Assessing the credibility of a company's transition plan: framework and guidance

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CONTENTS

1. Acknowledgement

Assessing Transition Plan Collective – ATP-Col – is an international ad hoc working group of individual experts from different organisations (see appendix 10). Each expert has expressed and contributed to this draft in an individual capacity and not representative of their organisation. ATP-Col's goal is to try, in a non-competitive mindset, to harmonise practices for assessing the credibility of a company's transition plan.

ATP-Col was launched in June 2023 by the World Benchmarking Alliance (WBA) and is co-chaired by Romain Poivet of WBA and Perrine Tolédano of the Columbia Center on Sustainable Investment.

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2. Document scope

Greenhouse gases (GHG) emissions continue to increase, even as the window to limit climate change to 1.5°C with limited overshoot by the end of the 21st century is closing. Since COP21 and the Paris Agreement, companies, more globally speaking non-state actors, are recognised as key players in achieving this international challenge to decarbonise the global economy. Nevertheless, even as more and more companies are setting GHG reduction targets[1], only a few have defined and implemented credible transition plans to reach them[2]. A credible and robust transition plan is undeniable a key tool to render the international decarbonisation challenge into a company's operational roadmap and make its activities compatible with the low-carbon requirements that will contribute to decarbonising the global economy.

Both voluntary and mandatory climate disclosure frameworks, standards and regulations have emerged since COP26. These disclosure schemes are critical for transparency and corporate climate accountability. Regardless, a company's transition plan should not just be seen as a reporting exercise but as a steering and monitoring tool for transition. There is still a need to go beyond reporting compliance exercises and provide guidance to help relevant stakeholders assess and understand the credibility of companies' transition plans. Accountability cannot be limited as merely a duty to fulfil reporting requirements.

The goal of this document is to provide a coherent and harmonised framework for assessors to gauge the credibility of a company's transition plan. It is based on existing guidance and guidelines[3], standards and disclosure frameworks[4], and assessment methods[5] for companies' transition plans. Additionally, the

[1] See for instance https://sciencebasedtargets.org/target-dashboard or https://zerotracker.net/analysis/net-zero-stocktake-2023

[2] See for instance the assessments done by CA100+'s net zero company benchmark, New Climate Institute's Corporate Climate Responsibility Monitor, Transition Pathway Initiative, World Benchmarking Alliance's climate and energy benchmarks (using ACT Initiative)

[3] Such as in alphabetic order : CDP technical note on climate transition plan, Climate Bonds guidance on transition plan, CERES Climate transition action plans, HLEG integrated matters and associated criteria, ISO IWA 42 Net Zero Guidelines, Race to Zero criteria…

[4] Such as: EU ESRS E1, GFANZ Expectations for real-economy transitions plans, IFRS S2, UK TPT Disclosure Framework, TCFD…

[5] Such as: ACT Initiative, Climate Action 100+, Climate Bonds Initiative Standard V4.0, New Climate Institute's CCRM, Transition Pathways Initiative…

document seeks to define how to identify relevant sectoral transition plans that contain credible decarbonisation pathways and levers to provide rigour and clarity to market actors.

This document draws on existing international documentation related to transition plans to present a credibility assessment process for transition plans and provide a basis streamlining and harmonising these efforts worldwide. It can be used by assessors as well as those developing assessment methodologies to be more transparent regarding their practices.

The primary target audience for this guidance document are assessors and/or analysts[6] who want to go beyond simply verifying a company's reporting compliance with existing or upcoming disclosure frameworks to assessing the credibility of its transition plan. The framework and guidance in this document can also be used by transition plan preparers to better understand how third-party assessors will analyse their transition plans.

The framework and guidance in this document focus on the decarbonisation aspect of a transition plan; they do not cover nature or just transition aspects despite these being key components of a company's transition plan.

Lastly, this guidance document remains neutral to transition plan disclosure policy and frameworks and can be used along with any existing transition plan disclosure framework. ATP-Col members acknowledge that the topic of transition plan assessments is a growing one. As expertise on transition plans continues to expands in the future, further effort will be necessary to update and share this knowledge with the community on this subject.

3. Introduction to transition plans

The past decade has seen the international community push for stronger development of green finance and corporate sustainability in the context of the accelerating environmental crises. This is true in different regions of the world that have developed their own legislative vehicles and incentive schemes to drive the ecological transition[7].

One key dimension currently gaining traction in the push for a green economy is that of transition finance and transition plans. Transition finance concerns businesses or activities that are not yet net zero, but that are planning and implementing a transition to net zero. Many economic actors are developing plans to get their business strategy on track with pursuing efforts to limit global temperature to 1.5°C above pre-industrial levels by the end of 21st century[8]. These transition plans set the objectives and associated means

[6] The document uses indifferently the terms assessor or analyst to define a person who assess the credibility of a company's transition plan, it could be verifier, consultant, auditor, ESG analyst, or even internal auditor of a company who wants to assess the credibility of the company's transition plan before publication…

[7] For instance: The European Commission developed its Sustainable Finance Strategy in the frame of the European Green Deal, meant to guide the push to net-zero in the region. In parallel, China has announced an ambition to reach net-zero by 2060 and developed tools to impulse the movement towards this objective (Green Bond Endorsed Project Catalogue, for example). The United States have also followed suit, with a large-scale investment program in the greening of its economy through the Inflation Reduction Act. Brazil is currently developing its Green Taxonomy and creating laws to fight deforestation in the Amazon more effectively. Different countries on the African continent are also implementing legislation to regulate natural resources use and guide the energy transition, as can be seen in Egypt, Ghana or Kenya…

[8] Given that warming outcomes are assessed probabilistically, a fair chance at 1.5C is the same thing as well below 2C. This is why the Paris Agreement refers to 'long-term temperature goal' in the singular and sets out the goal as: *"Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C".* This is because the estimated carbon budget for a 50% chance at 1.5C is approximately the same as the carbon budget for a 83% chance at 1.7C and for a >83% chance at 2C (see IPCC AR6 WGI Fig. SPM.2 at D.1.2). Conversely, note that aiming for even an 83% chance at 2C, is only a 17% chance at 1.5C which does not constitute "pursuing efforts".

for the successful transition of a company's activities, and generally seek to inform the company's stakeholders about its roadmap, including the decarbonisation levers, governance and engagement strategy that it must implement in order to reach its net-zero targets and manage climate-related risks (transition, physical, litigation).

In addition to the decarbonisation aspects, most related disclosure frameworks and guidance are currently giving priority to including climate change adaptation, nature and just transition considerations in companies' transition plans. It is crucial that companies develop these transition plans to induce change within their business models, with clear pathways towards the achievement of the Paris Agreement and other initiatives, such as the Kunming-Montreal Global Biodiversity Framework or the International Labor Organization's (ILO) Guidelines for a just transition towards environmentally sustainable economies and societies for all.

In recent times, there has been a proliferation of proposed frameworks, regulations and assessment schemes addressing the key components of credible transition plans. There is a high level of commonality in these in terms of shared principles and structures. But there is still significant diversity in the granular details underpinning them[9]. Given this proliferation, there is a need for international standardising around transition plan assessment approaches so that they can be used to make coherent and comparable assessments regardless of which framework has guided the transition plan development.

There is an important distinction to be made between transition plans and transitional, enabling or green activities (as defined, for example, within green taxonomies).

Transitional activities are those for which there are no low-carbon alternatives, and which can only be denominated as such if they correspond to the best technical standards available at a given moment. Moreover, transitional activities should not hamper the creation and development of low-carbon alternatives or lead to critical locked-in effects over the lifespan of invested assets, and they should have a credible pathway to net zero[10].

Enabling activities are those that allow other green activities to be conducted or scaled up. This is the case for electric vehicle (EV) charging stations, for instance, which allow for the growth of the EV market.

Green activities are those that either have a business model compatible with planetary boundaries (i.e. solar panel manufacturers, wind turbine manufacturers), or that have already transitioned their activities to ensure that environmental impacts are compatible with planetary boundaries.

Transition plans are created at the level of a certain organisation or company and seek to decarbonise the company's business model – whether by a change of strategy, investment in low-carbon or carbon-neutral alternatives for current processes or other methods. Transition plans may therefore include transitional or enabling activities, but overall, they should aim to align the organisation's activities with a 1.5°C climate target.

4. Principles

The application of principles when assessing companies' transition plans is fundamental to ensuring that the related information is clear, fair, not misleading to intended users and, above all, creates confidence

[9] See for instance "Transition Finance Mapping : Frameworks to assess corporate transition" (Climate Bonds Initiative, November 2023) and Appendix 1.

[10] This means that there is a retirement date for those assets, compatible with limiting by the end of 21st century, a global temperature increase of 1.5°C above pre-industrial levels.

in the feasibility of the company's plan to transition in line with pursuing efforts to limit temperature increase to 1.5°C[11].

The following principles form the basis for the guidance in this document and should, it turn, be used by assessors when applying this guidance to carry out transition plan assessments.

4.1 Relevance, transparency and completeness

The transition plan should contain all of the relevant information related to the company's planned transition to net zero and contribution to a net-zero economy. It should also show an appropriate balance between relevant, verifiable qualitative and quantitative information and use text, figures and graphical representations as appropriate.

Further, the transition plan should cover all of the company's material[12] direct and indirect GHG emissions categories and detail its response to climate-related risks and opportunities as well as its contribution to an economy-wide transition.

4.2 Ambition, consistency and feasibility

The decarbonisation objective outlined in the transition plan should be consistent with pursuing efforts to limit temperature increase to 1.5°C above pre-industrial levels by the end of 21st century as stated in the Paris Agreement. Further, the plan should enable the evaluation of the long-term performance of a company, while simultaneously providing insights into short- and medium-term outcomes in alignment with the long term.

The company's decarbonisation levers, stated in the transition plan, should be feasible to implement over different time horizons taking into account the assumptions used and the local context where the company operates.

Moreover, all of the low-carbon means employed or planned by the company should be consistent with each other and with the overall decarbonisation ambition of the company. All decarbonisation actions, disclosures, finance, incentives, policies, statements and targets should be in consistency with each other.

The feasibility of a transition plan depends both on factors within the company's internal control[13] and external factors that are outside the company´s control. These two categories of factors can be referred to as internal and external dependencies (see appendix 4 on external dependencies). The plan should adequately outline these dependencies to demonstrate its feasibility.

4.3 Long-term value and no significant harm

The company's transition should be designed to protect and enhance long-term value for stakeholders, society, the economy and the natural environment on which the company depends, without having any significant foreseeable negative impacts on any environmental and societal objectives.

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[11] Given that warming outcomes are assessed probabilistically, a fair chance at 1.5°C is the same as well below 2°C. This is why the Paris Agreement refers to 'long-term temperature goal' in the singular and sets out the goal as: "Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C". This is because the estimated carbon budget for a 50% chance at 1.5°C is approximately the same as the carbon budget for an 83% chance at 1.7°C and for a >83% chance at 2°C (see IPCC AR6 WGI Fig. SPM.2 at D.1.2). Conversely, note that aiming for even an 83% chance at 2°C, is only a 17% chance at 1.5°C, which does not constitute 'pursuing efforts'.

[12] Materiality should be defined from a quantity perspective as follows: at least 95% of scope 1 and 2 emissions should be included. For companies with scope 3 emissions that are at least 40% of their total (scope 1, 2 and 3) emissions, at least 90% of scope 3 emissions should be included.

[13] Depending on the structure of the company (horizontal or vertical integration, for instance), the influence of the company on specific factors can vary.

4.4 Just transition

The transition plan should indicate how it “maximises positive economic, social, and decent work gains and minimises and mitigates negative impacts”.

4.5 Nuance and contextualisation

When assessing the credibility of the company’s transition plan, the local context(s) and the specifics of the business sector(s) in which the company operates should also be considered. The assessment should provide adequate nuance in accordance with these specifics.

5. Assessment framework

5.1 General challenges

The challenge of the assessor is to ensure that the past, present and future mitigation actions of the company as well as its overall strategy and business model are compatible with its transition ambition and align with the global ambition to limit temperature increase to 1.5°C.

To this end, it is helpful for the assessor to understand how transition plans fit into the wider system architecture as laid out in a recent report[14] by IMF, World Bank and OECD. Corporate disclosure guidance or regulation can dictate transition plan availability and timing. Moreover, existing transition plan disclosure frameworks may determine the format used by a company in its transition plan to ensure quality and consistency. So, an assessor should be familiar with the latest standards applicable to transition plans, specifically those that are relevant to their locality.

The definition of ‘credibility’ in the context of a transition plan may be similar or related to other alignment tools like product certifications and labels and due diligence standards, and intertwined with local laws on related topics. This is the broader context in which a company may be disclosing its transition plan, and an assessor should be cognizant of this – depending on their role, some assessors may also be tasked with assessing the company’s alignment against these other elements, or themselves required to demonstrate compliance with local accounting requirements.

More importantly, a transition plan may be informed by other system components, particularly local sectoral pathways and taxonomies. The assessor will need to be familiar with how to interpret these documents and use them to assess transition plan content. They will likely need to ask for the judgement of sectoral experts, use existing and upcoming external publications and rely on other specialists.

The assessor should keep in mind that a company’s transition plan, while it may be aligned with the average decarbonisation pathway at the global level, may not automatically be reciprocally aligned with the local sectoral pathway. Indeed, considering "the principle of equity and common but differentiated responsibilities and respective capabilities, in the light of different national circumstances[15]". Decarbonisation pathways at local levels may require more or less decarbonisation ambitions and actions than reflected in the global decarbonisation pathway (see IEA or NGFS scenarios for different granularity, for instance).

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[14] *Activating Alignment: Applying the G-20 Principles for Sustainable Finance Alignment with a Focus on Climate Change Mitigation*; IMF, World Bank and OECD; September 2023.

[15] The common but differentiated responsibilities and respective capabilities known as CBDR-RC principle was introduce in the UNFCCC article 3 paragraph 1 and article 4 paragraph 1 in 1992.

5.2 Concepts underlying transition plan credibility

The credibility of a company's transition plan may be defined or perceived differently from one person to another, sometimes leading to different expectations. Generally, it includes the following concepts:

- Compliance with transition plan disclosure requirements
- Climate risk management
- Alignment of ambition with international climate goals
- Consistency of the transition plan
- Feasibility of the transition plan

Compliance with transition plan reporting standards and disclosure frameworks is the starting point for assessing the credibility of a company's transition plan. However, on its own, it is not enough. While it's true that the assessor will not be able to assess the credibility of the plan without the data required and recommended by most of the existing frameworks and standards, this data is only the raw material that feeds the assessment process.

Although a credible transition plan reduces a company's exposure and vulnerability to **climate related risks** (transition, physical, litigation), this document does not define the credibility of a transition plan through the lens of climate-related risk management and will not focus on that dimension, but will flag assessment points that can be risk related (see section 5.4).

This document defines the credibility of a company's transition plan as the triple consistency in:

1. the overall decarbonisation ambition aligned with international objectives defined by the Paris Agreement (see section 8.2),
2. the relevant sectoral transition plan(s) for the region(s) where the company operates, (see section 6), and
3. the implementation of <u>feasible</u> policies, mitigation actions and decarbonisation levers on time to deliver the strategic ambition. Feasibility is dependent on internal and external factors that may be linked to local context (see appendix 4).

Note 1: mitigation actions refer to: i) actions and action plans (including transition plans) that are undertaken to ensure that the company delivers against targets set and through which it seeks to address material impacts, risks and opportunities; and ii). decisions to support these with financial, human or technological resources

Note 2: decarbonization levers are aggregated types of mitigation actions such as energy efficiency, electrification, fuel switching, use of renewable energy, products change, and supply-chain decarbonisation that fit with company' specific actions.

Note 3: Local context refers to the region, country or even subjurisdiction where the company operates.

Note 4: Internal factors on which the company relies to deliver its transition plan are factors within the company's direct control. These include factors such as organisational structure and management responsibilities, which in turn form the basis of investment decisions (CapEx, OpEx, R&D), strategic business model orientation, workforce training, etc.

Note 5: External factors on which the company relies to deliver its transition plan are outside the company's direct control. These include factors such as public policy or legal factors, economic factors, technological and infrastructure readiness, social factors, environmental factors and resource availability, etc (see appendix 4).

To sum up, a credible transition plan is aligned with international decarbonisation goals, is coherent with relevant sectoral and local transition plans where the company operates, and is feasible within its proposed timeline.

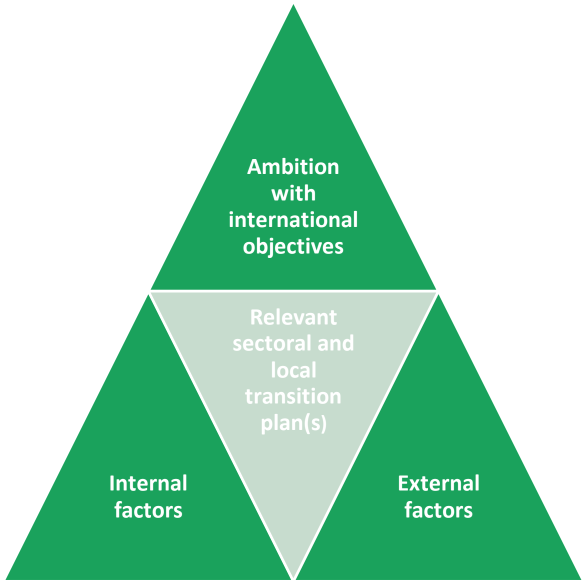

Figure 1: Credibility through overall consistency

5.3 Assessment process

To assess the credibility of a company's transition plan, the assessor should follow a four-step process:

1. **Compliance check**: The starting point should be to check if the transition plan is compliant with the selected disclosure framework. The plan qualifies as compliant if it contains all the disclosures required by the selected framework.

   Note that the present document does not provide guidance on this step as the compliance check would depend on the selected disclosure framework.

2. **Red flag check**: Following the compliance check, the assessor should review the data disclosed by the company for red flags highlighted in this document. These red flags signal the assessor of a potential lack of completeness or bias in the transition plan that could undermine the credibility assessment. They signal areas where the assessor may need to probe the company further.

3. **Granularity check**: The assessor should then proceed to check the inclusion of further granular information identified as necessary to perform a credibility assessment depending on the intended use of the transition plan. For example, to assess alignment with a decarbonisation pathway or dependencies on external factors, the assessor may need certain asset level disclosures that may not be required or recommended in the disclosure standards selected for compliance. These additional details may vary by sector too. Though the transition plan may qualify as complete if it contains all the disclosures needed for compliance, leaving out more granular information could call into question the credibility of the transition plan or could limit the scope of the assessment.

4. **Credibility check**: Finally, the assessor should use the disclosed information as well as any specific external data sources (e.g. the appropriate sectoral decarbonisation pathway for the locations where the company has assets) to go beyond box-ticking and assess the transition plan's credibility on the basis of the 'assessment points' set out in section 8 of this report. This step should be done holistically in order to assess the consistency between the different aspects of the transition plan. If some aspects are judged as lacking credibility, the assessor should provide a qualitative assessment and recommendations on the basis of the guidance under section 8 of this report.

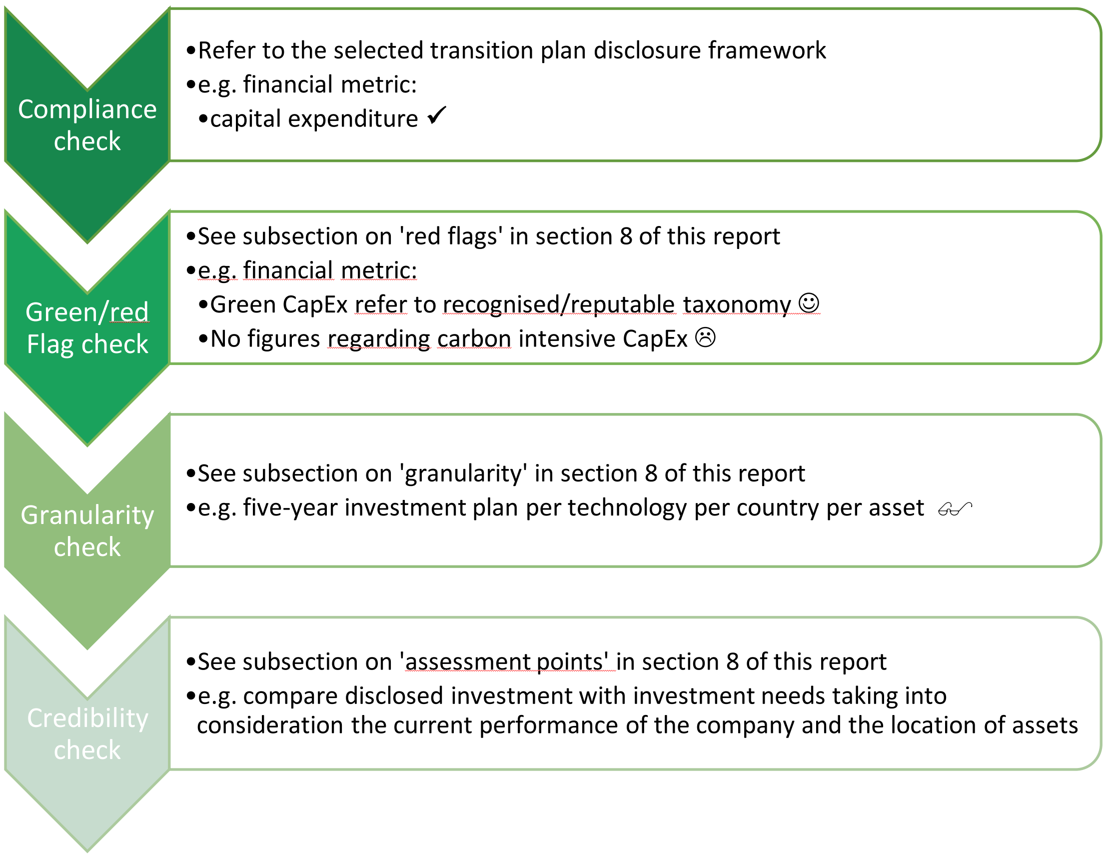

Figure 2: Process for an assessor to follow when assessing a Transition Plan's credibility

5.4 Credibility assessment items

In order to remain neutral regarding the existing climate disclosure frameworks (see section 6.1), this document proposes assessor to focus on the following credibility assessment items that are usable with most of the climate disclosure frameworks referred in this document :

- Company's GHG accounting and performance
- GHG targets
- Decarbonisation levers and mitigation actions, plus locked-in emissions
- Financial elements, including expenditure allocations and revenue/production
- Engagement strategy
- Governance

The assessment items in turn contain several assessment points, which are described in section 8. As mentioned earlier, this document mainly focuses on the decarbonisation elements of a transition plan.

