

## **FINAL - Fossil Fuel and non-CO2 gases Transition**

*This document lays out the draft suggestions from the working group focused on Fossil Fuel and non-CO2 gases*

<b>Starting line criteria</b>	<b>2</b>
Pledge	2
Plan	5
Proceed	7
Publish	8
<b>Leadership Principles</b>	<b>10</b>
Scope	10
Sinks & Credits	10
Empowerment and Equity	11
<b>References</b>	<b>13</b>
<b>Question responses</b>	<b>14</b>

# Starting line criteria

STARTING LINE CRITERIA				
Area	Current wording	Interpretation Points	Potential suggested changes for starting criteria	Potential suggestions for Interpretation Points
Pledge	Pledge at the head-of-organisati on level to reach (net) zero GHGs as soon as possible, and by midcentury at the latest, in line with global efforts to limit warming to 1.5C. Set an interim target to achieve in the next decade, which reflects maximum effort toward or beyond a fair share of the 50% global reduction in CO2 by 2030 identified in the IPCC Special Report on Global Warming of 1.5C.	<ol style="list-style-type: none"> <li>1. The “Pledge” criterion encompasses the idea that reaching balance between sources and sinks (as stated in the Paris Agreement) is a goal for the world, and that individual entities’ (net) zero targets are means toward that goal, though not the only ones.</li> <li>2. “Mid-century refers” to 2050. At a minimum, all carbon emissions must be (net) zero by 2050, with other gases following soon thereafter, as articulated in the IPCC Report on Global Warming of 1.5C.</li> <li>3. The requirement to have an interim target that reflects a fair share of the 50% reduction by 2030 is explained in the IPCC Report on Global Warming of 1.5C. We note that a 50 percent reduction by 2030 implies average annual reductions of approximately 7 percent, though change may not be linear.</li> <li>4. “Fair share” can be operationalized in different ways.</li> </ol>	<p>The 2022 WG found the Starting line Criteria to be a good starting point for considering inclusion of fossil-fuel/non-CO2 exposed entities in RTZ but discussed and recommended several key points for improvement, focusing on avoiding scope for any potential loopholes and providing a greater level of specificity on relevant criteria and leadership practices. The WG discussed the importance of inclusion of fossil-fuel sectors given their significance in contributing to global emissions and the risk of exclusion in leading to potential perverse outcomes.</p> <p><b>Key points:</b></p> <ul style="list-style-type: none"> <li>• Specify ‘no/low overshoot 1.5C’ pathway. Commitments and actions should be measured against this. R2Z could note the need for credible scenarios and point to specific examples such as, . IEA’s Net Zero roadmap, IPCC.<sup>1</sup></li> <li>• Pledges relating to fossil fuel emissions, should aim to reflect goals to reduce absolute emissions and not just emissions intensity (For eg.</li> </ul>	<ul style="list-style-type: none"> <li>• “Limit warming to 1.5C” refers to no/low overshoot scenarios. To support high quality commitments RTZ could note the need to use credible scenarios noting examples [such as those developed by IEA, IPCC and NGFS.]</li> </ul> <p><b>No consensus: On</b> whether EPRG should endorse specific scenarios. Several members felt a strong need to recommend pathways to ensure comparability while others thought it might be better to allow for some flexibility and a choice between credible pathways, while providing examples.</p> <ul style="list-style-type: none"> <li>• “Net Zero” plans should be attached to a specific scenario so that they link to a temperature outcome, the degree of NETs required is understood, and the interim pathway is clear. IEA’s Net Zero Roadmap could be used as a guidance document Or IPCC AR6 1.5C no/low overshoot scenario.</li> <li>• Need to ensure disclosure of emissions on both an absolute and intensity basis, but targets may be better established around either depending on circumstances demonstrating alignment with 1.5C aligned strategy.</li> </ul> <p><b>No consensus: On suggestion to consider targets that fail to account for absolute</b></p>