While this document tries to remain as sector-agnostic as possible, some assessment points are intrinsically sector-sensitive. When it was not possible to do otherwise, some notes – identified with icons such as (fossil fuels), (coal power generation), (industrial hard to abate sectors) (financial) – bring in sectoral perspectives/nuances. Nevertheless, these require further sectoral and technical specifications that are not provided in this document.

As far as possible, assessment points integrate icons for consistency, feasibility, risk, and ambition, to indicate the perspective that criteria can provide the assessor when looking at the company's transition plan.

6. Sectoral transition plan

As explained in section 5.2, a company's transition plan should be built upon relevant sectoral transition plans related to the company's activities and locations.

6.1 Definition and content of sectoral transition plan

A sectoral transition plan (STP) refers to what needs to happen to achieve a specific decarbonisation objective for a given sector. Some would call it a sectoral roadmap. It describes the technological levers for decarbonisation, as well as the optimal selection and sequencing of these levers, the expected level of GHG reduction, the necessary investments, the research and development (innovation) needs and potential disruptive needs, as well as other external factors such as potential regulations and market changes, including demand reduction, that may influence the achievement of the decarbonisation objective of a sector, but also the changes related to the workforce of the sector.

According to the project standard prEN 18074: *Industrial decarbonization — Requirements and guidelines for sectoral transition plans*, under development by CEN CENELEC TC 467, a sectoral transition plan (STP) is defined as "a long-term (minimum 20 year projection) strategic plan elaborated in collaboration with interested parties setting out actionable measures to match a sectoral industry decarbonization objective".

In the context of this guidance document, the decarbonisation objective is limiting global warming to 1.5°C by the end of the 21st century with no or limited overshoot.

According to prEN 18074, an STP is defined for geographical and sectoral boundaries. It details the decarbonisation scenarios over a timeframe of at least 20 years, with interim targets every five years. The STP includes at least two scenarios, with at least two reaching the decarbonisation objective. The STP may explore other scenarios (see section 6.2 below) to expose the different transition pathways for the sector.

6.2 Selection of scenarios

A scenario comprises projections of what can happen by creating plausible, coherent and internally consistent descriptions of possible futures. Scenarios are not predictions for the future. A scenario is the coupling of three elements:

1. Transition universe
   The transition universe is an aggregation of all the assumptions made regarding future developments of exogenous factors. This includes, but is not limited to, market assumptions (future demand for products, commercial policies, trade regulations, etc.), technological assumptions (innovation and new implemented technologies, technology costs and/or energy consumption, etc.), policies of interested parties (regulations, industrial commercial planning and business models, civil society opinions, infrastructure, etc.) or resource availability (energy, raw and recycled material availability, etc.). Each transition universe is specific to a given scenario, and

strongly influences both the associated technological and market pathways described below. Further, each transition universe is internally coherent and reflects a possible, albeit potentially biased, future. The qualitative and quantitative hypotheses composing the transition universe are described, documented and reported in the STP.

2. Technological pathway
   The technological pathway describes, documents and reports the deployment modalities of the decarbonisation levers targeting each objective, namely:
   - year of first implementation of a productive asset,
   - deployment progression if the decarbonisation lever is not fully deployed in the first year,
   - carbon intensity trajectory (per tonne of product or per functional unit of product) over the chosen time period following the implementation of the expected decarbonisation levers,
   - investments plan associated with the implementation of the decarbonisation lever, including capital expenditure (CapEx) and/or updated operational expenditure (OpEx),
   - uncertainties around each decarbonisation lever's availability, maturity and deployment modalities, expressed at least qualitatively.
3. Market pathway
   The production volumes are determined by the demand within or outside the geographical boundary, in conjunction with raw material and energy availability, competition outside the geographical boundary as well as trade regulations.
   The market pathway of the STP and the underlying hypotheses should be reported separately and should describe the envisioned developments in:
   - production
   - demand, including consumer behaviour and sufficiency trends
   - trade outside the geographical boundary
   - commercial balance
   - level of circularity

   Accordingly, any evolution in production is reflected in the sectoral emissions and can be fully considered a factor in reaching the decarbonisation objective. The market pathway should describe, at least qualitatively, uncertainties around the market development.

Consensus is emerging on principles by which to select appropriate scenarios to inform sectoral transition plans, such as limited carbon budgets, temperature overshoot and carbon sequestration assumptions. A recent OECD report[16] sets out criteria for Paris-compliance as scenarios that aim for 1.5°C with no or limited overshoot, maintain a high likelihood of staying below 2°C, reach peak emissions early and achieve net-zero GHG emissions. It also provides a perspective on the feasibility of a scenario's socio-economic, policy, and particularly its technological assumptions, like an over-reliance on uncertain technologies like carbon dioxide removal (CDR) and carbon capture and storage (CCS), including direct air carbon capture and storage (DACCS) and bioenergy with carbon capture and storage (BECCS). Aligning with ambitious and ideally multiple scenarios is needed in the face of high climate uncertainties. Assessors should note that not many scenarios currently used in transition planning meet these stringent criteria.

The assessor should check that the scenarios used by the company to frame its transition plan meet the above criteria. See also the recent guidance[17] from the Glasgow Financial Alliance for Net Zero (GFANZ) on

[16] Climate change mitigation scenarios for financial sector target-setting and alignment assessment, OECD, September 2023. OECD Environment Working Papers No. 223.
[17] Guidance on Use of Sectoral Pathways for Financial Institutions, GFANZ, June 2022.

use of sectoral pathways by financial institutions, which covers the question of credibility and feasibility of pathways.

6.3 Use of the sectoral transition plan

As outlined by GFANZ, sectoral pathways can be hugely valuable for transition plan assessors as they "provide the link between the science of the remaining carbon budget and the detailed steps that a specific sector could take to reduce GHG emissions to a particular level in a specified timeframe[17]." They can inform the following elements of a company's transition plan:

- High-level strategy, risks and opportunities
- Target-setting, at entity and portfolio levels
- Implementation strategy, including technology choices, capital allocation and investments needs, collaboration opportunities, innovation and disruptive needs, demand change and public policy needs

There is huge variation between sectors when it comes to choosing technology levers for decarbonisation, and the optimal selection and sequencing of these levers. For many 'hard-to-abate' sectors, such as heavy industries, the choice is challenging as not all the technologies are as yet available at the scale required.

Other sectors, notably fossil fuels, must be rapidly phased out to give us the best chance of limiting global warming, as demonstrated by climate science. A credible transition plan for a company in these sectors would need to demonstrate steps to conscientiously wind down its workforce, communities and environmentally damaging physical infrastructure, potentially but not necessarily transitioning to other sources of revenue. Some company success stories already exist and should serve as a reference point for assessors demonstrating that long-term resilience is possible.

Given these sectoral variations, it can be helpful for an assessor to refer to existing guidance, particularly in the case of sectors for which the available transition options are less clear. According to IMF and World Bank, a credible transition plan should be grounded in a credible sectoral plan or taxonomy.

Each company's circumstances are different, but if its implementation strategy does not align at least at a high level with what is set out in the recognised sectoral transition plan most relevant to its situation, then this is an indication that its transition plan is likely not credible.

The assessor should also bear in mind that sectoral transition pathways often have many dependencies (government policy, availability of capital, existence of infrastructure) and should consider these when assessing the performance of a company against the pathway. A company may be doing everything that is reasonably expected of it but still falling short because of a systemic dependency beyond its own control (see appendix 4 and section).

If a regional or national sectoral transition plan compliant with the definition in section 6.1 or with a recognised taxonomy is available for reference, this is a valuable resource for transition plan assessment.

Many reputable initiatives, business sector associations and governmental organisations have produced transition pathways[18] or similar materials for companies to refer to when developing their transition plans. There is also much guidance available on the most appropriate technology solutions for each sector, e.g. IPCC's *Global Warming of 1.5°C* report. Assessors should familiarise themselves with these materials to inform their assessments.

[18] For instance, the Leadership Group for Industry Transition (LEAD-IT) has compiled existing materials for the heavy industries sector: https://www.industrytransition.org.

Sector-specific transition plan assessment guidance

There is a growing body of sector-specific transition plan assessment guidance for assessors developed (or under development) by different sources, including the Accelerate Climate Transition (ACT) initiative, Climate Bonds Initiative (CBI), Climate Action (CA) 100+, European Financial Reporting Advisory Group (EFRAG), Institutional Investors Group on Climate Change (IIGCC), Oxford Transition Finance Centre of Excellence, Rocky Mountain Institute Center for Climate-Aligned Finance, Science Based Targets initiative (SBTi), UK Transition Plan Taskforce (TPT) sector guidance, etc.

These materials from reputable organisations are designed to equip investors and other transition plan assessors with guidance to ask the right questions to test the credibility of a corporate strategy, particularly regarding technology and investment choices and actions to reduce emissions. This level of information, previously not commonly disclosed, is now a critical component of a transition plan, which an assessor needs to focus on to determine the company's transition credibility.

6.4 Regional considerations

There are not yet many regions or countries with specific regional decarbonisation pathways that provide relevant sectoral transition plans with relevant granular data, which can be used by companies in their transition planning. This is partly due to the high effort and data availability required. Nevertheless, assessors are encouraged to refer to them wherever available as these are more reflective of the circumstances of the particular region in which an organisation is located and can be more readily compared against its transition plan and the decarbonisation levers it plans to implement (see section 8.3 and appendix 4):

Category	External dependency	Example of external factor the transition plan may depend on
1. Non-physical	1.1 Policy strategy	- National decarbonisation strategy - Geopolitical environment (e.g. trade of critical resources)
	1.2 Regulatory framework	- Real economic regulation (e.g. permitting process) - Financial regulation - Legal framework (e.g. ESG litigation risks)
	1.3 Market and economics	- Capital availability and cost - Energy and commodity prices
	1.4 Public acceptance	- 'Not in my backyard' (NIMBY) phenomenon
	1.5 Consumer and client behaviour	- Willingness to reduce demand and/or adapt to consumption behaviours - Willingness to pay a green premium
2. Physical	2.1 Infrastructure availability and logistics	- Availability of infrastructure and logistics for transport, distribution and storage
	2.2 Technology	- Technology readiness levels and innovation - Efficiency improvement - Technology lock-in
	2.3 Resource availability	- Availability of land, raw materials and other inputs
	2.4 Environmental impacts and ecosystem services	- Climate change impact (e.g. decreased water availability for power generation)
	2.5 Labour availability	- Availability of skilled workers

Table 1 : Categorisation of external dependencies and examples

The additional granularity means that regional decarbonisation pathways can provide even more prescriptive guidance when it comes to targets, implementation strategy, innovation, investment, and particularly engagement strategy.

For large companies with operations in multiple geographies, not all of which will have country-specific pathways to refer to, assessors should consider reviewing their transition plans against local as well as global pathways to get a sense of company performance in-country but also overall.

Unfortunately, without an internationally agreed and adopted set of principles around credibility for sectoral transition plans, such as prEN 18074, there is an inherent risk that country-specific guidance may be influenced by local, vested interests. It's important then for assessors to consider the ownership of the guidance and how it was developed.

Moreover, given the importance of equitably assessing transition plans in a way that reflects regional challenges and opportunities, assessors should look (and advocate) for more credible country-specific or regional decarbonisation pathways and guidance on principles to fairly consider regional nuance in their transition plan assessments. Note that there is no international alignment as yet on how to apportion things like the carbon budget fairly, and how the principle of Common but Differentiated Responsibilities and Respective Capabilities (CBDRRC) translates to country decarbonisation pathways and the transition plans of individual entities.

7. Transition plan content and use cases

7.1 Definition of a transition plan

Based on existing guidance and guidelines[19], standards and disclosure frameworks[20], as well as assessment methods[21], a transition plan can be defined as ***an aspect of a company's overall long-term strategy that lays out a set of short-, mid- and long-term targets, actions and resources, with accountability mechanisms, to align the company's business activities with a net-zero GHG emissions pathway that delivers real-economy emissions reductions with the objective of limiting global warming to 1.5°C and minimising the company's systemic climate transition risks***.

7.2 Transition plan elements

A transition plan is a **publicly available comprehensive document at the disposal of every intended user**. It contains annually updated and clear and material information on a company's key performance indicators (KPIs), ambition and performance targets, chosen science 'aligned' pathways, detailed implementation plan, financing plan, internal governance structure and external disclosure regime. Progress reports against the transition plan are usually linked and available on the same website.

The content of companies' transition plans may vary depending on the disclosure framework used. Maintaining neutrality to different disclosure frameworks, ATP-Col members have consensually agreed and set out certain high-level elements that should structure a company's transition plan:

- **Strategic ambition**[22]
  This comprises the company's **objectives and priorities** for responding and contributing to the transition towards low-GHG emissions and a climate-resilient economy. It sets out whether and

[19] See for instance: CDP Technical Note: Reporting on Climate Transition Plans, CBI Guidance to Assess Transition Plans, CERES Climate Transition Action Plans, HLEG integrated matters and associated criteria, ISO IWA 42 Net Zero Guidelines, OECD Guidance on Transition Finance, Race to Zero Criteria.

[20] See for instance: EU ESRS E1 Climate Change, GFANZ Expectations for Real-economy Transitions Plans, IFRS S2 Climate-related Disclosures, UK TPT Disclosure Framework, TCFD.

[21] See for instance: ACT Initiative, Climate Action 100+, CBI Standard V4.0, New Climate Institute's CCRM, Transition Pathways Initiative.

[22] This element is also named 'foundation' in some transition plan disclosure documents.

how the company is pursuing these objectives and priorities, including whether it is doing this in a manner that **captures opportunities, avoids adverse impacts for stakeholders and society, and safeguards the natural environment**. The strategic ambition enables an **understanding of the company's past, current and future mitigation efforts to ensure that its strategy and business model are compatible with the transition to a sustainable economy and with limiting global warming** to 1.5°C. Under this element, a company should also disclose the **high-level implications that its transition plan will have on its business model and value chain**, as well as the **key assumptions** and **external factors on which the plan depends**.[23]

- **Metrics and targets**
  These include all the **metrics and targets that the company is using to drive and monitor progress** towards its strategic ambition[23]. When stating these metrics and targets, the company's transition plan should include a qualitative assessment of the potential locked-in GHG emissions from the company's key assets and products. It should also include an explanation of whether and how these emissions may jeopardise the achievement of the company's GHG emissions reduction targets and drive transition risk and, if applicable, an explanation of the company's plans to manage its GHG-intensive and energy-intensive assets and products.

- **Implementation strategy**
  This covers the **actions** the company is taking **within its business operations, products and services, and policies and conditions** to achieve its strategic ambition. It should also include an explanation and quantification of the **investments and funding supporting the company's implementation of its transition plan** and the **resulting implications for its financial position, financial performance and cash flows**[23]. Referencing its GHG emissions reduction targets and the climate change mitigation actions, the company should include an explanation of the decarbonisation levers identified and key actions planned, including changes in its product and service portfolio and the adoption of new technologies in its own operations or upstream and downstream in its value chain.

- **Engagement strategy**
  This includes a description of the company's **engagement with its value chain, industry peers, government, public sector, communities and civil society** in order to achieve its strategic ambition[23].

- **Governance**
  This comprises an explanation regarding how the company is **embedding its transition plan within its governance structures and organisational arrangements** in order to achieve the strategic ambition of its transition plan[23]. For instance, whether the company's transition plan is approved by its administrative, management and supervisory bodies.

These five items consist of the **common high-level elements** of a company's transition plan that are present **at a minimum** in all climate disclosure frameworks, standards, guidance and assessment methods, though they may be organised or named differently and include different levels of sub-elements. More details regarding sub-level elements and data points based on an academic paper by the University of Zurich and Oxford Sustainable Finance Group [24] are provided in appendix 1.

[23] Adapted from the UK TPT Disclosure Framework, October 2023.

[24] *Net Zero Transition Plans: Red Flag Indicators to Assess Inconsistencies and Greenwashing*; University of Zurich and Oxford Sustainable Finance Group, September 2023.

7.3 Intended users of a transition plan and use cases

A transition plan should first and foremost be used internally by the company as a tool to steer and monitor its transition towards a net-zero world in order to: i) prevent and reduce its climate-related risks, and ii) limit its impact on climate change and contribute to the global transition effort.

The reporting dimension and credibility assessment of a transition plan is a way to: i) inform and provide transparency to relevant stakeholders about the company's transition plan, and ii) follow up on a company's climate accountability. Use cases for transition plan credibility assessments can be, for instance, to:

- respect regulations,
- inform government regarding the company's alignment with the national decarbonisation strategy,
- inform clients[25] about the company's transition,
- inform shareholders regarding the company's transition,
- inform intergovernmental agencies regarding the company's transition,
- inform (public or private) funders and investors when the company is looking for funding to support the transition,
- inform financial regulators regarding climate-related financial risk management,
- provide transparency to market actors regarding the company's transition,
- provide evidence to civil society regarding the credibility of the company's transition,
- provide proof to a judge when companies are sued for climate-related issues.

Beyond the requirements and recommendations of transition plan disclosure frameworks, the assessor should note that the level of granularity needed in a specific part or all of the transition plan can vary depending on the intended users and use cases (see Table 2). Intended users outside the company can, for instance, be financial institutions (banks, insurers, investors), financial regulators, governments, intergovernmental organisations and judges, NGOs, and rating agencies and ESG analysts.

Some intended users may require access to further details, such as the precise breakdown of investments per asset in a specific region where the company operates or detailed impact on the workforce, while this information may not be relevant for public disclosure because of its sensitivity. The following are other examples of such instances:

- A government that is about to provide public subsidy to a company to support the decarbonisation of a specific company asset may require granular financial information to make sure the subsidy actually supports a transition plan that would not be possible without public financial support, and that, for instance, the just transition aspect is duly integrated to protect the local workforce and communities.
- A bank that is about to provide a loan to a company may require granular information to manage its own risks or to design a transition-linked loan.
- A financial regulator may require detailed information for prudential or financial stability purposes.
- A group of shareholders may require more details regarding the investment plan of the company when its transition plan is submitted for approval at the general assembly.

[25] Clients can be companies (B2B), customers (B2C) or public authorities (public procurement).

Categories of transition plan use cases

Actor requiring transition plans	Government	Corporate		Financial Regulator	
Regulatory objective	Climate outcomes (e.g., Paris Agreement)	N/A	Market conduct / consumer protection	Financial Stability	Safety and Soundness of financial institutions
What is the primary objective of the transition plan?	Achieve national climate outcomes through corporate action	Inform shareholders and investors of a corporate's strategy in response to climate change and transition	Provide transparency to market actors e.g., maintain market integrity, prevent financial misconduct and/or greenwashing	Effective management of aggregate climate-related financial risks (externalities and systemic vulnerabilities)	Effective management of climate-related financial risks (institution level)
What is the primary tool to achieve that purpose?	Disclosure of strategy to meet climate targets	Disclosure of strategy to meet climate targets	Disclosure of strategy to meet climate targets	Aggregate report on the potential build-up of climate-related risks in the financial system	Report to supervisor on how the institution will manage climate related risks associated with corporate strategy
Who is the primary audience?	Public	Shareholders and investors	Market participants, consumers	Macro-prudential regulators	Micro-prudential regulators
Is the information publicly available?	Yes	Yes	Yes	Jurisdiction-specific decision to determine whether it needs to make the information public to meet regulatory objectives	Jurisdiction-specific decision to determine whether it needs to make the information public to meet regulatory objectives

Table 2 : Examples of categories of transition plan use cases (NGFS[26], May 2023)

7.4 Special case of enabling activities, climate solutions providers and transitioned activities

The concept of a transition plan is generally associated with companies having activities highly reliant on GHG emissions (directly or indirectly) with high impact on climate change. As companies cannot magically shift to a low-carbon world, they need to implement transition plans to decarbonise their activities over a period of time, compatible with limiting global temperature rise to 1.5°C by the end of the century. Nonetheless, transition plans are necessary for all kinds of activities.

There are companies, generally called **enablers or climate solutions**[27] **providers,** with activities that support delivering and scaling green activities without having negative impacts on other environmental and social aspects, or that have an intrinsically low-carbon profile due to the nature of their activities.

Enablers and climate solutions providers will have to respond to the growing demand for their products to ensure the transition challenge is met. As a result, their gross absolute emissions will likely increase, while the intensity of their production will have to decrease at least at the same pace as the decarbonisation of their sector or the overall economy. For such companies, it's more relevant to **assess how much they contribute to the transition's needs in physical units** (or functional units) proportional to their market share and whether their production intensity decreases at a level similar to the

[26] *Stocktake on Financial Institutions' Transition Plans and their Relevance to Micro-prudential Authorities*, Network for Greening the Financial System (NGFS), May 2023.

[27] Climate Solutions: Technologies, services, tools or social and behavioural changes that directly contribute to the elimination, removal or reduction of real-economy GHG emissions or that directly support the expansion of these solutions. These solutions include scaling up zero-carbon alternatives to high-emitting activities — a prerequisite to phasing out high-emitting assets — as well as nature-based solutions and carbon removal technologies. This definition is adapted from The Nature Conservancy and proposed by GFANZ in the technical review note *Scaling Transition Finance and Real-economy Decarbonization*, December 2023.

decarbonisation of the sector. To illustrate this point, in the case of a wind turbines manufacturer, it is more relevant to:

- check if the capacities of the wind turbines produced by the company are aligned with the demand for wind turbine capacities required under a 1.5°C scenario proportional to the company's market share, and
- to control that, for the same functional unit, the GHG intensity of the production of its wind turbines is decreasing at least at the same rate or more than the average emissions intensity reduction for the wind turbine production sector.