<sup>1</sup> International Energy Agency (2021) “Net Zero by 2050” <https://www.iea.org/reports/net-zero-by-2050>

IPCC, 6th Assessment Report, Working Group III, Climate Change 2022: Mitigation of Climate Change, Summary for Policymakers (2022). [https://report.ipcc.ch/ar6wg3/pdf/IPCC\\_AR6\\_WGIII\\_SummaryForPolicymakers.pdf](https://report.ipcc.ch/ar6wg3/pdf/IPCC_AR6_WGIII_SummaryForPolicymakers.pdf)

		<p>While global CO2 emissions must reduce by 50 percent by 2030, different sectors and different actors will move at different speeds, reflecting their unique opportunities and constraints. The Race to Zero does not have a single way of operationalizing this division. Rather, EPRG requires partner networks and initiatives to operationalize “fair share” in a science-based fashion as appropriate for their members, and to explain and justify how they do this. Three salient examples:</p> <p>a. Some initiatives simply require all members to reduce emissions by 50 percent or more by 2030. For example, over 800 Certified B Corporations from over 50 countries - nearly one quarter of the global B Corp community - have pledged to reach Net Zero by 2030, 20 years ahead of the Paris Agreement targets.</p> <p>b. Some initiatives use climate models to generate scenarios for how the world reaches 1.5C, and then assign individual entities emissions reduction pathways, that reflect a share of the overall reductions calculated in that scenario. For example, the Science Based Targets Initiative uses scenarios to determine</p>	<p>Currently many fossil-fuel exposed entities focus their transition plans on emissions intensity targets), and have a defined pathway to get there. For instance, pathway for absolute emission reductions from coal or oil and gas consistent with a credible/recognised scenario</p> <ul style="list-style-type: none"> <li>• Specify interim 2030 target in line with 1.5C no/low overshoot scenario</li> <li>• Include, ‘no new coal plants and no/limit other new fossil fuel investments’ - any new investments need to be demonstrably part of a 1.5C-aligned strategy .</li> <li>• Include, ‘present plans for phase out/down of fossil fuels’ corresponding to fair share appropriate targets.</li> <li>• Include “and 34% global reduction in methane by 2030<sup>2</sup>”</li> <li>• <b>No consensus: No consensus: On suggestion, to include “in line with the IPCC 6th AR an interim target on greenhouse gas emissions to peak before 2025.” There was further discussion on how reaching peak emissions could take longer in developing countries and such a target could dissuade participation.</b></li> <li>• The group also discussed the potential need to look at Just Transition aspects in pledging. What does it mean to the plans to phase out oil and gas, and coal? WG discussed whether pledge criteria could include language on just transitions that can help create momentum</li> </ul>	<p><b>emissions reduction as non-aligned (as they could lead to overshoot). Benefits and drawbacks of both - emissions intensity reduction and absolute emission reduction - targets were highlighted.</b></p> <ul style="list-style-type: none"> <li>• Net zero targets need to be grounded in scientific evidence, and include transition pathways that leave no overshoot.</li> <li>• Important to note that “fossil fuel phase out” does not refer to a universal date but phase out should be equitable, could differ by sectors, and entities. For instance, IEA net zero pathway implies there is no need for new investment in fossil fuel supply (ie beyond currently licensed fields), unabated coal-fired generation need to be cut by 70% by 2030, including the phase-out of unabated coal in advanced economies, and phased out in all other regions by 2040.<sup>3</sup></li> <li>• There seems to be a contradiction between pledge and the interpretation for the non-carbon gases, wording on ambition from the pledge is not the same as interpretation. As such, the startling line criteria should clearly delineate the need to reduce the use of CO2 and methane gases sooner, and point to the need to act on other GHG gases consistent with IPCC AR6.</li> <li>• If oil and gas entities are included, they should be required to make pledges around methane leakages, methane reductions, and emission reductions aligned with 1.5C pathway. There is also a need to establish a more robust baseline of emissions</li> </ul> <p><b>Note: Whether oil and gas companies are allowed to join will require further</b></p>
--	--	--	---	--

<sup>2</sup> IPCC, AR6, Working Group III, SPM, pg. 22.