There are also companies that **have already transitioned** due to an anticipated low-carbon transition in the past. Therefore, they overperform compared to relevant sectoral decarbonisation pathway(s) and their peers. In most cases, these companies will overperform compared to the thresholds set in green taxonomies as well.

For companies that **have already transitioned**, it is more relevant to **ensure that they do not increase their GHG emissions and that they conduct their activities while continuing to remain within their carbon budget**. If they increase their GHG emissions, they can only do it proportional to the potential increase in their market share and within their re-estimated carbon budget.

8. Assessment items and associated assessment criteria

8.1 Company's GHG accounting and performance

A company's GHG performance forms the foundation for its transition plan. If this indicator is not based on relevant international standards and rules for GHG accounting or excludes substantial information, it can mislead the company itself and lead to an irrelevant, incomplete and misleading transition plan.

8.1.1 Red flags

- The company's GHG inventory does not follow the rules of international GHG accounting standards such as ISO 14064-1 or the GHG Protocol[28].
- The company's GHG inventory does not cover relevant and material GHG emissions categories (see Figure 3: for overall sectoral profiles), or the company doesn't provide any details regarding the exclusion of GHG emissions categories[29].

Materiality should be defined from a quantity perspective as follows. At least 95% of scope 1 and 2 emissions should be included. For companies with scope 3 emissions that are at least 40% of total (scope 1, 2 and 3) emissions, at least 90% of scope 3 emissions should be included.

[28] A correspondence table between ISO 14064-1:2018, the GHG Protocol Accounting Standard (2004) and the Corporate Value Chain (Scope 3) Standard (2011) is provided in appendix 5.

[29] See ISO 14064-1:2018 : The organization shall apply and document a process to determine which indirect emissions to include in its GHG inventory. As part of this process, the organization shall define and explain its own pre-determined criteria for significance of indirect emissions, considering the intended use of the GHG inventory. Whatever the intended use is, criteria should not be used to exclude substantial quantities of indirect emissions or evade compliance obligations. ISO 14064-1:2018 Appendix H regarding how to identify significant indirect emissions. Note that according to ISO 14064-1 : *"As part of this process, the organization shall define and explain its own pre-determined criteria for significance of indirect emissions, considering the intended use of the GHG inventory. Whatever the intended use is, criteria* should not be used to exclude substantial quantities of indirect emissions or evade compliance obligations. . Using those criteria, the organization shall identify and evaluate its indirect GHG emissions, to select the significant ones. The organization shall quantify and report these significant emissions. Exclusions of significant indirect emissions shall be justified".

- Direct emissions are only reported as total aggregated carbon dioxide equivalent (CO_2e) figures instead of being quantified and reported separately for carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), nitrogen trifluoride (NF_3), sulphur hexafluoride (SF_6) and other appropriate GHG groups (hydrofluorocarbons, perfluorochemicals, etc.) in tonnes of CO_2e.
- For large companies, GHG inventory has not been verified or validated by a third party[30] or the third party has expressed concerns regarding the quality of the GHG report.
- Carbon credits are not reported separately as required by international GHG accounting standards such as ISO 14064-1 or the GHG Protocol.

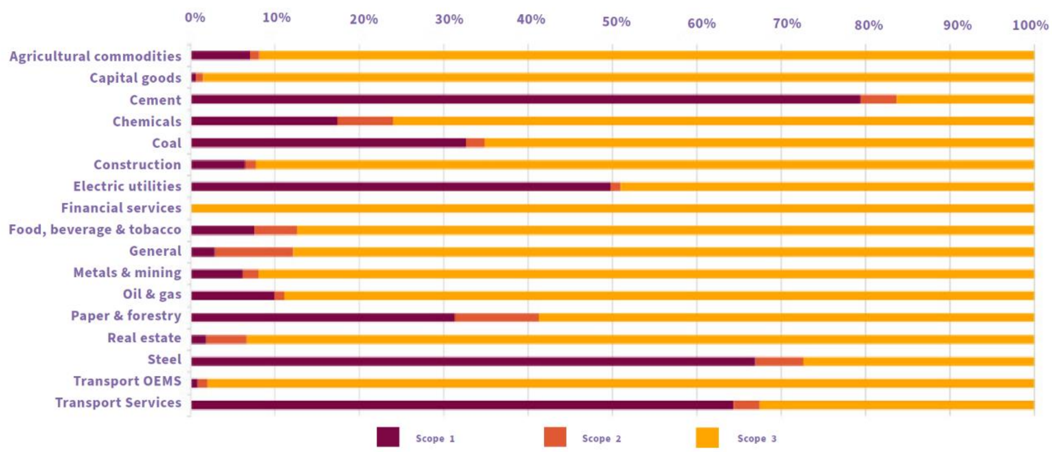

Figure 3: High-level perspective of scope 1, 2 and 3 GHG emissions for different sectors (source CDP[31])

8.1.2 Granularity

The location of a company's activities bears and important link with how GHG reduction targets should be set (see section 8.2). To this end, the assessor may need to access the company's **GHG disclosure disaggregated by activities, by countries where the company operates, and by emission sub-categories**.

8.1.3 Assessment criteria

The assessor should not carry out an assessment of the company's GHG accounting while there are already verification schemes that exist for years. For large companies, GHG inventory should be verified or validated by an independent third party[30] against recognised international GHG accounting standards such as ISO 14064-1 or the GHG Protocol.

GHG accounting assessment point 1: The assessor should ensure that the GHG figures provided by the company have been verified or validated in accordance with recognised international standards such as ISO 14064-1 or the GHG Protocol.

GHG accounting assessment point 2: If no independent verification or validation has been done, the assessor should ensure that the company discloses, at the least, the relevant GHG emissions categories depending on its activities.

Note: The assessor can refer to the *CDP Technical Note: Relevance of Scope 3 Categories by Sector*[31] (see Figure 3:) or any relevant and trusted existing GHG accounting sectoral guidance or standard (see, for

[30] For the largest companies or defined as public interest entities, third party should be accredited according to ISO 14065, ISO 17029, ISAE 3000, or ISAE 3410.
[31] *CDP Technical Note: Relevance of Scope 3 Categories by Sector*, CDP, April 2022.

instance, the ISO 19694 series related to energy-intensive industries, GHG sector-specific tool or guidance approved by the GHG protocol, ADEME's sector guidebooks) or existing life cycle analysis for the sector's products focusing on climate change impact.

8.2 GHG targets

GHG reduction targets serve as the compass to drive the strategic ambition of the company's transition plan. Their scope and alignment with science are critical and need to be assessed in order to appreciate the credibility of the company's transition plan.

Though this section only focuses on GHG reduction targets, note that companies can also set other non-GHG emissions targets, such as increasing renewable energy capacity, phasing out fossil fuels or financial targets. These are not addressed in this section as they are considered in this guidance more as decarbonisation levers or mitigation actions and objectives that the company schedules to achieve its strategic ambition. Moreover, the assessor should note that for financial institutions, there are other relevant targets related to transition plans that should be considered. These are described in appendix 9 dedicated to transition plan assessment points for financial institutions in particular.

8.2.1 Red flags

- There is no reference to the underlying climate scenario used for target setting, or the scenario used is not that of 1.5°C with no or limited overshoot.

  Note 1: The European Commission states[32]: *"When using scenarios or pathways, it is recommended to use those that are science-based, and in the case of decarbonisation pathways, those that are in line with the Paris Agreement, such as the 1.5°C scenarios of the International Energy Agency or the International Panel on Climate Change with no or limited overshoot".*

  Note 2: HLEG Recommendation 4 states: *"transition plan must reference credible sector pathways consistent with limiting warming to 1.5°C with no or limited overshoot (e.g. IPCC, IEA, Network for Greening the Financial System (NGFS), One Earth Climate Model (OECM)) and explain any material difference between the non-state actor's transition plan and sector pathways".*

- There is only one long-term GHG reduction target.

  Note: Long-term constitutes a period of more than 20 years from the baseline year.

- There are no intermediary targets or the existing intermediary targets exceed a five-year frequency or don't take into consideration the lifespan of assets.

  Note: The commonly accepted recommendation is to set interim targets for 5 to 10 years till 2050.

- Targets are only provided in relation to emissions intensity reduction.

  Note: Gross GHG emissions reduction targets may be expressed in relevant intensity values (physical or economic units). Nevertheless, caution should be used when interpreting emissions intensity expressed as economic value in sectors characterised by volatile prices, i.e. physical units to express emissions intensity should be preferred where possible.

- Targets do not cover all of the company's activities.
- Targets do not cover all relevant GHG emissions categories.

[32] Commission Recommendation (EU) 2023/1425 of 27 June 2023 on facilitating finance for the transition to a sustainable economy.

- Target do not cover all relevant GHGs.
- The targets do not follow from a baseline year or the baseline used is too dated (more than five years old, for instance).
- Targets do not cover gross GHG reductions but include avoided emissions, energy attribute certificates (EACs)[33] or carbon credits with no or limited explanation.

  Note 1: For better understanding of renewable electricity procurement, the assessor can read section 3.2 on renewable electricity procurement of the Corporate Climate Responsibility[34] methodology, and section 3: Renewable electricity procurement: innovative leadership and cheap claims of the Corporate Climate Responsibility Monitor (CCRM) 2024[35]. Some EACs are attached to physical and virtual Power Purchase Agreements (PPAs), meaning they are bundled and traceable to a unique renewable project. As such they are considered additional as they enable this project to be financed and to exist

  Note 2: For better understanding of current limitations to the use of carbon credits, the assessor can read section 4.2 on offsetting claims of the Corporate Climate Responsibility methodology.

8.2.2 Granularity

Ideally, all information related to GHG reduction targets in the transition plan should be **disaggregated by activities and by country where the company operates** in order to allow the assessor to ensure the consistency of these targets with relevant local sectoral decarbonisation plans.

In all cases, the company should explain the method used to set these targets, any sectoral decarbonisation plans used and how it has used them to shape its decarbonisation trajectory in the areas where it operates.

8.2.3 Assessment points

GHG targets assessment point 1 : The assessor should ensure that the targets cover all relevant direct and indirect GHG emissions (scope 1, 2 and 3) in coherence with the company's GHG inventory (see section 8.1). If substantial quantities of GHG emissions are missing from the targets without any explanation or justification, the target coverage cannot be considered credible.

Note: Consistent with the note mentioned in section 9.1.1 on red flags in relation to GHG accounting and performance, more than 5% of scope 1 and 2 emissions missing from the target qualifies as a substantial quantity. For companies with scope 3 emissions that are at least 40% of total (scope 1, 2 and 3) emissions, more than 10% of scope 3 emissions missing from the target qualifies as a substantial quantity.

GHG targets assessment point 2 : The assessors should check the 1.5°C ambition of the company's selected decarbonization pathway(s) to set its targets (see also section 6).

GHG targets assessment point 3 : The assessor should consider whether the company's selected decarbonisation pathways are appropriate to its activities and their locations (see also section 6).

GHG targets assessment point 4 : The assessor should check the alignment of the company's targets with its selected decarbonisation pathways (see also section 6).

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[33] Renewable energy certificates threaten the integrity of corporate science-based targets, Anders Bjørn et al., June 2022.
[34] *Corporate Climate Responsibility, Guidance and assessment criteria Version 4.0*, New Climate Institute & Carbon Market Watch, April 2024.
[35] *Corporate Climate Responsibility Monitor*, New Climate Institute & Carbon Market Watch, April 2024.

Note: There are different ways and methods to set and to assess target alignment with the decarbonisation pathways. The assessor should be aware of the existing approaches and should select one that is most appropriate to the use cases of the assessment. For instance, the assessor can:

- rely on independent third-party GHG reduction target validation or other trusted GHG reduction target certification scheme,
- compare the theoretical ideal target considering parameters such as sectoral decarbonisation pathways/benchmarks, the company's current GHG performance, its market share and its forecasted future activities by the year of the target (see illustrative example in Figure 4 and see formulae such as the ones described in appendix D of ISO 14097:2021, also on open access in the Paris Agreement Capital Transition Assessment (PACTA) methodology[36]), or
- compare company decarbonisation rate/speed with the annual average decarbonisation rate that the economy should follow (see example in Figure 5 and Table 3)

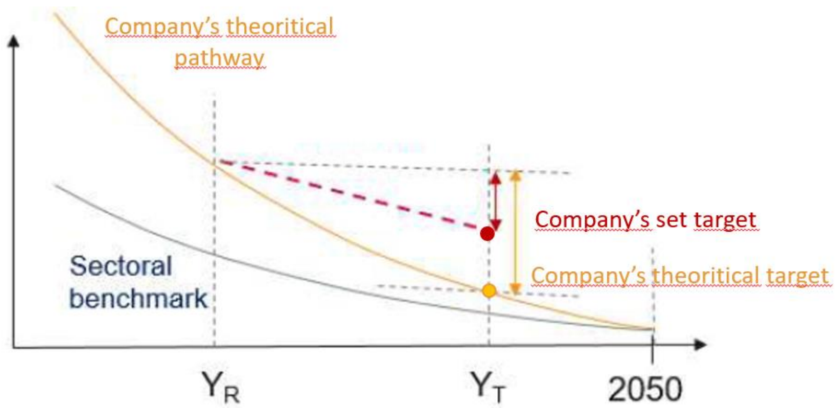

Figure 4: Illustrative target misalignment (adapted from ACT generic V2)

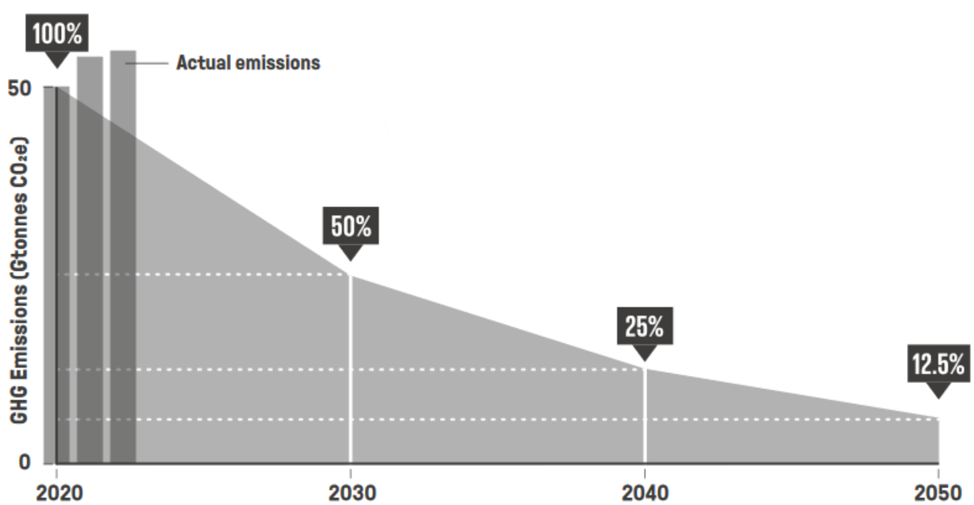

Figure 5:Illustrative decarbonisation rate from the climate law (Exponential Roadmap, 1.5°C business playbook, version3)

[36] PACTA: Paris Agreement Capital Transition Assessment. See section 2 of PACTA for Banks Methodology Document, V1.2.2, July 2022, Rocky Mountain Institute | 2°Investing Initiative.

	2030	2050
Cross-sector (ACA) [37] reduction pathway based on 2020 as the reference year	-42%	-90%
Source: based on pathways to net-zero – SBTi Technical Summary (version 1.0 October 2021)		

Table 3 : Example of climate-aligned decarbonisation rate proposed by SBTi

GHG targets assessment point 5: The assessor should ensure that GHG reduction targets cover gross absolute emissions and do not include carbon credits inside or outside the company value chain or any avoided emissions generated by the company's sold products.

GHG targets assessment point 6: The assessor should ensure that GHG reduction targets related to scope 2 emissions are not based on contractual electricity instruments or energy attribute certificates.

GHG targets assessment point 7 : The assessor should ensure that GHG reduction targets cover short-, medium- and long-term horizons.

GHG targets assessment point 8 : The assessor should ensure that the plan contains interim GHG targets for every five years or at least for a time period consistent with the lifespan of strategic GHG-intensive assets of production for high-intensive sectors, or with the lifespan of sold products (goods or services) that will lock emissions until their end of life.

GHG targets assessment point 9 : When emissions intensity metrics are used, the assessor should ensure that the denominator is relevant to the company's activities and not subject to variability in external factors[38], such as volatility in prices, and that the expected production growth does not lead to an increase in absolute emissions.

GHG targets assessment point 10 : The assessor should review the company's decarbonisation progress in the recent past and its current performance against its next target.

Note 1: The recent past can consist of a five-year period from the reporting year.

Note 2: The assessor can, for instance, check if the company has achieved its previously set targets.

Note 3: The assessor can check if the company is on track to achieving its next target and does not deviate from it.

8.3 Decarbonisation levers and mitigation actions

Decarbonisation levers[39] are aggregated types of mitigation actions, such as energy efficiency, electrification, fuel switching, use of renewable energy, product change and supply chain decarbonisation, that fit with the company's specific actions.

Mitigation actions refer to:

- actions and action plans that the company undertakes to deliver against its set targets and address material impacts, risks and opportunities; and
- decisions the company takes to support these with financial, human or technological resources.

[37] Note that Anders Bjørn et al. have some reservations regarding the absolute contraction approach (ACA) (*From the Paris Agreement to corporate climate commitments: evaluation of seven methods for setting 'science-based' emission targets,* Bjørn et al**.,** April 2021).

[38] Physical units should be preferred where possible.

[39] COMMISSION DELEGATED REGULATION (EU) 2023/2772 of 31 July 2023 supplementing Directive 2013/34/EU of the European Parliament and of the Council as regards sustainability reporting standards

Note that the investment plan of the company supporting its transition plan is addressed under section 9.5 covering assessment points for financial elements.

8.3.1 Red flags

- The company does not provide an action plan regarding how it will reach its short-, medium- and long-term targets and prevent transition risks.

  Note: At the least, the company's transition plan should provide an explanation of the decarbonisation levers it has identified, the sequencing of their deployment and the key actions planned, including changes in the company's product and service portfolio and its adoption of new technologies in its own operations or upstream and downstream in its value chain.

- The company does not quantify the GHG emissions reduction resulting from the actions it plans to implement (see Figure 6 and Table 4 for examples of good disclosure)

  Note: The description of the decarbonisation levers implemented or planned by the company (e.g. energy or material efficiency and consumption reduction, fuel switching, use of renewable energy, phase out or substitution of product and process…) should include information on their overall expected quantitative contributions to achieving the GHG emissions reduction targets.

- There is no information (qualitative or quantitative) in the transition plan regarding the potential locked-in emissions of the company (see appendix 3).
- The company does not provide an explanation regarding the sensitivity of its mitigation actions to the external factors on which they depend to achieve the strategic ambition (and appendix 4).
- The transition plan does not provide financial elements regarding how the company will fund its mitigation actions (see section 8.5).
- There is no information in the plan related to the forecasted production activities.
- In the case of fossil fuel companies, there is no fossil fuel phase-out plan included in the company's transition plan.
- Carbon credits are considered as mitigation actions to reach intermediate targets or account for a disproportionate share of long-term targets.

  Note 1: Companies should not use carbon credits to deliver on short- or medium-term GHG reduction targets. A company should prioritise its own GHG emissions reductions and removals over the use of carbon credits. It should prioritise direct reduction in all GHG emissions within its boundaries, limiting residual emissions to a minimum, in line with science-based pathways that are aligned with a high likelihood of limiting global warming to 1.5°C above pre-industrial levels.
  Note 2: Any use of carbon credits should be restricted to addressing residual emissions only and should be reported separately, so that the company does not count carbon credits and offsets in its short- and medium-term targets, nor relies on these to reach such targets.
  Note 3: Despite the absence of a consensual definition for 'residual emissions', the main frameworks, such as those by CBI, ESRS, ISO, GFANZ or SBTi, limit residual emissions to 5-10% of total (scope 1, 2 and 3) emissions.
  Note 4: Use of carbon credits should follow higher expectations set out in recognised guidelines, such as section 10 of the ISO Net Zero Guidelines.

8.3.2 Granularity

In many use cases, the assessor will need to at least have access to a description of the implemented and planned decarbonisation levers and their overall quantitative contributions to achieving the GHG emissions reduction targets (see examples in Figure 6 and Table 4).

Additionally, the assessor will need to have access to the hypothesis and information on the quality of data used by the company to quantify its own GHG emissions reductions or its contribution to GHG reductions in the global economy. The assessor will also need access to the decarbonisations levers disclosed, if not at asset level, at least at the geographical level where the company operates.

For specific use cases, the assessor may also need a detailed investment plan of the company per asset (see section 8.5.1), or at least per geographical location where the company operates.