<sup>3</sup> International Energy Agency (2021) “Net Zero by 2050: A Roadmap for the Global Energy Sector” p.116.

		<p>sectoral pathways to 1.5C, and then assigns participating companies a target based on their share of the market in a given sector. In this way it relies on climate models to determine what individual entities' shares should be.</p> <p>c. Some initiatives assign different targets to entities at different stages of development. For example, C40's Deadline 2020 program includes cities from both the global North and South. Because many cities in the latter are still growing, they are on slower pathways to halving emissions, but, at the same time, the cities from the Global North that are part of the initiative have more accelerated timeframes, in many cases halving emissions before 2030 (all cities aim to reach net zero before 2050).</p> <p>5. The "Pledge" criterion sets the goal as "(net) zero. EPRG notes the value of differentiating the "end state" to be achieved from the transition to that end state. EPRG considers acceptable "end state" targets by 2050 to include the following. Please refer to the Race to Zero Lexicon for further details.</p> <p>a. Absolute zero - When no greenhouse gas emissions are attributable to an actor's activities across all scopes.</p> <p>b. Net zero - An actor reduces its emissions following science-based pathways, with</p>		<p><b>deliberations. Some members suggested they could be allowed if they demonstrate absolute emissions and demand reductions.</b></p> <ul style="list-style-type: none"> <li>● The group discussed the need for some care with how language is crafted to avoid perverse outcomes e.g. inhibiting activity that would involve engaging with coal assets in order to accelerate their phaseout. This would also include methane-carbon tradeoffs: e.g., firms reducing methane venting or leakage should not replace with flaring or otherwise combusting gas, rather than fixing leaks or remediating abandoned wells.</li> <li>● Recommend having conditions for ramping down coal while ramping up RE - conditions that we could draw upon for coal investments</li> <li>● Recommend limiting/ending any form of support (such as EPC) to new coal pipeline projects</li> <li>● Note: "Fair Share" needs further clarification. While the WG didn't get sufficient time to delve on this, a few questions were raised. <ul style="list-style-type: none"> <li>- To whom does fairshare apply – consumers (of fossil fuels) or producers? Fair share could have different implications based on this.</li> <li>- For producers, how does "fair share" get interpreted for SOEs?</li> <li>- Do economics and efficiencies of production have a role to play in determining "fair share" considerations for producers?</li> <li>- How specific should the clarifications be on fair share to allow some flexibility?</li> </ul> </li> </ul>
--	--	--	--	--

		<p>any remaining GHG emissions attributable to that actor being fully neutralized by like-for-like removals (e.g. permanent removals for fossil carbon emissions) exclusively claimed by that actor, either within the value chain or through purchase of valid offset credits.</p> <p>c. Climate positive - When an actor's greenhouse gas removals, internal and external, exceed its emissions and any removals are "like for like." Must be specified over a declared time period, and whether removals and emissions are cumulative or represent only the time period specified. (Sometimes called net negative, but Race to Zero prefers the term "climate positive").</p> <p>6. EPRG notes that some entities make separate pledges for emissions reductions and investments in natural sinks or other forms of compensation. Differentiating these objectives can provide additional clarity and transparency regarding the "Pledge" criterion.</p>		
Plan	Within 12 months of joining, explain what actions will be taken toward achieving both interim and	<p>1. EPRG acknowledges that plans are often iterative, especially when entities first embark on their net zero transformation. For example, smaller entities or those facing resource and</p>	<ul style="list-style-type: none"> <li>• Ensure there is coherence between pledge and plan for both CO2 and non-CO2 gases</li> <li>• Targets and plans need to be <i>credible</i> – i.e. based around production cuts, rather than just reliant on</li> </ul>	<ul style="list-style-type: none"> <li>• Suggest updating the Race to Zero "Breakthroughs" using the most recent IPCC 6th AR WG III report, which includes pathways per sector and can be complemented with examples of measures<sup>4</sup>.</li> </ul>