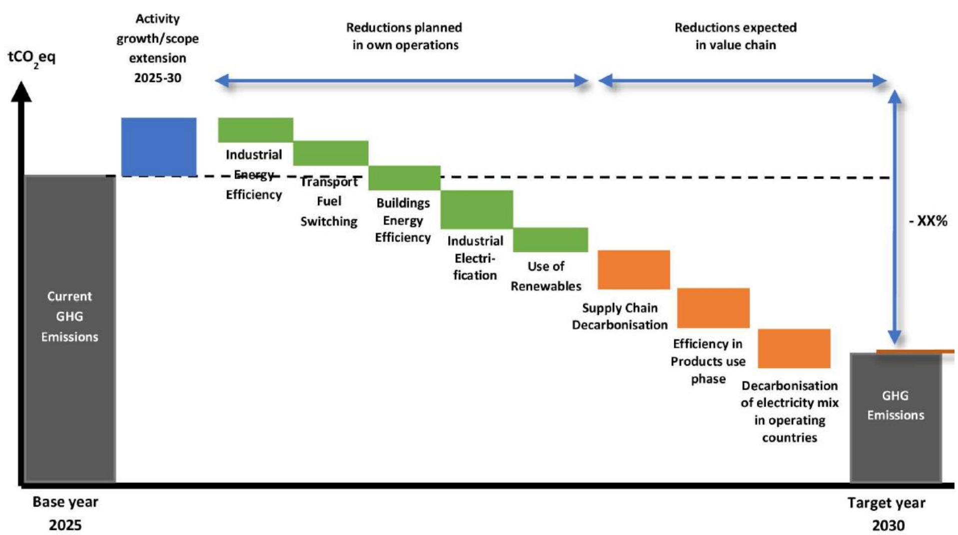

Figure 6: Illustration of GHG decarbonisation by action (adapted from ESRS E1)

	Base year (e.g., 2025)	2030 target	2035 target	...	Up to 2050 target
GHG emissions (ktCO2eq)	100	60	40		
Energy efficiency and consumption reduction	-	- 10	- 4		
Material efficiency and consumption reduction	-	- 5	-		
Fuel switching	-	- 2	-		
Electrification	-	-	- 10		
Use of renewable energy	-	- 10	- 3		
Phase out, substitution or modification of product	-	- 8	-		
Phase out, substitution or modification of process	-	- 5	- 3		
Other	-	-			

Table 4 : Decarbonisation levers in the short- and medium-term (table from ESRS E1)

In use cases that question the feasibility of the transition plan, the assessor will need to understand all the key assumptions the company has made, especially regarding dependencies on external factors that the company relies on to implement its decarbonisation levers and meet its emissions reduction targets. Table 5 provides a categorisation of transition plan external dependencies (see appendix 4 for more details).

Category	External dependency
1. Non-physical	1.1 Policy strategy
	1.2 Regulatory framework
	1.3 Market and economics
	1.4 Public acceptance
	1.5 Consumer and client behaviour
2. Physical	2.1 Infrastructure availability and logistics
	2.2 Technology
	2.3 Resource availability
	2.4 Environmental impacts and ecosystem services
	2.5 Labour availability

Table 5 : Categorisation of transition plan external dependencies

8.3.3 Assessment points

Decarbonisation levers assessment point 1 : The assessor should ensure that the decarbonisation levers cover and impact relevant GHG emissions categories of the company's GHG inventory (see section 8.1).

Note: The levers can be technological or non-technological, for instance: energy or material efficiency, consumption reduction, electrification, fuel switching, use of renewable energy, phase-out or substitution/change of product and process, eco-design, supply-chain decarbonisation, influencing client behaviour to modify demand, climate policy regarding liquidity management (e.g. climate criteria to select a bank).

Decarbonisation levers assessment point 2 : The assessor should ensure that the decarbonisation levers planed by the company in the short, medium and long term contribute quantitatively to achieving the respective GHG emissions reduction targets set by the company and do not lead to delaying the strategic ambition or to locked-in emissions (see also 8.3.4).

Decarbonisation levers assessment point 3 : The assessor should check the hypothesis, calculations and figures provided by the company for each of its decarbonisation levers, where this information is available, to ensure the company does not overestimate the expected contribution of the decarbonisation lever.

Decarbonisation levers assessment point 4 : The assessor should ensure the company has clearly identified the external factors on which it depends to achieve the strategic ambition of its transition plan and has assessed the transition plan's consistency with these external factors, including geographical dependencies (see Appendix 4).

Note 1 : Especially in the case of some hard-to-abate sectors where technological innovations are critical to mitigate GHG emissions, the assessor should ensure that the deployment dates are aligned with the technology readiness level[40] and licence availability to use such technologies. Ideally, companies and assessors can find this information in sectoral transition pathways (see section 6).

[40] See for instance the IEA's *Clean Energy Technology Guide*.

Note 2: When a company's transition plan relies on some specific materials or energy vectors, especially biomass or hydrogen for instance, the assessor should check the availability of such materials and of the related infrastructures where the company plans to use them.

Decarbonisation levers assessment point 5: The assessor should ensure that the company's decarbonisation levers do not lead to an increase in its climate-related risks or have other negative environmental or social impacts.

Decarbonisation levers assessment point 6: The assessor should ensure that the company's decarbonisation levers are coherent with the sectoral transformation needed to limit global warming to 1.5°C with no or limited overshoot.

Note: To do so, the assessor can notably rely on the sectoral milestones identified in scenarios like the International Energy Agency's (IEA) Net Zero Emissions (NZE) scenario or relevant local or sectoral transition plans (see section 6).

Decarbonisation levers assessment point 7: Where relevant, the assessor should ensure that the company's contributions to the decarbonisation of the global economy are not overestimated nor misleading and are associated with figures expressed in tangible physical units.

Note 1: This is especially relevant for enablers/climate solutions providers and for companies that develop or increase the climate solutions offering in their portfolio.

Note 2: Physical units can, for instance, be renewable electricity capacity produced, number of low-carbon vehicles produced, amount of energy savings from goods and services.

Decarbonisation levers assessment point 8: The assessor should assess the evolution of the company's technology mix against the evolution of the sectoral technology mix identified in the company's selected sectoral transition plan(s).

Decarbonisation levers assessment point 9: The assessor should assess the consistency between the company's production capacities and its strategic ambition (see also sections 8.3.4 and 8.5.1.3).

8.3.4 Additional assessment points for decarbonisation levers in specific sectors

Some assets from GHG-intensive (hard-to-abate) sectors, fossil fuel producers and producers of energy-intensive products or products that will emit GHGs during their entire lifespan including end of life (e.g. fossil fuel internal combustion engine transportation vehicles, fossil fuel boilers, furnaces or heating systems, halocarbon-based cooling systems, N-fertilizers) are associated with high transition risks from locked-in emissions[41] (see appendix 3). For these sectors and producers, we propose additional assessment points in relation to decarbonisation levers, focusing on locked-in emissions.

Note: Any existing or upcoming fossil fuel well or mine contributes to locked-in emissions due to the use phase of the future extracted products but also, to a smaller extent, due to the extraction phase of such assets (leakages, flaring, venting).

Locked-in emissions assessment point 1: The assessor should analyse the company's future cumulative GHG emissions (i.e. locked-in emissions) implied by the company's installed and planned production assets (or products) over a chosen time period from the reporting year.

Note 1: Analysis can be done, for instance:

[41] Note that despite this topic being critical for transition challenges, locked-in emissions are not directly covered by GHG accounting standards, except through the lens of the use phase of sold products to a certain extent. Companies are not used to quantifying and disclosing such information at the moment.

- by comparing the locked-in emissions against the carbon budget allocated to the company according to the chosen sectoral decarbonisation pathway(s), or
- by any other approach that provides relevant insights regarding the risk for the company of not meeting its 1.5°C-aligned GHG reduction targets due to its locked-in emissions.

Note 2: The chosen time period should be representative of the lifespan of assets/products.

Locked-in emissions assessment point 2 : The assessor should assess the consistency between the company's existing and planned production capacities against the long-term production projections[42] (see Figure 7:) through the lens of potential locked-in emissions. This allows for an assessment of the extent to which the company is likely to deliver long-term production with the current and planned production capacities while identifying potential gaps and potential locked-in emissions risks.

Note 1: Existing and planned activities are the actual production capacities of the companies.

Note 2: Long-term production projections constitute the production forecasted for the company or the projected sectoral production 'trend' to which the company would likely have to answer/contribute.

Note 3: The assessor can compare activities secured by the company's existing and planned assets (see Figure 8:) against expected activities (forecasted for the company or the sector). This conservative approach helps ensure there is no gap between how much the company plans to produce (or how much the sector requires it to produce) and the future production capacities of the company, without assuming that this gap is automatically filled by hypothetical low-carbon activities.

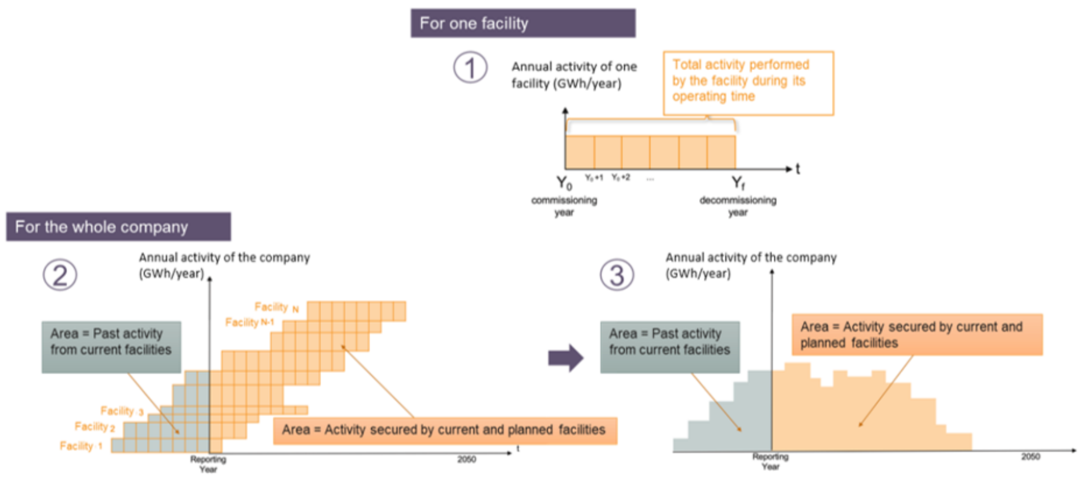

Figure 7: illustrative company's secured activities considering existing and planned assets[43]

[42] Fifteen years can be considered a reasonable timeframe for long-term projections.
[43] Source: ACT Generic Methodology version 2.0, Accelerate Climate Transition Initiative, December 2023

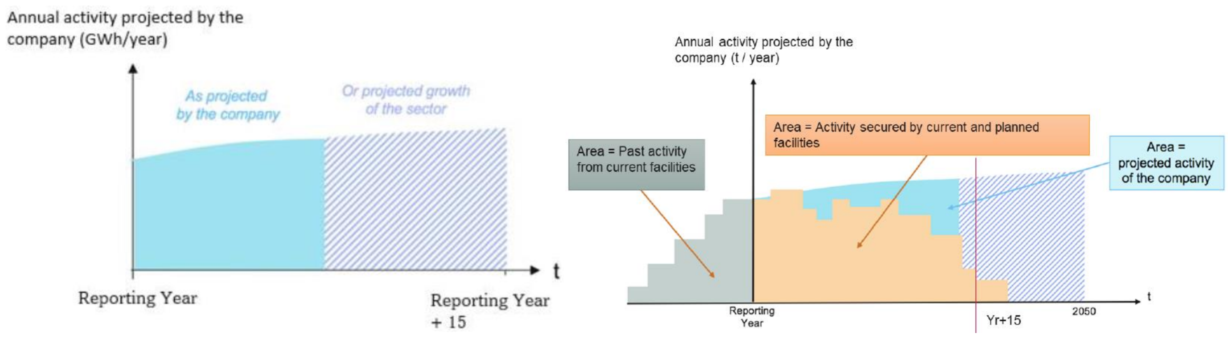

Figure 8: Illustrative comparison of projected secured activities against expected activities[43] (adapted from ACT generic V2)

8.4 Governance

Without relevant governance mechanisms the implementation and success of the transition plan is likely impossible.

8.4.1 *Red flags*

- The company does not provide any relevant information or provides only vague or limited information on how its transition plan is embedded within its governance structures and organisational arrangements. This concerns information regarding the following:
  - Board oversight and reporting
    - There is limited information about the governance body/bodies or individual(s) responsible for oversight of the transition plan.
  - Management roles, responsibility and accountability
    - There is limited information about management's role in the governance processes, controls and procedures used to monitor, manage and oversee the transition plan, as well as how the transition plan is embedded within the company's wider control, review and accountability mechanisms.
  - Incentives and remuneration
    - The company provides only a vague reference to remuneration and incentives linked to ESG or sustainability performance.
    - There is limited information about how the company aligns or plans to align its remuneration and incentive structures with the strategic ambition of its transition plan.
    - There is no information regarding how incentives and remuneration pertain to the company's board (or equivalent body) and executive pay.
  - Skills, competencies and training
    - There is limited information about the competencies of the company's decision-makers in relation to climate change risks and opportunities.
    - There is limited information regarding actions the company is taking or plans to take in order to assess, maintain and build the appropriate skills, competencies and knowledge across the organisation in order to achieve the strategic ambition of its transition plan.

8.4.2 *Granularity*

In most use cases, none of this information is sensitive to local context, nor does it necessitate additional geographical precision or breakdown. Nevertheless, depending on the company's organisational and governance structure in relation to its subsidiaries, business units and national sub-entities, the assessor may need to better understand, where relevant, how the company's governance at the level of the consolidated accounting group influences the other linked sub-entities or vice versa. This can be necessary, for instance, if the scope of the assessment is a sub-entity of a group in a specific country.

8.4.3 Assessment points

The assessment points related to governance are listed below. Additional guidance and resources to help the assessor address some of the governance assessment points are proposed in appendix 6.

Governance assessment point 1: The assessor should ensure that the topic of climate change is embedded at the highest decision-making level of the company and that leadership accountabilities regarding the transition plan are clearly defined.

Note: The assessor can look for evidence of board (or equivalent body) oversight of the company's transition plan, e.g. approval of the transition plan by the board, inclusion of the transition plan in the agenda of the board meetings, accountability of the board regarding transition plan delivery.

Governance assessment point 2: The assessor should ensure that the company's governance and organisational arrangements embed the strategic ambition of its transition plan and do not undermine the success of the latter.

Note: The assessor can look for approved strategic orientations that could antagonise the strategic ambition of the transition plan.

Governance assessment point 3: The assessor should ensure that the board (or equivalent body) has access to the results of climate change scenario analysis and takes informed decisions based on this.

Note: As informed decisions depend on the quality of the climate change scenario analysis, the assessor can also assess the company's scenario analysis practices (see Table 15 of appendix 6)

Governance assessment point 4: The assessor should ensure that the company board or executive management has expertise on the science and economics of climate change, including an understanding of policy, technology and consumption drivers that can disrupt current business. The assessor should also look for evidence whether this expertise is used by the individual or committee to inform high-level decision-making within the company.

Governance assessment point 5: The assessor should ensure that the compensation arrangements for the company's CEO and/or seniors executives are linked to the delivery of the transition plan KPIs.

Note 1: The assessor can, for instance, check:

- whether the KPIs used for incentives and renumeration are included within the short-, medium- and/or long-term incentive plan(s),
- the percentage weighting of the transition plan KPIs within the incentive plan for the executive(s),
- the percentage of total executive remuneration that is linked to transition plan KPIs.

Note 2: Additionally, the assessor can look at whether the company provides relevant financial incentives linked to the delivery of the transition plan KPIs for all managers accountable to some extent for the implementation of the transition plan.

Note 3: Additional elements are proposed in Table 14of appendix 6.

Governance assessment point 6: The assessor should ensure that the company does not provide financial incentives that antagonise the strategic ambition of its climate transition (e.g. incentives for fossils fuel production growth or for the sales of GHG-intensive products).

Note: Additional elements are proposed in Table 14of appendix 6.

Governance assessment point 7 : The assessor should ensure that the company is equipped with procedures to assess, maintain and build the relevant skills, competencies and climate-related knowledge across the organisation to achieve the strategic ambition of its transition plan.

8.5 Financial elements

The financial elements of a transition plan are fundamental elements that not only provide information on the feasibility and coherence of the implementation strategy for the plan, but also on financial climate-related risks and the viability of the company. Absence of financial elements in a transition plan should in itself be seen as a red flag. Regardless, they are only one aspect among several others that a robust and credible transition plan must demonstrate and should not be seen as its sole keystone.

Once a company has announced its climate or other environmental targets and associated decarbonisation levers for implementing its transition plan, it is relevant to verify how the company mobilises investment and financial flows towards its presented strategy. Financial figures, such as levels of capital expenditure (CapEx) and operational expenditure (OpEx), research and development (R&D) budget directed towards transition efforts and revenues generated by green activities, can provide a 'proof of means' against which to compare the company's ambition. Although this does not necessarily provide a guarantee of performance or impact, it has the advantage of providing a quantitative element to enable comparisons with other actors in the same sector, with the sectoral needs for investment in decarbonisation, or even with the investment in activities or assets that go against the transition efforts.

Two approaches are of particular interest here. On the one hand, it is necessary to compare the financial indicators of the levels of proposed investment with the company's chosen decarbonisation levers. The internal coherence between these will vary according to the specific indicators being analysed; this will be discussed in the following sub-sections that deal with financial allocation and revenue independently. On the other hand, the level of investments and revenue associated with green or transition-enabling activities can be benchmarked against green taxonomies. These taxonomies are legal frameworks specifically designed to provide a classification of green versus other types of activities and assets.

While taxonomies are not necessarily tools designed to guide transition efforts specifically, they provide a rudimentary check that investments that the companies label as green or transition-enabling are indeed coherent with the overall aim to decarbonise the economy. That said, it should be noted that there are multiple taxonomies throughout the world. Moreover, these taxonomies do not cover all economic sectors and the scope of the activities included can vary based on political priorities across regions and countries, making the tool inherently limited.

Taxonomies are thus useful tools for information users that need a stable comparative basis for what constitutes a green investment – while keeping in mind the limits established above. Indeed, if a company claims to be heavily investing in transition efforts, but its investment in activities or assets aligned with a specific green taxonomy are low, it provides a signal to look at further information to ensure the company is not greenwashing.

Last, but not least, to align its financial elements with its strategic ambition, the company should consider the evolution of carbon prices and impacts from physical exposure to climate risks in its usual financial metrics.

Note that other kinds of financial considerations not captured here can also be relevant for an assessor, such as a company's strategic acquisition or divestment, joint ventures, etc. These can also give indications of the company's transition plan implementation strategy.

8.5.1 Financial allocations to support the strategic ambition: CapEx and OpEx

Depending on the sector, a company's capital expenditure (CapEx) and/or operational expenditure (OpEx) can serve as indicators of the expenditure and investments necessary to support the strategic ambition of its transition plan. While some sectors, such as heavy industries and energy, have huge investments scheduled over time, others undertake more operational expenditures related to their transition. Both these indicators should be considered by the assessor to evaluate the coherence of financial resource allocation towards the company's stated transition ambition.

CapEx comprises the funds a company uses to acquire, upgrade, retrofit and/or maintain its physical assets (buildings, equipment, power plants, technologies, etc.). It is one of the key indicators of a company's investment in its own activities and in its further development. Breaking down and analysing the way in which a company chooses to direct these financial flows into different assets can provide an objective and quantitative basis to understand the direction in which it is orienting its activities in the short, medium and long term.

Switching to low-carbon production models may (or not) result in cost overruns compared to business-as-usual OpEx. Regardless, OpEx trend can be an indicator of the company's engagement with decarbonising its activities.

There are different types of OpEx a company can incur in relation to decarbonising its activities. Examples include: purchase of low-carbon energy and fuels, maintenance costs of low-carbon technologies and processes, low-carbon transport costs, purchase of low-carbon materials, employees trainings related to climate topics, including upskilling and reskilling related to low-carbon technologies or low-carbon business model shifts. The costs related to R&D of low-carbon, transition-compatible technologies that are not covered by R&D CapEx can also be considered as low-carbon OpEx.

8.5.1.1 Red flags

- There is unclear or limited information regarding current and future financial resources the company allocates to implementing its transition plan.
- There is no information regarding how the company plans to to transition its CapEx and OpEx towards low-carbon activities.
- There is no information regarding the company's CapEx in carbon-intensive assets and/or products.
- There is unclear or no information about the company's CapEx in technologies and products (climate solutions) that enable the decarbonisation of the global economy.
- There is no information related to the company's forecasted production activities.

8.5.1.2 Granularity

In most cases, the assessor will need information on the CapEx and OpEx allocation for each of the company's stated decarbonisation levers. In addition, the assessor might need to better understand the abatement costs hypothesis that the company uses to steer and monitor financial allocations to its transition plan.

The time horizon of 'future' resources allocated to the action plan should cover at least the short term (five years), consistent with the company's communication of its financial plan communication. Note that for some types of OpEx, those costs can only be disclosed with relatively high uncertainty, considering the variability of low-carbon energy prices[44] and materials.

The medium- and long-term (10 to 20 years) financial horizons are more uncertain and subject to many more external dependencies (see appendix 4) and cost evolutions. Nevertheless, the company can disclose financial considerations for these time horizons as well, at least in order of magnitude and linked to the lifespan of assets or investments. Note that for some assets with long lifespans, such as a cement factory, the lifespan should be considered at sub-asset level, such as the cement kiln instead of the overall cement factory.

In some cases, the assessor may need CapEx information for the different company activities, locations, and also types of assets (new/planned, existing, retrofitted) in order to ensure the credibility of the company's transition-related investment plans and alignment with sectoral and local decarbonisation needs and contexts (see section 6). If some of this information is classified or sensitive, it is likely not to be publicly disclosed; however, it can be communicated by the company to the assessor under a non-disclosure agreement.

Further, the assessor may need a breakdown of the company's OpEx by categories such as:

- low-carbon energy and fuels[45]
- maintenance of low-carbon technologies and processes[45]
- low-carbon transport costs[45]
- low-carbon raw materials[45]
- climate-related training for employees
- other low-carbon R&D costs not covered by R&D CapEx

8.5.1.3 Assessment points

Financial allocation assessment point 1 : The assessor should ensure there is consistency between the company's investment plan (existing and planned) and the investments required for its planned decarbonisation levers (see section 8.3).

Note: Any investment gap would likely mean that the company will not be able to meet the original ambition of its transition plan.

Financial allocation assessment point 2 : The assessor should ensure there is consistency between the company's investments (existing and planned) in available low-carbon technologies/climate solutions[46] and the decarbonisation investment needs of the sector in which the company operates[47], keeping in mind the underlying hypothesis relating to investment costs.

Note 1: To identify investment needs, the assessor should consider, for instance:

- Current GHG performance of the company and the company GHG reduction target
- Forecasted production activities of the company; it is important to ensure that the company aligns its CapEx with its forecasted production activities and its future actual production capacities

Note 2: Different existing approaches can be used to allocate investment needs. A basic approach would be to allocate it proportional to the company's technology mix profile compared to the technology mix

[44] Except for some specific contractual vehicles, such as power purchase agreements.
[45] Refer to relevant 1.5°C-aligned taxonomies where companies operate to identify relevant eligible items.
[46] Recognised by relevant green taxonomies or the IEA's *ETP Clean Energy Technology Guide*.
[47] Relevant information can be found, for instance, in IIGCC's *Climate Investment Roadmap* (2022) or other reports.

profile of the selected scenario at a specific point of time. A more detailed approach would be the one used, for instance, in the Paris Agreement Capital Transition Assessment (PACTA) methodology.[36]

Note 3: The assessor should use sectoral transition plans, where they exist, adapted to the location where the company operates, as a source to determine relevant sectoral investment needs (see section 6 and Figure 10: for an example of investment needs for aluminium production in Australia).

Note 4: Investment costs will not only vary over time but also likely be different from one region or country to another. The assessor should be careful not to compare apples and oranges and be cautious when interpreting results.

Note 5: When sectoral transition plans adapted to the location where the company operates do not exist or do not provide relevant information, the assessor can use information from international 1.5°C-aligned pathways, such as the IEA NZE (see Figure 9:) , NGFS Net Zero 2050, NGFS Low Demand, or other sectoral decarbonisation pathways and roadmaps from reputable organisations.

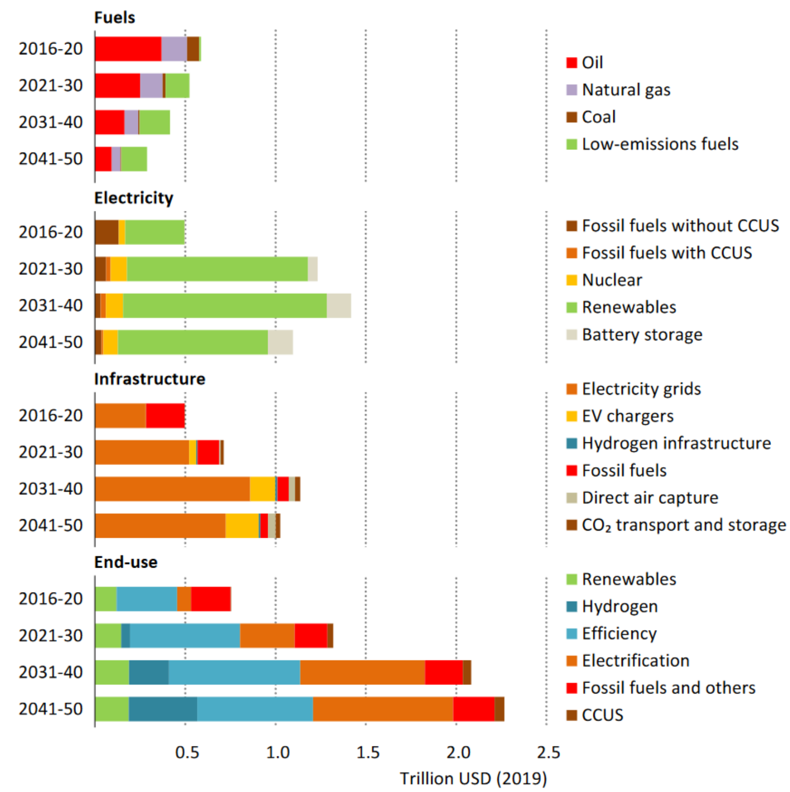

Figure 9: Global average annual energy investment needs by sector and technology in the NZE (Net Zero by 2050) scenario, October 2021, AIE all rights reserved)

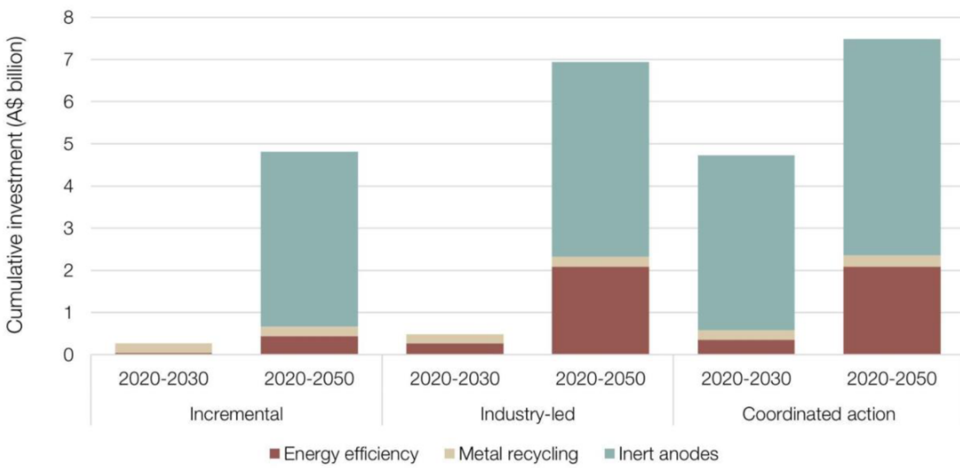

Figure 10: Investment required for aluminium production in Australia under three different scenarios[48] (Pathways to industrial decarbonisation, February 2023, Australian Industry Energy Transition Initiative)

Financial allocation assessment point 3 : The assessor should ensure that the company ends investments in activities that undermine the transition in accordance with the selected decarbonisation scenario, considering the local context in which the company operates.

Note 1: For companies in the fossil fuel sector and coal power generation, the assessor should ensure the following:

- The company ends investments in new oil and gas production, including any new investments in exploration, new fields, expansion of existing fields or infrastructure to increase the production of existing fields (apart from investments dedicated to reducing methane emissions from production).
- The company ends investments in new thermal and metallurgical coal production, including any investments in new coal mines, expansion of existing mines or infrastructure to increase the production of existing mines.
- The company ends investments in new coal power plants and in the development of additional capacity at current plants.
- The company phases out coal production and power in its operations by 2030 in OECD and EU countries and by 2040 in the rest of the world. Any residual coal CapEx after these dates should exclusively be devoted to closing existing infrastructures or avoiding methane leakage.
- The company directs sufficient investment to reducing methane emissions from its existing assets.

Note 2: For financial institutions, the assessor should ensure the following:

- No new financial services are provided to new coal, oil or gas production projects and to the companies that develop them.
- No new financial services are provided to new coal power plants and to the companies that develop them.
- No new financial services are provided to new gas liquefaction projects and to the companies that develop them.

[48] Only the 'coordinated action' scenario is aligned with the 1.5°C requirement (See in more detail: https://www.climateworkscentre.org/wp-content/uploads/2023/12/Pathways-to-industrial-decarbonisation-phase-3-technical-report-February-2023-Australian-Industry-ETI.pdf).

- The financial institution has committed to phase out coal from its portfolio and operations by 2030 for OECD and EU countries and by 2040 worldwide.
- The financial institution has adopted strong policies to drive companies active in the coal, oil and gas sector to shift their practices and change business models, and to sanction companies that do not. This includes requiring the adoption of plans to reduce fossil fuel production in line with the 1.5°C scenario with limited or no overshoot, with limited reliance on negative emissions such as under the IEA NZE scenario, and to accordingly ramp up investments in sustainable energy and in drastic methane emissions reduction.

Note 3: The assessor can use the Global Coal Exit List and the Global Oil and Gas Exit List by the NGO Urgewald, or an equivalent open access list, to identify companies and their fossil fuel projects and investments.

Financial allocation assessment point 4 : The assessor should compare the company's financial allocations (CapEx and/or OpEx) in climate solutions against the total financial allocations of the company.

Note 1: This provides an indication of the company's momentum regarding changes to its business model.

Note 2: When assessing financial allocation to climate solutions, the assessor should remain cautious and refer as much as possible to relevant elements identified in sectoral transition plans and dynamically assess the real impact of such expenses on companies' transition efforts. It is important to observe whether the different expenditures provide any real, short-term decarbonisation impact and pave the way for long-term low-carbon activities.

Financial allocation assessment point 5 : When the company invests in R&D programmes for climate solutions (especially non-mature climate technologies), the assessor should ensure that the company invests in the relevant climate solutions on which its transition plan relies.

Note 1: The assessor should refer to relevant literature and databases such as the IEA's *ETP Clean Energy Technology Guide* to identify relevant technology development needs and the technology readiness level (TRL).

Note 2: Patents can be considered as CapEx.

Financial allocation assessment point 6 : Next to investments, the assessor can also look at the divestment operations of the company. Selling a GHG-intensive asset can legitimately be considered a relevant action to decarbonise the company's operations or to support its investments in low-carbon assets. Nevertheless, without any climate considerations in the conditions set by the seller for the buyer, it is likely that this asset will continue to emit GHGs in the new owner's hands. The assessor may investigate the company's policies regarding how it sells high-intensity assets, looking for conditions such as the buyer's commitment to upgrade, retrofit or phase down production.

Note: Some organisations such as GFANZ, Environmental Defense Fund and CERES work on this topic and their reports[49] can be a helpful resource for the assessor.

8.5.2 Revenue and production

Revenue and production are other ways to assess a company's engagement in transition efforts. While the previously listed financial indicators focus on the company's intentions to deploy its transition plan, signalled by the coherence between its decarbonisation levers and associated financial allocations,

[49] *Tackling Transferred Emissions: Climate Principles for Oil and Gas Mergers and Acquisitions*, EDF and CERES, 2023.

revenue and production help to verify that investments are translating into the actual greening of the company's activities and assets.

Analysing a company's engagement with its transition plan through the lens of revenue and production is dynamic by nature. Unless a company's business model is entirely dedicated to green or transition-enabling activities, it is logical that its low-carbon revenue and/or production in the first reporting year of its transition plan will not be significant. However, as the company proceeds to implement its transition plan and decarbonise or switch to low-impact alternatives, the share of revenue and/or production associated with green or transition-enabling activities disclosed by the company should rise. This is also true of transitional activities, for which the alignment criteria is typically stringent and has the tendency to evolve towards higher standards with time, such that zero-emissions solutions become the standard even for hard-to-abate activities.

Aligned/transitional low-carbon revenue and production: These revenues are generated by activities that are either widely recognised as low-carbon (for instance, those recognised in taxonomies of sustainable activities), have substantially lower GHG emissions than the sector or industry average, do not hamper the development and deployment of low-carbon alternatives, do not lead to locked-in assets incompatible with the objective of climate change mitigation when considering the economic lifetime of those assets, and do no significant harm to the environment.

- Examples of activities yielding low-carbon revenues are generating electricity from renewable sources, or producing steel or aluminium using a process that emits significantly less emissions than the industry average.
- An example of revenue that would not be considered as low-carbon is that generated by manufacturing internal combustion engine (ICE) vehicles using a process with GHG emissions that are substantially lower than the sector or industry average. While the company's activities may be low-carbon in themselves, they lead to locked-in assets that are incompatible with the objective of climate change mitigation (due to the in-use emissions from ICE vehicles).

Enabling low-carbon revenue and production : These revenues are generated by activities that enable other activities/companies/sectors to make a substantial contribution to the decarbonisation of the economy, provided that these enabling activities do not themselves lead to locked-in assets incompatible with the objective of climate change mitigation when considering the economic lifetime of those assets.

- Examples of enabling low-carbon revenues or production activities include producing batteries for renewable energy storage, building transmission & distribution infrastructure to enable the shift to renewable energy generation, providing sustainability services to the buildings sector, reducing energy demand, etc.

8.5.2.1 Red flags

- The company does not explain how it defines the revenues and/or amount of production from climate solutions and green activities.
- There is limited or no disclosure of the amount or percentage of revenues and/or amount of production generated by low-carbon activities drawn from a recognised green taxonomy.

- There is limited or no disclosure of the amount or percentage of revenues and/or amount of production generated by low-carbon activities in sectors with high climate impact.[50]
- There is limited or no disclosure regarding business activities facing material transition risk and material physical risk over the short, medium and long term, i.e. revenue facing climate risks.

8.5.2.2 Granularity

Companies subject to specific regulations may have to consider several existing green taxonomies. Ideally, the company should disclose revenue and/or amount of production generated by low-carbon activities drawn from each relevant taxonomy where the company operates, and/or consider the most conservative taxonomies to define the greenness of its activities.

Beyond national or regional taxonomies, there are other reputable climate taxonomies that can be considered, such as the ones developed by the Climate Bonds Initiative[51] or the Independent Science-Based Taxonomy[52].

8.5.2.3 Assessment points

Revenue/production assessment point 1 : The assessor should check how the company defines its green revenues (or green production in production units).

Note: When a company uses green taxonomies to define its green revenues (or production), the assessor should ensure that the company refers to green taxonomies that are relevant to the areas where it operates.

Revenue/production assessment point 2 : The assessor should analyse the share of a company's green revenues (or green production) against the company's revenue (or green production) from other activities.

Revenue/production assessment point 3: The assessor should analyse the change to the company business model from a dynamic perspective, by looking at proof of creation or expansion of low-carbon revenue over time (a 3-5 year timeframe is reasonable).

Revenue/production assessment point 4 : For companies in sectors with high climate impact, especially fossil fuels, coal and gas power generation, the assessor should assess the company's forecasted revenue and/or production from those activities and look for clear signs (ideally dates) of the phase-out or end of those activities.

Revenue assessment point 5 : The assessor should ensure that the company's revenue exposure to climate risks will not undermine its capacity to transition. Further, the assessor should assess the scope of the company's revenues exposed to climate risks and look for evidence of good risk management practices to mitigate those risks, and pay attention to the :

- consistency with the decarbonisation levers (see section 8.3) to address transition risks, and
- consistency with the adaption strategies and plans, where they exist, to address physical risks related to climate change.

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[50] Sections A to H and Section L of Annex I to Regulation (EC) No 1893/2006 which are the same as ISIC Rev 4 sections A to H and section L : Agriculture, forestry and fishing, Mining and quarrying, Manufacturing, Electricity, Gas, Steam, Air conditioning supply, Water supply, Sewerage, Waste Management and remediation activities, Construction, Wholesale and retail trade, Repair or motor vehicles and motorcycles, Transportation and storage, Real estate activities.

[51] https://www.climatebonds.net/standard/taxonomy

[52] https://science-based-taxo.org/

Note 1: The assessor can analyse the company's usual financial indicators through a climate lens, especially carbon price evolution. This can be done using adjusted indicators, such as adjusted EBITDA, adjusted net profit and adjusted cash-flow.

Note 2: 'Adjusted' refers to the case where the indicator is considered against the carbon price, e.g. multiplying the company's carbon emissions (tCO_2e) by the carbon price (€/tCO_2e). The carbon price should be documented and drawn from reputable sources (such as IPCC reports or national values) and include a reference year (vintage).

8.6 Engagement strategy

The decarbonisation transition being systemic, a company may not be able to do everything by itself (see for instance external factors in appendix 4), but it can influence the ecosystems within which it operates to facilitate its transition. Therefore, it is important to understand the engagement policy of the company with its value chain (clients and suppliers), peers, governments and policymakers, communities and civil society, especially in order to overcome the transition bottlenecks.

8.6.1 Red flags

- The company does not disclose its membership in trade organisations or industry bodies.
- The company does not disclose nor refer to any public disclosure platform regarding its expenditures (total monetary value of financial and in-kind political contributions) towards its climate-related lobbying activities.
- The company does not disclose the main topics covered by its lobbying activities in relation to the transition.
- The company has no public statement about how to conduct its advocacy activities to support the goals of the Paris Agreement.
- The company does not describe which climate policies it lobbies for.
- The company provides vague or incomplete information regarding its engagement with key suppliers and clients.
- The company does not provide an explanation regarding how the strategic ambition of its transition plan is linked to changes in sales, volumes, shifts in customer/client preferences and demand, or regulatory barriers, and how the company's engagement activities can influence that.

8.6.2 Granularity

Where necessary, the engagement activities of the company should be disaggregated by country or geographical level.

8.6.3 Assessment points

8.6.3.1 Engagement with governments and public policymakers

Government engagement assessment point 1 : The assessor should look for evidence that the company engages with governments and public policymakers to overcome regulatory bottlenecks to the transition.

Government engagement assessment point 2 : The assessor should look for evidence that the company actively engages with governments to enrich and support nationally determined contributions (NDCs) in countries where it operates.

8.6.3.2 Engagement with peers/trade association

Peer engagement assessment point 1: The assessor should look for evidence (policies, collective actions, public statements) that the company does not support any peer actions, alliances, coalitions, trade associations or businesses platforms it is member of, that undermine the transition and lobby against climate-friendly policies.

Note 1: The assessor can look for financial disclosures of the company regarding its lobbying activities and their purpose.

Note 2: The assessor can check if the company reviews its business association memberships through a climate policy perspective and the actions the company takes when its membership associations take opposing positions.

Note 3: Below are actions a company can take when peer associations, alliances, coalitions or think tanks it is a member of or to which it provides support are found to oppose climate-friendly policies:

1. Making public statements challenging the associations, alliances, coalitions and think tanks
    - For example, the company speaks out, publicly distancing itself from the statements or lobbying against climate policy by the associations, alliances, coalitions or think tanks. The company explains how these statements or lobbying are inconsistent with its own emissions reduction goals and with its support for climate policy.
2. Engaging with associations, alliances, coalitions or think tanks to change their position.
    - For example, the company works to end lobbying against climate policy through transparent and time-bound engagement with those associations.
3. Withdrawing funding for or suspending/ending its membership of the association, alliance, coalition or think tank.
    - For example, where attempts to change an association's position prove ineffective or insufficient, the company discontinues its membership or withdraws funding from the association.

The assessor can look for existing reputation controversies and use relevant materials from the following sources:

- NGOs such as InfluenceMap, The Good Lobby, Client Earth, Open Secrets, Corporate Europe Observatory, or an equivalent organisation
- Public resources from governments that track corporate lobbying activities
- OECD Anti-corruption & Integrity Hub

Peer engagement assessment point 2: The assessor should look for evidence (policies, collective actions, public statements) that the company directly supports or collaborates actively with peer actions, alliances, coalitions, trade associations or businesses platforms with positive actions for facilitating and accelerating the transition.

Peer engagement assessment point 3: Where relevant, the assessor should look for existence of collaborative research and development programmes on decarbonisation where the company is actively engaged with its peers.

8.6.3.3 Engagement with suppliers

Engagement with suppliers is key to accelerating the decarbonisation of a company's value chain, especially in sectors with important upstream emissions, but also for those companies that rely on climate solutions providers to facilitate their own transitions.

Supplier engagement assessment point 1: The assessor should ensure that the company has a strategy to influence its strategic suppliers' behaviour and activities to reduce GHG emissions and support the delivery of its transition plan.

Note 1: Some guiding questions are proposed in Table 16 in appendix 7.

Note 2: Strategic suppliers are the ones identified by the company as key to conducting its activities and delivering its transition plan. The company may identify these from a hotspot analysis or materiality analysis, for instance.

Note 3: The assessor can also look for a company strategy that may influence its suppliers' transition plans.

Supplier engagement assessment point 2 : The assessor should ensure that the company carries out activities to influence its strategic suppliers' behaviour and activities to reduce GHG emissions and support the delivery of its transition plan.

Note 1: Some guiding questions are proposed in Table 17 in appendix 7.

Note 2 The assessor can look at whether the company has clear requirements regarding its climate-related expectations from its strategic suppliers.

Supplier engagement assessment point 3 : The assessor can check whether the company has climate-related criteria to select its financial service providers[53].

Note: While there are no GHG accounting methods regarding this question of using company money on a deposit account or the company's invested money, it would make sense for a company to have relevant climate criteria regarding the selection of its financial service providers (including insurance) given the risk posed by this money being invested in fossil fuels and not supporting the overall transition.

8.6.3.4 Engagement with clients/customers

Engagement with clients or customers is especially key for companies with products with a use phase that is critical in relation to the transition and/or can lead to locked-in emissions, for which there is no other reasonable choice than to reduce product demand. It is therefore important to understand how the company can influence its clients' behaviour to reduce GHG emissions over time and support its transition plan.

For some companies, such as those in the fossil fuel or hard-to-abate sectors, this means having a clear strategy and activities to support the reduction of demand for their products.

For financial institutions, this means supporting the companies in their portfolio with transitioning.

Client engagement assessment point 1: The assessor should ensure the company has a strategy, ideally governed by policy and integrated into business decision-making, to influence, enable or otherwise shift customer choices and behaviour in order to reduce GHG emissions related to the company's activities.

Note: Additional guidance to support the assessor with this point is provided in Table 18 appendix 7.

Client engagement assessment point 2: The assessor should review the extent to which the company implements activities and initiatives that help, influence or otherwise enable customers to reduce their GHG emissions.

Note: Additional guidance to support the assessor with this point is provided in Table 19appendix 7.

[53] See for instance *The Carbon Bankroll Report*: https://www.topofinance.org/

9. In conclusion

The assessment process and the summation of the assessment items, consideration assessment points and red flags outlined in this document should provide the assessor with a strong basis to arrive at a well-founded judgement of the credibility of a company's transition plan and its transition readiness.

As agreed with ATP-Col members, this document does not aim at proposing a scoring method, nor a weighting approach of assessment points or thresholds to categorise a company's transition plan; the result of this would be to create another method in a landscape already dense and competitive. Indeed, there are already categorisation matrices or ladders to qualify a company's transition readiness and transition plan, each having its own pros and cons and answering specific uses cases. Examples include categorisations provided by the ACT Initiative, Climate Bond Initiative, GFANZ, New Climate Institute, Sustainable Market Initiative and Transition Pathway Initiative, with more such initiatives likely to come soon.

Whichever approach assessors use, they should keep in mind the assessment principles described in section 4 of this document as well as the triple consistency approach described in section 5.2 and be transparent about any weighting they use to assess the credibility of the transition plan and categorise the transition readiness of the company.

This document acknowledges the need for categorisation to derive a more systematic and comparative understanding of whether the company's transition plan and ambition aligns with or lags behind the global decarbonisation goal. Based on the review of the different existing categorisations, we see the following emerging assessment categorisations, described in Table 6 below. In recognition of the need for such categorisations, we invite assessors to be transparent about the assessment points they use to categorise companies' transition plans, which can go a long way in creating a methodical, unified approach for transition plan assessments.