<sup>4</sup> IPCC Working Group III (2022) "Climate Change 2022: Mitigation of Climate Change"  
[https://report.ipcc.ch/ar6wg3/pdf/IPCC\\_AR6\\_WGIII\\_SummaryForPolicymakers.pdf](https://report.ipcc.ch/ar6wg3/pdf/IPCC_AR6_WGIII_SummaryForPolicymakers.pdf)

	<p>longer-term pledges, especially in the short- to medium-term.</p>	<p>capacity constraints may require significant time to prepare a first GHG inventory. In such cases EPRG does not necessarily expect a “full” plan to be immediately available, but it does require that entities provide information on their progress and the steps they will take within 12 months.</p> <ol style="list-style-type: none"> <li>2. Entities’ plans should address the initiative’s approach to the Race to Zero leadership practices.</li> <li>3. Entities’ plans may refer to Race to Zero “Breakthroughs” where appropriate.</li> </ol>	<p>as-yet-unproven CCUS technologies, or the widespread purchase of offsets etc (this is an area we are developing in this year’s iteration)</p> <ul style="list-style-type: none"> <li>• Specific commitment of entities on how their plan contributes to an overwhelmingly decarbonised electricity sector in line with the 1.5C no/low overshoot pathway. While sectoral transitions could vary, there’s an urgent need to decarbonize energy use and increase renewables. With that in mind, efforts to increase the share of renewables, phase out coal and gas in electricity are critical. Entities can demonstrate commitment here via establishing clean energy targets, fossil fuel phaseout targets and joining global initiatives (e.g. <a href="#">RE100</a> and <a href="#">EV100</a>)</li> <li>• Specifically draw out exposure to oil, gas, and coal and present 2030 and 2050 sectoral plans on phasing out fossil fuel use and finance. For instance: Oil and gas companies need to specify what they think their share of the carbon budget is and how production cuts fit into their emissions reduction targets. Actors need to specify their plans to phase down and out coal use, eg for financials not just divest assets but what they are doing to finance redevelopment of coal into renewable energy.</li> <li>• Alliances to set out specific approaches in relation to highest emitting sectors.</li> <li>• Alliances to set out specific approaches where specific GHGs are of particular significance to their members’ activity</li> </ul>	<ul style="list-style-type: none"> <li>• Race to Zero signatories should go to greater lengths to show their decarbonisation plans in the run up to 2030, preferably through an interim target, as well as a 2050 target.</li> <li>• Should be explicit on nearer-term plans (i.e. 2030) with interim milestones (5 years); should demonstrate strong understanding of transition and entity/company’s role in decarbonization</li> <li>• WG emphasised the importance of setting targets that capture all GHG gases, with specific focus on CO2 and CH4, while noting other gases (nitrous oxides, black carbon, halogenated gases, VOCs) without necessarily developing individualised specifics for each.</li> <li>• <b>Note: Discussions highlighted the complexity of having targets for each GHG. There was agreement on the need to accelerate action on CO2 and CH4. For other gases, there were a few suggestions to have temporal targets but challenges in establishing baseline, monitoring and implementation. were highlighted.</b> Actors should demonstrate how they are accelerating reduction of fossil fuel demand, reducing emission intensity (including both carbon and non-CO2), as well as absolute emissions trajectory. For instance, Transition plans for fossil fuel companies/fossil fuel sectors should be different to most others inc. power / utilities companies, to reflect the <i>demand loss</i> for their products, whereas most other industries <i>need to decarbonise</i> the manufacture of their product, but demand is likely to remain/grow. Focus on transition plan rather than responsibility for end use emissions.</li> </ul>
--	--	--	---	---