Company transition category	Company practices	Transition plan credibility
Company not aligned or not transitioning	Company practices reflect the absence of transition plan	No transition plan
Company committed, pledged or aiming to transition	Company practices reflect only the existence of a public commitment or pledge towards a 1.5°C pathway endorsed by the board. This approach is much like a boat having defined the destination but not the course.	The ambition is good, generally the targets have been reviewed and validated by an independent third party, but there is no transition plan
Company aligning	Company practices reflect the company is about to get on track to delivering on its strategic decarbonisation ambition in time but is not there yet. Think of this like a boat having defined a destination and oriented	The ambition of the transition plan is good, the targets have been reviewed and validated by an independent third party, the transition plan is complete and quite credible but does not yet

	its course to meet the destination in time but is still *en route*.	allow for the level of performance as expected.
Company aligned or transitioning in a credible way	Company practices reflect the company is performing as expected to deliver on its strategic decarbonisation ambition. The boat, in this case, has set the destination and the course, knows all the stopovers and has mastered the map to reaching its destination in time without risks.	The transition plan is complete and credible and allows the company to perform as expected to deliver in a timely way on its strategic decarbonisation ambition.

1342 *Table 6 : Categorisation of a company's transition readiness and transition plan credibility*

Glossary

TO BE COMPLETED AFTER THE PUBLIC CONSULTATION

Mitigation actions

These refers to:

- actions and action plans that are undertaken to ensure that the company delivers against targets set and through which it seeks to address material impacts, risks and opportunities; and
- decisions to support these with financial, human or technological resources

Decarbonisation levers:

Aggregated types of mitigation actions such as energy efficiency, electrification, fuel switching, use of renewable energy, products change, and supply-chain decarbonisation that fit with company's specific actions.

Company's transition plan

An aspect of a company's overall strategy that lays out a set of targets, actions, resources and accountability mechanisms to align its business activities with a net-zero GHG emissions pathway that delivers real-economy emissions reductions with regard to the objective of limiting global warming to 1.5°C and climate neutrality, and minimising the company's systemic climate transition risks.

Transition plan programme

Voluntary or mandatory international, national or subnational system or scheme that registers companies' transition plans.

Intended use of transition plan

Main purpose set by the organisation, or a transition plan programme, to define and implement a transition plan consistent with the needs of the intended user.

Intended user of transition plan

Individual or organisation who relies on the information reported in the transition plan to make decisions, as identified by the company reporting the transition plan.

Note 1: The intended user can be the client, the responsible party, the organisation itself, net-zero coalition administrators, regulators, the financial community or other affected interested parties, such as judges, government departments, local communities, general public or non-governmental organisations.

Locked-in emissions

Locked-in emissions are estimates of potential future GHG emissions from the company's productive assets (direct emissions) or from sold products over their operating lifetimes (indirect emissions).

Remaining carbon budget

Cumulative global carbon dioxide (CO_2) emissions from the start of 2018 to the time that CO_2 emissions reach net zero that would result, in some probability, in limiting global warming to a given level, accounting for the impact of other anthropogenic emissions (IPCC IPCC, AR6, WGIII, glossary section, 2020).

It describes the total net amount of CO_2 that human activities can still release into the atmosphere while keeping global warming, in some probability, to a specified level, like 1.5°C or 2°C relative to pre-industrial temperatures.

Note 1: In the present context, the specific level of global warming is 1.5°C.

Note 2: This remaining carbon budget can increase or decrease depending on how deeply humankind reduces GHGs other than CO_2.

Adapted from: https://www.ipcc.ch/report/ar6/wg1/downloads/faqs/IPCC_AR6_WGI_FAQ_Chapter_05.pdf

Carbon budget

The carbon budget of a company is the CO_2 limit that it should respect to maintain, in some probability, global temperature increase to 1.5°C above pre-industrial levels by the end of 21st century.

Note: Different ways exist to allocate a carbon budget to a company:

- The basic approach involves dividing the remaining international carbon budget by each sector's current contribution to CO_2 emissions and then allocating it by companies' respective weight in the sector emissions.
- More complex approaches consider different parameters, such as a company's historical CO_2 emissions, previously unrespected carbon budget reallocation, or considering "the principle of equity and common but differentiated responsibilities and respective capabilities, in the light of different national circumstances".

Internal dependencies

Factors within a company's direct control that it relies on to deliver its transition plan. These include factors such as organisational structure and management responsibilities.

External dependencies

Factors outside a company's direct control that it relies on to deliver its transition plan. These include factors such as public policy or legal factors, economic factors, technological and infrastructure readiness, social factors, environmental factors and resource availability.

Appendix 1 Consensus areas among transition plan frameworks

The table below comes from appendix A.1 of the paper *Net Zero Transition Plans: Red Flag Indicators to Assess Inconsistencies and Greenwashing*[24]. It describes the number of times each indicator appears in the 28 frameworks[54] analysed by the research team[55]. A value of 0.5 implies that the indicator is only partially covered by the respective framework, for example as a recommendation, and is not a core required element. More than 250 individual indicators were identified.

This table identifies, if not the consensus, at least the convergence of the 28 different frameworks regarding the key indicators.

item	requirement	sum
target		
headline		
commitment	climate commitment wording is available	23.5
cheap talk	commitment is not classified as cheap talk by ClimateBERT	0
absolute	absolute emissions reduction target defined	22.5
intensity	intensity targets are shown to be aligned with absolute targets	10.5
ambition		
net zero	Net zero target defined	19.5
2050	Net zero target achieved no later than 2050	21
2030	plan for -50% emissions by 2030	5
coverage		
complete	target covers all business activities and subsidiaries	18.5
scope 1	absolute emissions target for scope 1 defined for min 95% of scope 1 emissions	21
scope 2	absolute emissions target for scope 2 defined for min 95% of scope 2 emissions	21
scope 3	absolute emissions target for scope 3 defined for min 95% of scope 3 emissions	19.5
scope sum	sum of scope targets shown to meet overall target ambition	2.5
methane	separate targets for CO2 and methane defined	6.5
pathway		
interim targets	Timebound interim metrics and targets for all scopes for minimum every 5 years with explicit baseyear defined	23.5
science-based	interim targets shown to be line with third party verified orderly sector-specific 1.5 degrees transition pathways with no or limited overshoot, with frontloaded activity	22
offsetting		

[54] 28 different frameworks, published in the years 2021 (5 frameworks), 2022 (12 frameworks) and 2023 (11 frameworks).
[55] Julia Bingler, Chiara Colesanti Senni, Tobias Schimanski

item	requirement	sum
limited	no interim target reliance on offsets and carbon credits and minimal net zero offsetting reliance (only for unabatable residual emissions)	14
permanent	if use carbon offsets consistently with previous indicator: will use (only) from additional, permanent third-party verified technological carbon removal projects, permanent third-party verified emission avoidance projects or third-party verified natural carbon removals	11
governance		
structure		
organisation	climate governance structure defined	18
mainstreaming	mainstreaming of plan in overall strategy, risk management, decision-making, processes, policies and resource allocation	11
skills		
board	board-level competence on climate ensured	10
needs	available skills and additional capacity needs to implement targets defined	8
training	strategy and training to close requirement gaps definded	9
inhouse	Inhouse skills are maintained and sustainability is not majorly outsourced to external consultancies	0
accountability		
board	board climate oversight, mandate, target setting responsibility and terms of reference defined	17
oversight	quarterly review of activities by board to track about progress against targets ensured	11.5
executive	executive oversight and target accountability structure defined	15.5
management	management responsibilities for target implementation defined	12.5
incentives		
culture	target-supporting culture in HR and leadership implemented	6
remuneration	significant percentage of executive management remuneration is linked to progress against and achievement of transition plan interim targets	16
misalignment	Climate misaligned and fossil fuel support executive management incentives are reported	6
transparency		
disclosure	annual GHG inventory, strategy, targets and activities / TCFD disclosure, integrated in or available alongside mainstream filings publicly disclosed	14
assurance	level of assurance and verification of disclosed plan and statements disclosed	6
consistency	organisational boundary consistent with organisatory boundary used in financial accounting	4.5
definitions	definition for climate aligned, transition, misaligned explained	3.5
strategy		

item	requirement	sum
management		
business	business, product and service strategy with activties, resources and decomissioning to implement target aligned	22.5
production	strategy for production process changes to fulfil interim targets defined	16
quantification	Subtargets in KPIs quantified	17
sensitivity	scenario envelopes inform targets and sensitivity analysis to test strategic and operational resilience reported	16
assumptions	strategy assumptions: policies, technological change, client and consumer demand, physical impacts reported	12.5
high carbon		
exploration	strategy for immediate stop of support for additional fossil fuel exploration and supply (extend fields and new field discoveries) defined	11.5
supply	strategy for decommissioning and canceling of support for new or existing fossil fuel exploration and supply infrastructure defined	5.5
demand	strategy to phase out all unabated own fossil fuel use and carbon emitting assets defined	15.5
Low carbon		
renewables demand	strategy for scaling up own renewable energy procurement and consumption defined	15
renewables supply	strategy for scaling up renewable energy investments and supply defined	15
climate solutions	strategy for scaling up investments in climate solutions technologies defined	14.5
balance sheet		
opex	strategy for opex targets to fulfil interim targets defined	13.5
capex	strategy for capex targets to fulfil interim targets defined	16.5
revenues	strategy for net zero aligned / "green" revenues targets defined	15
r&d	strategy for scaling up investments in climate solutions technologies defined	13
engagement		
upstream	1.5 degrees engagement strategy with upstream value chain activities strategy defined	18.5
downstream	1.5 degrees engagement strategy with downstream value chain activities strategy defined	18.5
direct lobbying	1.5 degrees engagement strategy with policy makers activities strategy defined	17
indirect lobbying	1.5 degrees engagement strategy within industry associations activities strategy defined	17
escalation	serious escalation strategies if engagement at each level is not effective strategy defined	3.5
just transition		

item	requirement	sum
planning	strategy, monitoring and activities to mitigate adverse impacts on workforce and communities defined	12.5
participatory	plan developed with affected workers, communities and stakeholders	5.5
biosphere		
nature positive	mitigate adverse impacts on and adapt to changes in the natural environment and the provision of ecosystem services strategy defined	13
deforestation	activities to halt deforestation by 2025 defined	11.5
biodiversity	activities to halt biodiversity loss by 2030 defined	8
Water	activities to reduce water consumption and pollution defined	7
Tracking		
emissions		
absolute scope 1	GHG emissions scope 1 reported	16.5
absolute scope 2	GHG emissions scope 2 reported	16.5
absolute scope 3	GHG emissions scope 3 reported	16
scope 3 categories	coverage scope 3 categories and reasons for exclusions explained	7
intensity scope 1	GHG intensity scope 1 reported	10.5
intensity scope 2	GHG intensity scope 2 reported	10.5
intensity scope 3	GHG intensity scope 3 reported	10
progress		
Interim targets	annual progress against net zero targets reported	14
trend absolute scope 1	absolute GHG emissions scope 1 past 5 years reported	5.5
trend absolute scope 2	absolute GHG emissions scope 2 past 5 years reported	5.5
trend absolute scope 3	absolute GHG emissions scope 3 past 5 years reported	5.5
trend intensity scope 1	GHG intensity scope 1 past 5 years declining	7
trend intensity scope 2	GHG intensity scope 1 past 5 years declining	6
trend intensity scope 3	GHG intensity scope 3 past 5 years declining	6
drivers	internal and external drivers of GHG changes reported, covering divestments, mergers and acquisitions, technology investments	6.5
deforestation	annual progress against deforestation targets reported	4.5
capex		
aligned	Amount of climate aligned capex reported	10.5
transition	Amount of climate transition capex reported	8.5
misaligned	Amount of climate misaligned capex reported	9
innovation		
aligned	Amount of climate aligned R&D reported	3
transition	Amount of climate transition R&D reported	3
misaligned	Amount of climate misaligned R&D reported	3
revenues		

item	requirement	sum
aligned	Amount of climate aligned revenues reported	3
transition	Amount of climate transition revenues reported	3
misaligned	Amount of climate misaligned revenues reported	3
engagement		
direct lobbying	corporate climate policy positions and lobbying activities reported	10
indirect lobbying	membership in trade associations reported	10
interest alignment	alignment transition plan with trade association's lobbying reported	9
engagements	corporate / peer engagement activties reported	1
escalations	escalation activities reported	1

Table 7 : Indicators frequencies in the assessed initiatives' frameworks. Total amount of frameworks assessed: 28. (adapted form table A1[54]),

Appendix 2: Mapping of disclosure indicators and ATP-Col

Note that the mapping is limited to a few key transition plan guidance and guidelines and standard and disclosure frameworks, namely HLEG integrated matters and associated criteria[56], ISO IWA 42 Net Zero Guidelines[56], EU European Sustainability Reporting Standards (ESRS), IFRS S2 Climate-related Disclosures and the UK Transition Plan Taskforce (TPT) Disclosure Framework. The assessment methods are excluded as they are not necessarily disclosure oriented. The ATP-Col column indicates where those elements are key for the assessor.

Mapping will be done once the assessment points are stable after the public consultation.

[56] These two were selected because the UN is an intergovernmental organisation and ISO is an international standards setter that gathers 170 countries through national standardisation bodies plus liaison members.

Appendix 3 Locked-in emissions guidance

Locked-in emissions are estimates of future GHG emissions that are likely to be caused by a company's production assets or sold products within their lifespan. The amount of locked-in emissions is critical to understanding if the company will respect its theoretical carbon budget, the risk of stranded assets exposure and the potential cost of inaction. According to the International Energy Agency (IEA)[57], the total locked-in CO_2 emissions from existing energy infrastructure (about 750 $GtCO_2$) already exceeds the remaining 1.5°C carbon budget (about 300 $GtCO_2$ with an 83% likelihood), which serves as a vivid illustration of how crucial locked-in emissions are.

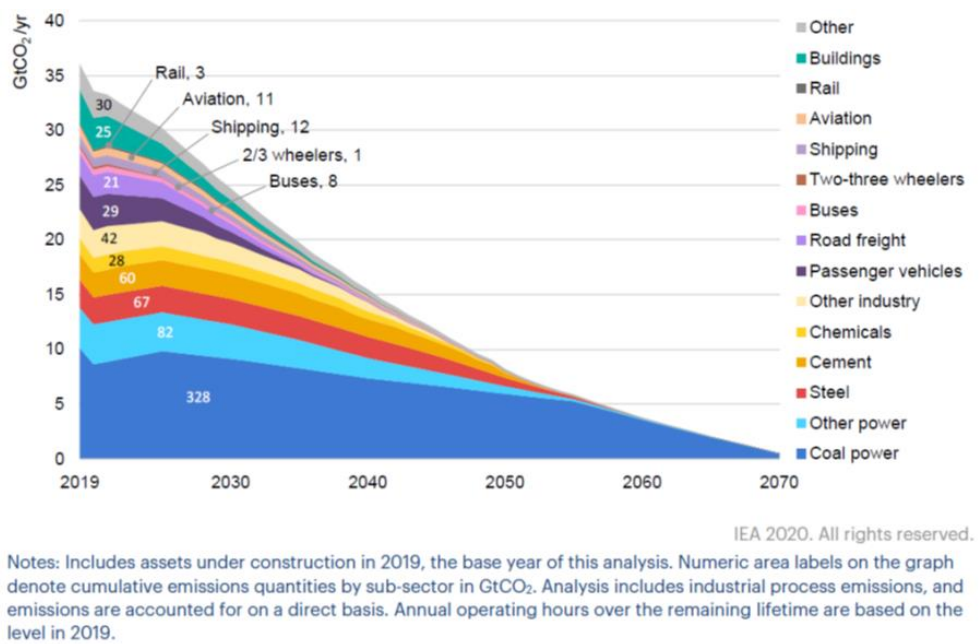

Figure 11: Global CO_2 emissions from existing energy infrastructure by sub-sector 2019-2070 (Energy Technology Perspectives 2020, AIE 2020 all rights reserved)

According to OECD[58]: "Actions focus on decarbonisation strategies along the value chain, in line with the latest IPCC findings outlined above, which emphasise that deep emission reductions are necessary during this decade and that continued installation of unabated fossil fuel infrastructure will lead to emissions lock-in. In that context, credible planning will identify existing assets and infrastructures, as well as new investments, which are at risk of leading to emissions lock-in and clearly set out the steps to be taken to prevent such lock-in".

Nevertheless, most disclosure standards and frameworks do not require information on locked-in emissions, except for EU ESRS E1:

- 16.(d) "a qualitative assessment of the potential locked-in GHG emissions from the undertaking's key assets and products. This shall include an explanation of if and how these emissions may jeopardise

[57] *Energy Technology Perspectives 2020*, IEA, February 2021.
[58] Section 4 of *Guidance on Transition Finance Ensuring Credibility of Corporate Climate Transition Plans*, OECD, 3 October 2022.

the achievement of the undertaking's GHG emission reduction targets and drive transition risk, and if applicable, an explanation of the undertaking's plans to manage its GHG-intensive and energy-intensive assets and products."

While it does not directly require disclosure of such information, the UK TPT Disclosure Framework says that "a transition plan should seek to ensure that climate is appropriately considered in decisions with long lifetimes to avoid the risk of 'carbon lock-in'".

In the absence of requirements regarding locked-in emissions in existing disclosure standards and frameworks, guidance and examples to report on this topic are provided below, derived from ESRS E1 16(d) and AR3 and the ACT Generic Methodology.

A company should disclose:

a. *the **cumulative locked-in GHG emissions associated with key assets from the reporting year until 2030 and 2050 in tonnes of carbon dioxide equivalent (tCO2eq)**. This will be assessed as the sum of the estimated scope 1 and 2 GHG emissions over the operating lifetime of the active and firmly planned key assets. Key assets are those owned or controlled by the company, and they consist of existing or planned assets (such as stationary or mobile installations, facilities, and equipment) that are sources of either significant direct or energy-indirect GHG emissions. Firmly planned key assets are those that the company will most likely deploy within the next five years.*
b. ***the cumulative locked-in GHG emissions associated with the direct use-phase GHG emissions of sold products in tCO2eq**, assessed as the sales volume of products in the reporting year multiplied by the sum of estimated direct use-phase GHG emissions over their expected lifetime.*

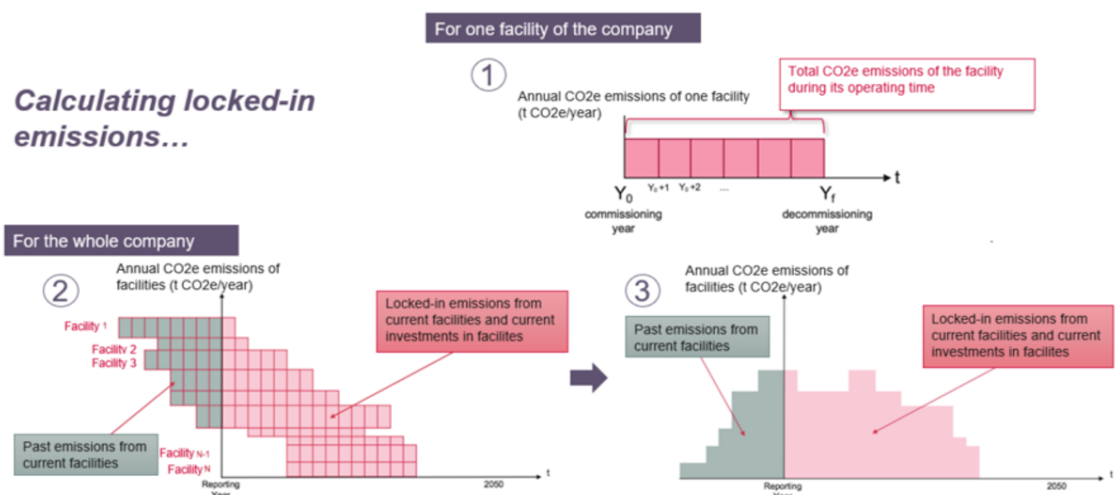

Figure 12: Illustration of locked-in emissions calculation (adapted from ACT Generic Methodology V2)

<u>Calculation rules</u>

A. How to calculate locked-in-emissions

The analysis should cover emissions estimates for the company's installed and planned facilities and/or products until the planned decommissioning year.

$[LE]$ = Locked-in emissions

For facilities, $[LE]$ is calculated as the total cumulative scope 1 (and 2, where relevant) emissions implied by the lifetimes of currently active and confirmed planned facilities that are going to be commissioned soon. If unknown, the commissioning year of projects is estimated from the project status (e.g. bidding process, construction) and data on typical project periods by plant type or products and services.

For products, $[LE]$ is calculated as the total cumulative emissions of scope 3 use of sold products implied by the sales in the reporting year over the theoretical lifespan of the product. The calculation is the sales volume multiplied by the emissions intensity of the products, multiplied by the lifetimes and the average use of the products.

For fossil fuel production assets, $[LE]$ is calculated as the total cumulative emissions scope 1 (and 2, where relevant) implied by the lifetimes of currently active and confirmed planned assets that are going to be commissioned soon and the amount of GHG emissions that will be generated by the use of the fossil fuels produced, assuming, as a conservative hypothesis, that they will all be burned.

B. Company's carbon budget:

The company should use relevant science-based target methodologies in line with a 1.5°C climate scenario or take into account global carbon budgets and sectors, as described by the Intergovernmental Panel on Climate Change (IPCC) and the International Energy Agency (IEA). But ideally, the company's carbon budget should be quantified considering the location where it operates, referring to 1.5°C-aligned national sectoral transition plans (see section 6), since the carbon budget and effort to decarbonise are different form one area to another (see Figure 13 for illustration).