			<ul style="list-style-type: none"> <li>Specify action to phase out non-CO2 gases (other than methane) with both 2030 and 2050 targets</li> <li>Transition plans of entities should cover Scope 1,2, and 3 emissions, particularly for energy companies</li> <li>To increase transparency, also demonstrate knowledge of how activities contribute to deforestation and/or land degradation</li> <li>Strong MRV processes (pick up monitoring/tracking points from 'Pledge' above)</li> </ul>	<ul style="list-style-type: none"> <li>For integrated companies, targets for the fossil fuel part of business should be separate from other activities (e.g. separate the emissions intensity of a company's electricity generation from its fossil products).</li> <li>Actors should be encouraged to set out how they will help accelerate the phaseout of coal, eg. for financials not just divest assets but what they are doing to finance redevelopment of coal into renewable energy.</li> <li>There is a need to consider the GWP potential used to assess methane, as this is often underestimated. R2Z should consider providing explicit guidelines on this.</li> </ul>
Proceed	Take immediate action toward achieving (net) zero, consistent with delivering interim targets specified	<ol style="list-style-type: none"> <li>The urgency implied by the IPCC's Special Report on Global Warming of 1.5C means that we are now in a "decisive decade." Pledges and plans must therefore be matched by immediate actions. While full plans may take time to formulate, all entities have available a number of "no regrets" measures to reduce emissions immediately. "Analysis paralysis" should not prevent immediate action.</li> <li>EPRG interprets "immediate" to mean within months, not more than a year.</li> <li>EPRG does not consider issuing a plan to be sufficient for the "Proceed" criterion to be met. Tangible actions are also required.</li> </ol>	<ul style="list-style-type: none"> <li>Include reference to IPCC AR6 WG III report</li> </ul>	<ul style="list-style-type: none"> <li>Articulate how plans differ from Business As Usual, with sustained increases in non-fossil capex and/or investment in non-CO2 GHG reductions.</li> <li>Articulate how actions are in line with 1.5C no/low overshoot pathway.</li> </ul>

		<p>4. The types of specific actions required to meet the “Proceed” criterion vary by actor and sector. In general, they should be things that can be done now that will have a direct impact on reducing emissions. Examples may include:</p> <ol style="list-style-type: none"> <li>Adopting a new policy with immediate effect.</li> <li>Installing or purchasing new equipment.</li> <li>Changing processes or business models.</li> <li>Ensuring COVID-19 recovery spending and policies enable achievement of interim and long-term targets.</li> </ol> <p>5. In all cases, entities should explain how the immediate actions they are taking link to interim targets they are aiming for.</p>		
Publis h	<p>Commit to report publicly both progress against interim and long-term targets, as well as the actions being taken, at least annually. To the extent possible, report via platforms that feed into the UNFCCC Global Climate Action Portal.</p>	<ol style="list-style-type: none"> <li>Reporting may be done through any public channel, ideally including those that feed into the UNFCCC’s Global Climate Action Portal.</li> <li>Reports should provide clarity both on progress toward interim targets as well as the steps entities are taking to deliver that progress.</li> <li>For entities relying on offsetting, it is valuable to report these separately from internal reductions.</li> </ol>	<ul style="list-style-type: none"> <li>WG discussed the importance of disclosure, including embedded CO2. For example, O&amp;G companies would need to disclose the carbon intensity of their barrels.</li> <li>WG discussed the importance of aligning with common metrics used across other entities such as climate action 100, TCFD, etc..</li> <li>Cover GHGs and CO2/CH4 specifically</li> </ul>	<ul style="list-style-type: none"> <li>WG discussed the challenges of 24/7 monitoring but noted there has been improvement</li> <li>For transparency, emissions targets Oil and gas activities should be separate from other activities, e.g. electricity generation</li> <li>For non-CO2 monitoring, WG discussed the need for better tracking, better establishment of baseline (i.e. leaks).’</li> <li>Satellite based data could be a game changer. For instance, IEA’s report on methane emissions based on satellite data shows that methane emissions are 70% higher<sup>5</sup>.</li> </ul>

<sup>5</sup> International Energy Agency (2022) “Global Methane Tracker” <https://www.iea.org/reports/global-methane-tracker-2022/overview>.