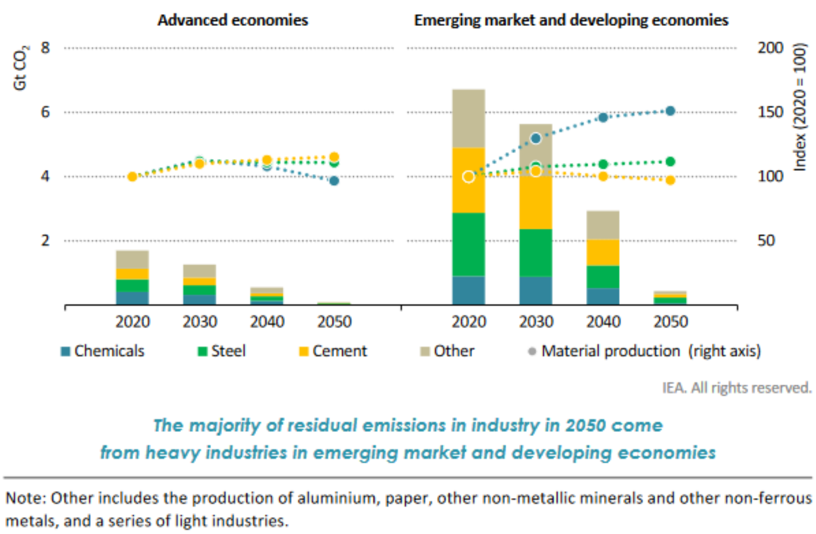

Figure 13: Global direct CO_2 emissions from industry by sub-sector in the NZE (Net Zero by 2050) scenario, IEA, October 2021.

C. Potential data needed for calculating facility locked-in emissions

- For all existing and planned facilities: facility name, geographic location (country level), facility type, technology, fuel mix, status, total capacity (in tonnes), active capacity (in tonnes), emissions factor (in metric tonnes of CO_2; CO2e/t), year of commissioning, expected lifetime (in years), decommissioning or modernisation year, if planned, ownership stake (%)
- Anticipated gross production for a 15-year period from the reporting year
- Including the operating lifetime of assets and products, estimated production volumes or product sales, use profiles of products and potential GHG mitigation solutions from installed/sold and announced facilities and products

D. Potential data needed for calculating product locked-in-emissions:

- Number of products deployed and planned to be deployed in the reporting year
- Number of products decommissioned and planned to be decommissioned in the year
- Number of net total products in operation in the year
- Planned use of the product (example, in tonnes of CO_2e/km)
- GHG intensity of the products
- Location of the use of the product, mainly for electric emissions factor
- Average and sectoral lifetime of the products (where relevant by country)
- Anticipated gross production for a five-year period from the reporting year

Presentation of information

As an example, consider that company A manages cement facilities. The timeframe considered in this example extends till 2030[59]. The company has three facilities and one planned facility. The company needs to calculate the installed and planned facilities' emissions for the ten years following the reporting year to compare the estimated locked-in emissions with the 2030 target carbon budget. The company has planned a production growth of 2% per year and emissions intensity reduction of 3% per year. It has also planned to build carbon capture and storage for facilities 1 and 3 that will be operationalised in 2026, which could reduce about 35% of the emissions intensity of these facilities.

Estimated locked-in emissions										
Facilities	Absolute emissions (t/CO_2) in the reporting year 2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Facility 1	1,000,000	989,400	978,912	968,536	958,269	948,112	628,598	621,935	615,342	407,972
Facility 2	500,000	494,700	327,986	334,546	341,237	348,061	355,023	362,123	369,366	376,753
Facility 3	1,000,000	989,400	978,912	968,536	958,269	948,112	628,598	621,935	615,342	407,972
Facility 4			700,000	692,580	685,239	677,975	670,789	663,678	656,643	649,683
Total locked-in emissions per year		2,473,500	2,985,811	2,964,198	2,943,014	2,922,260	2,283,007	2,269,671	2,256,694	1,842,380

Table 8: Locked-in emissions from cement company A

Consider another examples of company B, a car manufacturer, over the period until 2030. The company has sold 1,600,000 vehicles worldwide in 2024. The company calculates the locked-in emissions of the total amount of products sold till 2030. Its breakdown for sold vehicles is as follows:

– 500,000 vehicles of type X (1 single product), average performance is 150 gCO_2e/km (TTW)
– 500,000 vehicles of type Y (1 single product), average performance is 100 gCO_2e/km (TTW)
– 500,000 vehicles of type Z (1 single product), average performance is 80 gCO_2e/km (TTW)
– 100,000 vehicles of type 0 (1 single product), average performance is 80 gCO_2e/km (TTW)

[59] For illustration purposes, we limit the period here to 2030 but the exercise should be done at least up to fifteen years beyond the reporting year.

To simplify the example, assume that each vehicle has the same average lifespan: 250,000 km. The forecasted sales for the company is as follows :

	2024	2025	2026	2027	2028	2029	2030
Vehicle X	500,000	425,000	361,250	307,063	261,003	221,853	188,575
Vehicle Y	500,000	450,000	405,000	364,500	328,050	295,245	265,721
Vehicle Z	500,000	550,000	605,000	665,500	732,050	658,845	592,961
Vehicle 0	100,000	115,000	132,250	154,733	185,679	232,099	301,728

Table 9: Forecasted sales of a car manufacturer

The locked-in emissions for each vehicle category are as follows:

	2024	2025	2026	2027	2028	2029	2030
Vehicle X (tCO2e)	18,750,000	15,937,500	13,546,875	11,514,844	9,787,617	8,319,475	7,071,553
Vehicle Y (tCO2e)	12,500,000	11,250,000	10,125,000	9,112,500	8,201,250	7,381,125	6,643,013
Vehicle Z (tCO2e)	10,000,000	11,000,000	12,100,000	13,310,000	14,641,000	13,176,900	11,859,210
Vehicle 0 (tCO2e)	-	-	-	-	-	-	-
Total loked'in per year (tCO2e)	41,250,000	38,187,500	35,771,875	33,937,344	32,629,867	28,877,500	25,573,776
Total loked'in (tCO2e)							236,227,861

Table 10: Locked-in emissions of a car manufacturer

Appendix 4 External dependencies of transition plans

The assessor should pay attention to whether the company's transition plan identifies and describes its dependencies on external factors (as illustrated in Figure 1 and categorised in Table 5), which it relies on to implement the decarbonisation levers and mitigation actions to meet its emissions reduction targets. Table 11 provides additional examples to further qualify these 'external dependencies' and identify them.

Category	**External dependency**	**Example of external factor the transition plan may depend on**
1. Non-physical	1.1 Policy strategy	- National decarbonisation strategy - Geopolitical environment (e.g. trade of critical resources)
	1.2 Regulatory framework	- Real-economy regulation (e.g. permitting process) - Financial regulation - Legal framework (e.g. ESG litigation risks)
	1.3 Market and economics	- Capital availability and cost - Energy and commodity prices
	1.4 Public acceptance	- 'Not in my backyard' (NIMBY) phenomenon
	1.5 Consumer and client behaviour	- Willingness to reduce demand and/or adapt consumption behaviours - Willingness to pay a green premium
2. Physical	2.1 Infrastructure availability and logistics	- Availability of infrastructure and logistics for transport, distribution and storage
	2.2 Technology	- Technology readiness levels and innovation - Efficiency improvement - Technology lock-in
	2.3 Resource availability	- Availability of land, raw materials and other inputs
	2.4 Environmental impacts and ecosystem services	- Climate change impact (e.g. decreased water availability for power generation)
	2.5 Labour availability	- Availability of skilled workers

Table 11 : Categorisation of external dependencies and examples

When analysing dependency on these external factors, it is important to keep in mind two cross-cutting elements:

1. Geographic perimeter – While the analysis starts taking as the basis the locations in which the decarbonisation levers will be implemented, the perimeter for analysis should not be restricted by regional or national boundaries but rather by the geographic scope of influence. Geopolitics can have a significant direct impact on external factors, with notable examples including external dependencies 1.1 (Policy strategy), 1.2 (Regulatory framework) and 2.3 (Resource availability).

2. Timeframe – While the majority of data that might be used in the analysis will likely be based on the current state of external factors, the forward-looking nature of a transition plan means that data on future external factors should be used when available. Scenario analysis might serve to inform analysis on all external factors, with notable examples including external dependencies 2.1 (Infrastructure availability and logistics) and 2.4 (Environmental impacts and ecosystem services).

Table 12 includes credibility questions for the geographical dependencies of external factors. These can be used by an assessor analysing geographical dependencies as part of **'Decarbonisation lever assessment point 4'**. The credibility questions invite an assessor to evaluate the consistency of the transition plan with the characteristics of the external factors in the relevant geographic perimeter. The transition plan must contain information on the implementation of the decarbonisation lever (how, when and what volume, at asset level where possible) for the assessor to be able to assess geographical dependencies. Further information needs are detailed in Table 12.

Category	**External dependency**	**Credibility question for geographical dependency of decarbonisation lever (DL)**	**Further information needs from reporting company**[60]
1. Non-physical	1.1 Policy strategy	How is the planned implementation and type of use of the DL supported by policies in the relevant jurisdiction?	- Policy risk assessment
	1.2 Regulatory framework	How is the planned implementation and type of use of the DL supported by legislation in the relevant jurisdiction?	- Regulatory risk assessment
	1.3 Market and economics	How is the economic environment affecting the DL's planned implementation?[61]	- Investments and funding supporting the implementation of the DL
	1.4 Public acceptance	Does the transition plan address possible concerns regarding public acceptance of the DL?	- Public acceptance risk assessment
	1.5 Consumer and client behaviour	How does the expected consumer and client willingness to pay a green premium for the end product impact the DL's planned implementation?	- Market outlook analysis & reporting on planned commercial relationships
2. Physical	2.1 Infrastructure availability and logistics	How is the planned implementation of the DL supported by the necessary infrastructure and/or logistical requirements at an appropriate scale?	- Infrastructure and logistical dependency for DL
	2.2 Technology	How could technology transfer impact the DL's planned implementation?	- Risk analysis regarding technology transfer

[60] Information beyond the disclosed transition plan may be needed to answer these credibility questions. Such information may be found elsewhere in the company's reporting or collected through engagement with the company, or from third-party information sources on the characteristics of the external factors in the relevant geographic perimeter.
[61] This does not include macroeconomic trends that are not specific to the decarbonisation lever, such as inflation and interest rates.

	2.3 Resource availability	Does the resource availability satisfy the planned demand needed to implement the DL?	- Resource dependency for DL
	2.4 Environmental impacts and ecosystem services	Does the transition plan include an assessment of whether and how the implementation of the DL depends on ecosystem services as well as whether and how climate change might impact this implementation?	- Ecosystem dependency for DL - Dependencies on climate change
	2.5 Labour availability	Does the transition plan address a possible skill gap needed to implement the DL and align with initiatives that may address this?	- Skill needs and actions to manage gaps

Table 12 : Credibility questions to assess the geographical dependencies of external factors

Appendix 5: Category correspondence between ISO 14064-1 (and 14064-4) and the GHG Protocol

New categorisations from ISO 14064-1:2018	New categorisations from ISO 14064-4 (former ISO TR 14069)		Categorisations from GHG Protocol Corporate Standard (2010)
1	1.1	Direct emissions from stationary combustion	Scope 1 (direct)
	1.2	Direct emissions from mobile combustion	
	1.3	Direct process emissions and removals from industrial processes	
	1.4	Direct fugitive emissions from the release of GHG in anthropogenic systems	
	1.5	Direct emissions and removals from land use, land use change and forestry (LULUCF)	Optional information
2	2.1	Indirect emissions from imported electricity	Scope 2 (indirect) - generation of consumed energy
	2.2	Indirect emissions from imported energy other than electricity	
3	3.1	Indirect emissions from upstream transport and distribution for goods	Scope 3, Category 4: Upstream transportation and distribution
	3.2	Indirect emissions from downstream transport and distribution for goods	Scope 3 Category 9: Downstream transportation and distribution
	3.3	Indirect emissions from employee commuting	Scope 3, Category 7: Employee Commuting
	3.4	Indirect emissions from client and visitor transport	N/A
	3.5	Indirect emissions from business travel	Scope 3, Category 6: Business travel
4	4.1	Indirect emissions from purchased goods	Scope 3, Category 1: Purchased goods and services & Scope 3, Category 3: Fuel- and energy-related activities
	4.2	Indirect emissions from capital goods	Scope 3, Category 2: Capital goods
	4.3	Indirect emissions from the disposal of solid and liquid wastes	Scope 3, Category 5: Waste generated in operations
	4.4	Indirect emissions from the use of assets	Scope 3, Category 8: Upstream leased assets
	4.5	Indirect emissions from the use of other services	Scope 3, Category 1: Purchased goods and services

New categorisations from ISO 14064-1:2018	New categorisations from ISO 14064-4 (former ISO TR 14069)		Categorisations from GHG Protocol Corporate Standard (2010)
5	5.1	Indirect emissions or removals from the use stage of the product	Scope 3, Category 10: Processing of sold products & Scope 3, Category 11: Use of sold products
	5.2	Indirect emissions from downstream leased assets	Scope 3, Category 13: Downstream leased assets
	5.3	Indirect emissions from end-of-life stage of the product	Scope 3, Category 12: End-of-life treatment of sold products
	5.4	Indirect emissions from investments	Scope 3, Category 15: Investments
6	6	Indirect GHG emissions from other sources	N/A

NOTES:

In ISO 14064-1, franchisees' emissions should be considered within the operational boundaries of the organisation. The GHG Protocol includes the emissions from the operation of franchises in Scope 3, Category 14: Franchises.

The location-based method is used as the main method for accounting indirect GHG emissions from imported energy in ISO 14064-1. Organisations may also report separately using a market-based approach.

The market-based method may be used as the main method for accounting indirect GHG emissions from imported energy according to the GHG Protocol Corporate Standard, as long as the location-based method is also reported. Dual-reporting accounting of scope 2 GHG emissions using both location-based and market-based methods should be used according to the GHG Protocol Corporate Standard: "If companies have any operations in markets providing product or supplier specific data in the form of contractual instruments".

The subcategory 3.5 'Indirect emissions from client and visitor transport' in ISO 14064-4 does not exist in the GHG Protocol Corporate Standard.

Table 13: GHG categories correspondence between GHG Protocol and ISO 14064-1:2018

Appendix 6 Guidance on climate governance assessment points

The guidance below can help the assessor review the maturity of the company's practices regarding several of the governance assessment points mentioned in section 9 of this document. To finetune its approach for each of the governance assessment points, the assessor can also follow the principles and recommendations of the Climate Governance Initiative[62] or those mentioned in section 7 of the ISO Net Zero Guidelines[63].

Roles and accountabilities related to climate change (adapted from ACT Generic Methodology V2)**:** What is the position of the employee/committee with highest responsibility for transition plan delivery?

1. Level 1 (best practice)
    - Highest level of accountability or decision-making within the organisation, with responsibility for overall organisational or corporate strategic direction
    - Examples: Board, subset of the Board, Chief Executive Officer (CEO)
2. Level 2
    - Person/committee that is one step away in the corporate structure from the highest level of decision-making in the organisation (i.e. reports to or is accountable to Level 1). They input into organisational strategy but do not make decisions on it. They may have responsibility and accountability for business unit strategy formation and implementation of one or more business units.
    - Examples: Vice President, Director, other C-Suite officer (Chief Financial Officer (CFO), Chief Procurement Officer (CPO), Chief Risk Officer (CRO), Chief Operating Officer (COO), Chief Sustainability Officer (CSO), etc.), other committee appointed by the Board
3. Level 3
    - Person/committee that is two steps away in the corporate structure from the highest level of decision-making in the organisation. They may have responsibility and accountability for business unit strategy formation and implementation for one business unit.
    - Examples: Manager, Senior Manager
4. Level 4 (basic practice)
    - Person/committee that is three or more steps away in the corporate structure from the highest-level of decision-making in the organisation. They bear no responsibility or accountability for business unit strategy development.
    - Examples: Officer, Senior Officer

Expertise on climate change topics: Characteristics of climate change and low-carbon transition expertise may include:

- Academic/professional qualification related to climate change and the low-carbon transition, including an understanding of the impacts and risks, and the solutions to implement (e.g., bachelor's degree, master's degree, doctorate, professional certification, diploma)

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[62]See https://climate-governance.org/
[63] See https://www.iso.org/netzero

    - A purely energy-related background with no relationship to climate change and the low-carbon transition is not enough to qualify as expertise.
- Recent (ideally continuous) training on latest key IPCC findings about climate change
- Recent (i.e., within the last ten years) professional experience related to climate change and the low-carbon transition (e.g., previous employment in a climate change/low-carbon transition-related role, or with a climate change/low-carbon transition-related organisation)
- Technical knowledge related to climate change and the low-carbon transition, evidenced through recently published (i.e., within the last 10 years) outputs (e.g., statements, reports) written by the individual/committee

Incentives on climate change topics: The maturity matrix below can help with assessing the company's practices for incentives related to the transition plan.

Question	Subdimension	Basic practices				Best practices
Who is entitled to benefit?	*Who is entitled to benefit?*	Any other answer	Level 4 (see roles and accountabilities guidance)	Level 3 (see roles and accountabilities guidance)	Level 2 (see roles and accountabilities guidance)	Level 1 (see roles and accountabilities guidance)
What is the type of incentive?	*Type of incentive*	No incentives	The company has introduced transition plan metrics (key performance indicators (KPIs)), including metrics related to GHG emissions reductions, within annual bonuses (or other short-term incentive plans).		The company has introduced transition plan metrics (key performance indicators (KPIs)), including metrics related to GHG emissions reductions, within its long-term incentive plan (likely to include equity in the company).	The company has introduced transition plan metrics (key performance indicators (KPIs)), including metrics related to GHG emissions reductions, within its long-term incentive plan (likely to include equity in the company). This plan aligns with the timescale and content of the company's transition plan and emissions reduction targets.
How do climate-related incentives compare to other incentives?	*Comparison and scope coverage*	No incentives	There are a few transition plan related incentives, but they are undermined by climate non-friendly incentives (e.g. growth of fossil fuel production, sales of carbon-intensive products).	There are transition plan related incentives that are not undermined by the remaining climate non-friendly incentives, but they do not cover all the relevant items of the company's transition plan	There are transition plan related incentives that cover all relevant items of the transition plan and are not undermined by the remaining climate non-friendly incentives, but they are not consequential enough to the beneficiaries to drive the success of the plan.	The transition plan related incentives are consequential to the beneficiaries to drive the success of the plan. There are no remaining climate non-friendly incentives (e.g. growth of fossil fuel production, sales of carbon-intensive products)

Table 14: Maturity practices regarding transition plan related incentives (adapted from ACT Generic Methodology V2)

Question	Sub dimension	basic practices				Best practices
What is the scope of the scenario analysis?	*Scope*	Scope of scenario analysis is not defined.	Scenario analysis applies only to specific business units / operations (representing less than 50% of the company's GHG emissions).	Scenario analysis applies only to specific business units / operations (representing more than 50% of the company's GHG emissions).	Scenario analysis applies to all business units / operations.	Scenario analysis applies to all business units / operations and the rest of the value chain (upstream and downstream). Any exclusions from the transition plan are not material to the organisation in terms of GHG emissions.

Question	Sub dimension	basic practices				Best practices
What is the timescale of the scenario analysis?	*Timescale*	Covers only the short term, from the reporting year until three years beyond.	Covers only the short and medium terms, from the reporting year until 4-10 years beyond.	Covers the short, medium and long terms, from the reporting year until 11-20 years beyond.	Covers the short, medium and long terms, from the reporting year until 21 years beyond to 2049.	Covers the short, medium and long terms, from the reporting year until 2050 or beyond.
Does the company assess the materiality of climate-related risks/opportunities*?	*Climate-related risks/opportunities**	The materiality of climate-related risks/opportunities* is not assessed.	The materiality of one category of climate-related risks/opportunities* is assessed.	The materiality of two categories of climate-related risks/opportunities* is assessed.	The materiality of three categories of climate-related risks/opportunities* is assessed.	The materiality of four categories of climate-related risks/opportunities* is assessed.
How many scenarios are considered?	*Scenarios*	No scenarios are considered.	One scenario is considered.	Two scenarios are considered.		Three or more scenarios, including a low-carbon economy scenario, are considered.
What parameters/assumptions are considered?	*Parameters/assumptions considered*	Scenario analysis considers 1-2 different parameters/assumptions.		Scenario analysis considers 3-4 parameters/assumptions together (multivariate).		Scenario analysis considers five or more parameters/assumptions together, related to changing climate conditions in combination with changes in operating conditions.
Are the results** expressed in qualitative/ quantitative/ financial terms?	*Results†*	No results available.	Results are expressed only in qualitative terms.	Results are expressed in qualitative and quantitative terms.	Results are expressed in qualitative, quantitative and financial terms.	Results are expressed in qualitative, quantitative and financial terms and are translated into value-at-risk.
Is a carbon price considered?***	*Carbon price*	No carbon price is considered.		A carbon price is used as one of the main parameters/assumptions		The carbon price used is aligned with the parameters/assumptions of a low-carbon economy scenario.***

* Climate-related risk categories (TCFD):.

1. Market and technology shifts
2. Reputation
3. Policy and legal
4. Physical risks

** Results of scenario analysis should be presented as business impacts which can include (TCFD):

- Earnings – what conclusions does the organisation draw about impact on earnings and how does it express that impact (e.g. as EBITDA (earnings before interest, taxes, depreciation and amortisation), EBITDA margins, EBITDA contribution, dividends)?
- Costs – what conclusions does the organisation draw about the implications for its operating/production costs and their development over time?
- Revenues – what conclusions does the organisation draw about the implications for the revenues from its key commodities/products/services and their development over time?
- Assets – what are the implications for asset values of various scenarios?
- Capital Allocation/ investments – what are the implications for CapEx and other investments?
- Timing – what conclusions does the organisation draw about development of costs, revenues and earnings across time (e.g. 5/10/20 years)?

*** Refer for instance to International Energy Agency (IEA), latest World Energy Outlook publication displayed by region or countries where available.