		<p>4. Provide information on remaining emissions that are particularly challenging</p> <p>5. “Annually” means within 12 months of joining Race to Zero, but also in line with the reporting cycle of the network initiative. So if a network or initiative has an annual disclosure cycle, entities joining Race to Zero should report in the next one that arises after they join.</p>		<ul style="list-style-type: none"> <li>• WG also discussed the importance of who collects it (should be independent in order to be credible) and how it is collected - certification is only credible if financially independent, if you pay for certification within a competitive market there's inherent problems. See FT article.<sup>6</sup></li> <li>• For methane, IEA's report on methane emissions is a helpful starting point<sup>7</sup>.</li> <li>• In addition, WG discussed EDF/Carbon Tracker/Global Methane Hub as providing guidance e.g.: General methane monitoring and mitigation, on site monitoring, and satellite measurement of methane in Oil/gas<sup>8</sup></li> </ul>
--	--	---	--	---

<sup>6</sup> Financial Times, US gas industry pursues 'responsible' label to keep customers (23 February 2022), <https://www.ft.com/content/bbb3a299-833a-4ffe-9f99-c0ee231e61f7?desktop=true&segmentId=7c8f09b9-9b61-4fbb-9430-9208a9e233c8#myft:notification:daily-email:content>

<sup>7</sup> International Energy Agency (2022) “Global Methane Tracker”.

<sup>8</sup> General methane monitoring and mitigation: [https://iopscience.iop.org/article/10.1088/1748-9326/abf9c8?addl\\_info=2021%0AThe%20fastest%20way%20to%20slow%20warming](https://iopscience.iop.org/article/10.1088/1748-9326/abf9c8?addl_info=2021%0AThe%20fastest%20way%20to%20slow%20warming).

On site monitoring: <https://pubs.acs.org/doi/10.1021/acs.est.1c06458>

Re: satellite measurement of methane in Oil/gas: <https://www.science.org/doi/10.1126/science.aar7204>