Table 15 : Examples of criteria to evaluate the practices of companies' climate change scenario analysis (adapted from ACT Generic Methodology V2)

Appendix 7 Guidance on engagement assessment points

Table 16: Examples of criteria to evaluate the company's strategy to influence supplier behaviour to reduce GHG emissions (adapted from ACT Generic Methodology V2)

Question	Subdimension	Basic practices				Best practices
What is the scope of the supplier engagement strategy?	*Scope*	No strategy applied to any suppliers.	Strategy applied to up to 30% of total procurement spend OR up to 30% of supplier-related scope 3 emissions.	Strategy applied to 31-60% of total procurement spend OR 31-60% of supplier-related scope 3 emissions.	Strategy applied to 61-90% of total procurement spend OR 61-90% of supplier-related scope 3 emissions.	Strategy applied to over 90% of total procurement spend OR over 90% of supplier-related scope 3 emissions.
To what extent are GHG emissions reduction requirements integrated in engagement with suppliers?	*Emissions reduction requirements*	No emissions reduction requirement included in key procurement templates.*	Unquantified emissions reduction requirement included in key procurement templates.*	Quantified emissions reduction requirement included in key procurement templates* but the supplier is not required to report progress to the company.	Quantified emissions reduction target included in key procurement templates* and the supplier is required to report progress to the company.	Quantified, science-based emissions reduction target (that is aligned with the sector/industry pathway) included in key procurement templates* and the supplier is required to report progress to the company.
To what extent are other low-carbon transition requirements/recommendations** integrated in engagement with suppliers?	*Other low-carbon transition requirements/recommendations*	No other low-carbon transition requirements/recommendations** included in key procurement templates.*				One or more other low-carbon transition requirements/recommendations** included in key procurement templates.*
To what extent are suppliers required to publicly report on their GHG emissions and other low-carbon transition requirements/recommendations?	*Reporting*	No requirement included in key procurement templates* for suppliers to publicly report on their GHG emissions or other low-carbon transition requirements/recommendations.		Requirement included in key procurement templates* for suppliers to publicly report on their GHG emissions but not on any other low-carbon transition requirements/recommendations.		Requirement included in key procurement templates* for suppliers to publicly report on their GHG emissions and on other low-carbon transition requirements/recommendations.
Are GHG emissions reduction/reporting requirements included in selection of new suppliers and/or in renewal of contracts with existing suppliers?	*New suppliers/existing suppliers*	Requirements included in NEITHER the selection of new suppliers NOR renewal of contracts with existing suppliers.		Requirements included in EITHER the selection of new suppliers OR renewal of contracts with existing suppliers.		Requirements included in BOTH the selection of new suppliers AND renewal of contracts with existing suppliers.

Question	Subdimension	Basic practices				Best practices
How does the company respond to supplier non-compliance with GHG emissions reduction requirements?	*Non-compliance*	The company shows no response to supplier non-compliance.		Company retains/suspends/sanctions and engages non-compliant suppliers, but it does not exclude suppliers that fail to show significant improvement after the period of engagement.	.	Company retains/suspends/sanctions and engages non-compliant suppliers, and it permanently excludes suppliers that fail to show significant improvement after the period of engagement.
What action levers are embedded in the company's strategy to engage suppliers?***	*Action levers*** embedded in strategy*	No action levers*** are embedded in the strategy.	Strategy includes action lever(s) from one of the three engagement types (information collection, engagement & incentivisation, innovation & collaboration).***	Strategy includes action levers from two of the three engagement types (information collection, engagement & incentivisation, innovation & collaboration).***	Strategy includes action levers from all of the three engagement types (information collection, engagement & incentivisation, innovation & collaboration).***	Strategy includes action levers from all of the three engagement types (information collection, engagement & incentivisation, innovation & collaboration).*** Strategy includes regular audits of the supplier by the company or a representative.

* 'Key procurement templates' include but are not limited to:
- New supplier contracts
- Supplier Code of Conduct
- RFI/RFPs
- Supplier self-assessments
- Performance cards

**'Other low-carbon transition requirements/recommendations' refer to key aspects of a supplier's low-carbon transition, beyond emissions reductions and targets, that companies can engage them on. These may not be specific requirements but general/high-level recommendations. These aspects can include performance indicators related to:
- Intangible investment
  - For example, the company recommends that its suppliers increase their R&D spending in low-carbon technologies.
- Management
  - For example, the company requires its suppliers to conduct climate change scenario analysis.
- Policy engagement
  - For example, the company only selects suppliers not opposed to relevant climate policies.
- Business model
  - For example, the company engages with its suppliers to develop new, low-carbon business models.
- Any other relevant low-carbon transition requirement/recommendation

***Action levers must be embedded in a strategy document and not presented as examples of past or present actions/initiatives. 'Action levers' include, but are not limited to, the following examples, which are grouped into three engagement types:
1. Information collection (understanding supplier behaviour)
   - Collect climate change and carbon information at least annually from suppliers
2. Engagement & incentivisation (changing supplier behaviour)
   - Run an engagement campaign to educate suppliers about climate change/GHG emissions reductions/science-based targets/other low-carbon transition topics, such as scenario analysis, policy engagement, etc.
   - Provide climate-related training, support and best practices
   - Directly work with suppliers on climate-related topics, such as defining common GHG emissions reduction plans (i.e. both companies commit to together reduce X tCO_2e), or exploring corporate renewable energy sourcing mechanisms
   - Climate change performance is featured in supplier awards scheme
   - Offer financial incentives for suppliers who contribute to reducing the company's operational emissions (scopes 1 and 2)
   - Offer financial incentives for suppliers who contribute to reducing the company's downstream emissions (scope 3)
   - Offer financial incentives for suppliers who contribute to reducing the company's upstream emissions (scope 3)
   - Offer financial incentives for suppliers who increase the share of renewable energy in their total energy mix
3. Innovation & collaboration (changing markets)

Question	Subdimension	Basic practices				Best practices
▪ Run a campaign to encourage innovation to reduce climate impacts on products and services ▪ Collaborate with suppliers on innovative low-carbon business models/R&D projects (providing resources – experts, financial support, building, laboratories, etc.)						

Table 17: Examples of criteria to evaluate the company's activities to influence supplier behaviour to reduce GHG emissions (adapted from ACT Generic Methodology V2)

Question	Subdimension	Basic practices				Best practices
What action levers* does the company use in practice to engage suppliers?	*Action levers* used in practice*	There is no evidence of action levers* used in practice.	There is evidence of the company using action lever(s) from ONE of the three engagement types (information collection, engagement & incentivisation, innovation & collaboration).*	There is evidence of the company using action levers from TWO of the three engagement types (information collection, engagement & incentivisation, innovation & collaboration).*	There is evidence of the company using action levers from ALL of the three engagement types (information collection, engagement & incentivisation, innovation & collaboration).*	There is evidence of the company using action levers from ALL of the three engagement types (information collection, engagement & incentivisation, innovation & collaboration).* Regular audits of the supplier are carried out by the company or a representative.
What is the scope of the recent and current activities in supplier engagement?	*Scope*	No suppliers are engaged.	Suppliers engaged represent up to 30% of total procurement spend OR up to 30% of supplier-related scope 3 emissions.	Suppliers engaged represent 31-60% of total procurement spend OR 31-60% of supplier-related scope 3 emissions.	Suppliers engaged represent 61-90% of total procurement spend OR 61-90% of supplier-related scope 3 emissions.	Suppliers engaged represent over 90% of total procurement spend OR over 90% of supplier-related scope 3 emissions.
How impactful has the company's supplier engagement been?	*Impact of engagement***	There is no evidence of impact** of the action levers used.	Some action levers used show qualitative evidence of impact.**	Almost all action levers used show qualitative evidence of impact.**	Some action levers used show quantitative evidence of impact.**	Almost all action levers used show qualitative and quantitative evidence of impact.**

* Action levers must be presented as examples of past or present actions/initiative, and not be theoretical or embedded in a strategy document (such examples should be scored in indicator 6.1). 'Action levers' include, but are not limited to, the following examples, which are grouped into three engagement types:

1. Information collection (understanding supplier behaviour)
   - Collect climate change and carbon information at least annually from suppliers
2. Engagement & incentivisation (changing supplier behaviour)
   - Run an engagement campaign to educate suppliers about climate change/GHG emissions reductions/science-based targets/other low-carbon transition-related topics, such as scenario analysis, policy engagement, etc.
   - Provide climate-related training, support and best practices
   - Directly work with suppliers on climate-related topics, such as defining common GHG emissions reduction plans (i.e. both companies commit to together reduce X tCO2e), or exploring corporate renewable energy sourcing mechanisms
   - Climate change performance is featured in supplier awards scheme
   - Offer financial incentives for suppliers who reduce the company's operational emissions (scopes 1 and 2)
   - Offer financial incentives for suppliers who reduce the company's downstream emissions (scope 3)
   - Offer financial incentives for suppliers who reduce the company's upstream emissions (scope 3)

- Offer financial incentives for suppliers who increase the share of renewable energy in their total energy mix

3. Innovation & collaboration (changing markets)
   - Run a campaign to encourage innovation to reduce climate impacts on products and services
   - Collaborate with suppliers on innovative low-carbon business models/R&D projects (providing resources – experts, financial support, building, laboratories etc.)

** The metric used to measure impact depends on the action lever the metric refers to. Examples of 'evidence of impact' might include, but are not limited to:

- Qualitative example: Feedback from suppliers saying that they appreciate and will use this new knowledge to start their journey on the low-carbon transition.
- Quantitative example: Engaged suppliers have reduced their annual GHG emissions by X%.
- Quantitative example: The percentage of engaged suppliers setting science-based targets has increased annually by X%.
- Quantitative example: The percentage of engaged suppliers conducting scenario analysis has increased annually by X%.

Table 18: Examples of criteria to evaluate the company's strategy to influence client/customer behaviour to reduce GHG emissions (adapted from ACT Generic Methodology V2)

Question	Subdimension	Basic practices				Best practices
What is the scope of the client engagement strategy?	*Scope*	No strategy is applied to clients.	Strategy applied to clients representing up to 30% of revenues OR up to 30% of client-related scope 3 emissions.	Strategy applied to clients representing 31-60% of revenues OR 31-60% of client-related scope 3 emissions.	Strategy applied to clients representing 61-90% of revenues OR 61-90% of client-related scope 3 emissions.	Strategy applied to clients representing over 90% of revenues OR over 90% of client-related scope 3 emissions.
To what extent are GHG emissions reduction/energy efficiency targets integrated in client engagement strategy?	*Emissions reduction/ energy efficiency targets*	GHG emissions reduction/energy efficiency targets not included in the client engagement strategy.		Unquantified GHG emissions reduction/energy efficiency target(s) included in the client engagement strategy.		Quantified GHG emissions reduction/energy efficiency target(s) included in the client engagement strategy.
To what extent are other low-carbon transition recommendations* integrated in client engagement strategy?	*Other low-carbon transition recommendations**	No other low-carbon transition recommendations* are included in the client engagement strategy.				One or more other low-carbon transition recommendations* are included in the client engagement strategy.
What action levers** are embedded in the company's strategy to encourage clients to reduce their emissions?	*Action levers** embedded in strategy*	No action levers** are embedded in the strategy.	Strategy includes action lever(s) from ONE of the four engagement types (education/information sharing, collaboration & innovation, compensation, customer motivation via marketing and choice architecture).**	Strategy includes action lever(s) from TWO of the four engagement types (education/information sharing, collaboration & innovation, compensation, customer motivation via marketing and choice architecture).**	Strategy includes action lever(s) from THREE of the four engagement types (education/information sharing, collaboration & innovation, compensation, customer motivation via marketing and choice architecture).**	Strategy includes action lever(s) from ALL of the four engagement types (education/information sharing, collaboration & innovation, compensation, customer motivation via marketing and choice architecture).**

* 'Other low-carbon transition recommendations' refers to key aspects of a client's low-carbon transition, beyond emissions reductions and targets, that companies can engage them on:

- Intangible investment
  - For example, the company recommends that its clients increase their R&D spending in low-carbon technologies.
- Management
  - For example, the company encourages its clients to conduct climate change scenario analysis.
- Policy engagement
  - For example, the company encourages its clients to support relevant climate policies.

- Business model
  - For example, the company engages with its clients to develop new, low-carbon business models.

** Action levers must be embedded in a strategy document and not presented as examples of past or present actions/initiatives. ‘Action levers’ include, but are not limited to, the following examples, grouped into four engagement types:

- Education/information sharing
  - Run an engagement campaign to educate customers about the quantified climate change impacts of (using) products, goods and/or services
    - For example, highlight that the low-carbon product answers to the purchasing rules of the client.
    - For example, promote the low-carbon product highlighting that their client could use it to answer the purchasing rules of their own clients (e.g. low-carbon aluminium to produce a car door).
  - Share environmental information (e.g. quantified GHG emissions) about company products and relevant certification schemes (i.e. Energy STAR)
  - Provide documents and tools
- Collaboration & innovation
  - Run a campaign to encourage innovation to reduce climate change impacts
  - Collaborate with downstream segments of the value chain to foster circular end-of-life treatment of products and downstream logistic efficiency
  - Organise a multi-party working group with meetings taking place at least annually
- Customer motivation via marketing and choice architecture (‘nudging’)
  - Design marketing campaigns/choice architecture aiming to indirectly encourage customers to reduce their emissions

Table 19: Examples of criteria to evaluate the company’s activities to influence client/customer behaviour to reduce GHG emissions (adapted from ACT Generic Methodology V2)

Question	Subdimension	Basic practices				Best practices
What action levers* does the company use in practice to encourage clients to reduce their emissions?	*Action levers* used in practice*	There is no evidence of action levers* used in practice.	There is evidence of the company responding only to customer demand for more low-carbon products without attempting to change the existing customer demand towards low-carbon alternatives.	There is evidence of the company using action lever(s) from ONE of the four engagement types (education/information sharing, collaboration & innovation, compensation, customer motivation via marketing and choice architecture).*	There is evidence of the company using action lever(s) from TWO of the four engagement types (education/information sharing, collaboration & innovation, compensation, customer motivation via marketing and choice architecture).*	There is evidence of the company using action lever(s) from AT LEAST THREE of the four engagement types (education/information sharing, collaboration & innovation, compensation, customer motivation via marketing and choice architecture).*
What is the scope of the recent and current activities in client engagement?	*Scope*	No clients are engaged.	Clients engaged represent up to 30% of revenues OR up to 30% of client-related scope 3 emissions.	Clients engaged represent 31-60% of revenues OR 31-60% of client-related scope 3 emissions.	Clients engaged represent 61-90% of revenues OR 61-90% of client-related scope 3 emissions.	Clients engaged represent over 90% of revenues OR over 90% of client-related scope 3 emissions.
How impactful has the company’s client engagement been?	*Impact of engagement***	There is no evidence of impact** of the action levers used.	Some action levers used show qualitative evidence of impact.**	Almost all action levers used show qualitative evidence of impact.**	Some action levers used show quantitative evidence of impact.**	Almost all action levers used show qualitative and quantitative evidence of impact.**

*Action levers must be presented as examples of past or present actions/initiatives and not be theoretical or embedded in a strategy document. 'Action levers' include but are not limited to those specified as per indicator *7.1 Strategy to influence clients to reduce their GHG emissions.*
**The metric used to measure impact depends on the action lever the metric refers to. Examples of 'evidence of impact' may include, but are not limited to:

- Qualitative example: Feedback from clients saying that they appreciate and will use this new knowledge to start their journey on the low-carbon transition.
- Quantitative example: Evidence that engaged clients have reduced their use-phase GHG emissions by X%.

Appendix 8: Cross-consistency among ATP-Col assessment points

To be done after the public consultation once assessments points are stable

The idea is to show the (inter)connection between relevant ATP-Col assessment points. For instance target decarbonization levers assessment points 2 with target assessment point 1 with locked in assessment point 3 with capex assessment point 1 and so on.

Appendix 9 Precision regarding assessment points for financial institutions

To be done after the public consultation once assessment points are stable.

Appendix 10 ATP-Col members

Note that since ATP-Col has started in June 2023, people may have changed function and organization. Here is the list of individual experts names when then have joined ATP-Col. As long as they have been involved in ATP-Col, they all have received the ATP-Col materials, they had opportunities to contribute to the different ATP-Col meetings as well as the consultation of the first ATP-Col draft document.

First name	Last Name	Organization
Nate	Aden	SCIENCE BASED TARGET INITIATIVE
Ali	Amin	LONDON SCHOOL OF ECONOMICS
Inês	Amorim	WBCSD
Kaya	Axelsson	OXFORD NET ZERO
Chloe	Baumes	UN GLOBAL COMPACT
Matilda	Becker	OXFORD NET ZERO
Hunter	Bell	SCIENCE BASED TARGET INITIATIVE
Charles	Benoit	UNEP FI
Julia	Bingler	CEPWEB
Luke	Blower	WBCSD
Faith	Boluwatife-Falusi	UNEP FI
Jacob	Buckton	CDP
Fernando	Castellanos	UN GLOBAL COMPACT
Stephanie	Chow	GFANZ
Mike	Coffin	CARBON TRACKER
David	Cooke	2 DEGREES-INVESTING
Anna	Creed	CLIMATE BONDS INITIATIVE
Matthew	Dawes	UNITED NATION CLIMATE ACTION TEAM
Romane	Delevoie	ADEME
Nicholas	Dodd	ROCKY MOUNTAIN INSTITUTE
Laura	Draucker	CERES
Marlène	Dresch	ADEME
Margot	Duluk	WBCSD
Louisa	Durkin	CLIMATE CHAMPIONS TEAM
Todd	Edwards	UNFCCC
Henry	Eviston	WWF EU
Emily	Faint	BSI GROUP
Tessa	Ferry	CLIMATE CHAMPIONS TEAM
Nikolas	Geirnaert	FINANCE-WATCH
Ben	Gilbey	E3G
Sebastien	Godinot	WWF EU
Thomas	Gourdon	JOINT RESEARCH CENTER
Owen	Grafham	CLIMATE ARC
BONE	Guillaume	WWF FR

Thomas	Hale	BSG.OX.AC
Jenny	Halen	WMB COALITION
Krista	Halttunen	OXFORD SMITH SCHOOL
Frederic	Hans	NEW CLIMATE INSTITUTE
Elizabeth	Harnett	ROCKY MOUNTAIN INSTITUTE
George	Harris	ROCKY MOUNTAIN INSTITUTE
Rachel	Hawker	CLIMATE ARC
Rachel	Hemingway	CLIMATE BONDS INITIATIVE
Kerri-Anne	Hempshall	UNPRI
Marie	Henniges	GFANZ
Michael	Hugman	CHILDREN INVESTMENT FUND FOUNDATION
Heidi	Huusko	UNITED NATION CLIMATE ACTION TEAM
Natalie	Jackson	A4S
Elizabeth	Jacobs	E3G
Kerry	King	A4S
David	King	GFANZ
Anna	Kruip	UN GLOBAL COMPACT
Jenny	Kwan	WBCSD
Hélène	Lanier	2DEGREES-INVESTING
Brice	Laniyan	NOTRE AFFAIRE A TOUS
Cat	Leggat	CDP
Kate	Levick	E3G
Lisa	Lhonneur	BANQUE-FRANCE
Sara	Lickel	EUROPEAN CLIMATE FOUNDATION
Augustin	Lionatlan	BANQUE DE France
Tom	Lorber	CHILDREN INVESTMENT FUND FOUNDATION
Hina	Majid	UNEP FI
Estefania	Marchan	ROCKY MOUNTAIN INSTITUTE
Doree	Marentette	EUROPEAN CLIMATE FOUNDATION
Sophie	Marjanac	CLIENTEARTH
Aoife	Martin	UNEP FI
Federico	Mazza	CLIMATE ARC
Claire	McCarthy	WMB COALITION
Tyler	McCullough	CERES
Charlie	Mclellan	GFANZ
Simon	Messenger	UNEP FI
Anatole	Metais-Grollier	ADEME
Ritika	Modi	UN GLOBAL COMPACT
Silke	Mooldijk	NEW CLIMATE INSTITUTE
Michaela	Morris	CLIMATE WORKS CENTRE
Cyril	Moyo	WORLD BENCHMARKING ALLIANCE
Carmen	Nuzzo	LONDON SCHOOL OF ECONOMICS
Daniela	Palma	CLIMATE CHAMPIONS TEAM

Renaud	Pendaries	WWF Fr
Nicolas	Pickard-Garcia	JOINT RESEARCH CENTER
Lucie	Pinson	RECLAIM FINANCE
Ira	Poensgen	UK TPT
Romain	Poivet	WORLD BENCHMARKING ALLIANCE
Felix	Preston	CLIMATE ARC
Antoine	Pugliese	WWF FR
Oliver	Racher	CDP
Stanislas	Ray	ADEME
Tony	Rooke	GFANZ
Adrien	Rose	OXFORD SMITH SCHOOL
Yann	Rosetti	WORLD BENCHMARKING ALLIANCE
Andy	Ross	CDP
Joachim	Roth	WORLD BENCHMARKING ALLIANCE
Paul	Schreiber	RECLAIM FINANCE
Ritwika	Sengupta	BSIG ROUP
Gireesh	Shrimali	OXFORD SMITH SCHOOL
Maxim	Sinclair	CDP
Vicky	Sins	WORLD BENCHMARKING ALLIANCE
Anna	Skarbek	CLIMATE WORKS CENTRE
Marina	Strovolidou	CLIMATE BONDS INITIATIVE
Julia	Symon	FINANCE-WATCH
Paola	Tello	CLIMATE ARC
Julia	Tobias	CLIMATE ARC
Perrine	Toledano	CCSI
Daniel	Toran	FRANK BOLD
Ian	Tout	UNFCCC
Scott	Twigg	CDP
Stéphane	Voisin	INSTITUT LOUIS BACHELIER
Guillaume	Wahl	WWF FR
Tom	Wainwright	CLIMATE WORKS CENTRE
Jonathan	White	CLIENTEARTH
Claire	Wigg	EXPONENTIAL ROADMAP
Jessica	Wood	CHILDREN INVESTMENT FUND FOUNDATION
Chendan	Yan	EUROPEAN CLIMATE FOUNDATION

1657 *Table 20 : list of individuals experts involved in ATP-Col*