## Leadership Principles

LEADERSHIP PRACTICES			
Area	Current wording	Interpretation Points	Potential suggestions for leadership practices
Scope	<p>Targets must cover all greenhouse gas emissions:</p> <ol style="list-style-type: none"> <li>Including Scope 3 for businesses and investors where they are material to total emissions and where data availability allows them to be measured sufficiently. Including all territorial emissions for cities and regions</li> </ol> <p>Leading targets may also include:</p> <ol style="list-style-type: none"> <li>Cumulative emissions (for all actors)</li> <li>Consumption emissions (for cities, states, and regions)</li> </ol>	<ol style="list-style-type: none"> <li>Note the clear distinction between “must” and “may” in the first and second group of conditions.</li> <li>Different networks and initiatives will operationalize the materiality and measurability of Scope 3 emissions in different ways. EPRG looks for all networks and initiatives to follow best practices.</li> <li>While EPRG recognizes that data availability is a real limitation, it interprets “sufficiently” to imply a relatively low bar for inclusion. Furthermore, EPRG considers it incumbent on actors setting (net) zero pledges to work to expand data availability to capture all non-trivial emissions over time as part of their overall effort to reach net zero.</li> <li>For some entities (e.g. financial actors) Scopes 1-2 are relatively small compared to Scope 3. EPRG nonetheless requires these emissions be included, given they are typically readily measurable.</li> </ol>	<ul style="list-style-type: none"> <li>Should include a requirement for entities to explain how they are working to decarbonize the energy sector this decade in line with a 1.5C pathway.</li> <li>Ambitions must be framed on an absolute basis, should cover scope 1, 2 and 3 emissions, and account for activities based on a company’s full equity share.</li> <li>For coal, leadership criteria should include phasing down coal and increasing RE in the portfolio</li> <li>For O&amp;G. WG discussed Scope 3 reporting has only happened in last year or two; there isn’t a good idea of historical backwards accounting</li> <li>For non-CO2: Cumulative emissions and MRV are important - important to reiterate here.</li> <li>Plans must also account for pre production venting, not just production and post production.</li> </ul>
Sinks & Credits	<ol style="list-style-type: none"> <li>In the transition to (net) zero, prioritize reducing emissions, limiting any residual emissions to those that are not feasible to eliminate.</li> <li>Clearly specify what sinks or credits are used to make what, if any, neutralisation claims, clarifying how sinks and credits are used both on the path to (net) zero, and after (net) zero is obtained. Any neutralization of residual emissions must transition to permanent</li> </ol>	<ul style="list-style-type: none"> <li>The definition of residual emissions remains a critical ongoing area of work. As such, EPRG does not impose a single definition, but rather asks networks and initiatives to explain and justify their approach to defining emissions that are “not feasible to eliminate.” In general, approaches to this question should be based in science, for example, by relying on robust scenarios generated by climate models that involve little to no overshoot. EPRG seeks to ensure consistency across networks and initiatives in this dimension.</li> <li>See Race to Zero Lexicon for precise definitions <ul style="list-style-type: none"> <li>Neutralization</li> <li>Like for like</li> <li>Climate neutral</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Ensure any CCU activities are separated from CCS, rather than just lumped together into CCUS, with opaque impact on emissions.</li> <li>Removal should be proven and verifiable (e.g. CCS, DACCs); WG discussed the risk of removal technology not necessarily leading to removals and removal technology should therefore be real and justifiable. Otherwise targets and plans which allow for unabated increase of fossil extractions will be problematic. Ideally need to set a standard for minimal involvement of “unproven technologies.”</li> <li>Group discussed ‘feasibility’ being open to interpretation and providing an open window (e.g. and making it difficult to avoid transforming businesses/technologies</li> </ul>

	<p>removals by the time (net) zero status is achieved.</p> <ol style="list-style-type: none"> <li>3. Encourage immediate contributions to the preservation and restoration of natural sinks, not necessarily linked to neutralization claims.</li> <li>4. Ensure that any credits achieve robust outcomes for additionality, permanence, and accounting, and do not undermine social justice or harm biodiversity.</li> </ol>	<ul style="list-style-type: none"> <li>• EPRG notes the importance of immediate contributions to the preservation and restoration of natural sinks for achieving global net zero, but also notes a general lack of consensus on methodologies for transitioning investments in sinks to permanent neutralization by the time net zero is achieved. This remains an ongoing area of work in our community. EPRG therefore looks for networks and initiatives to clearly explain and justify their approach with reference to climate science.</li> <li>• “Robust outcomes” refers to best practices in offsetting to make sure that any credits purchased truly reflect the desired outcome.</li> <li>• Examples of approaches to sinks and credits that would not meet the Race to Zero leadership practice <ul style="list-style-type: none"> <li>○ Where sinks or credits are relied on in lieu of decarbonization.</li> <li>○ Where accounting systems cannot prevent double-counting or non-additionality.</li> <li>○ Where projects risk harm to biodiversity or social justice.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• There was some discussion questioning whether carbon off-setting should be allowed in net-zero pledges as these could slow the pace change needed. For example, for oil and gas, it is not possible for companies to offset the emission from their products because there is not enough CCS and NBS to do it. This is where clearly defined production cuts must come first.</li> <li>• WG discussed need to provide guidance/thresholds for offsets versus direct reductions</li> <li>• For coal, there is a need to reconcile the IEA’s net zero scenario for coal with the SBTi methodology. Hence, recommending a net-zero scenario is important to measure impact of actions. It’s important to demonstrate the implications of like for like removals on net-zero pathway for coal.</li> </ul>
<p><b>Empowerment and Equity</b></p>	<p>Seek to enable all actors to contribute to the global transition toward (net) zero through engagement, information sharing, access to finance, and capacity building. Need to develop pledges, plans, and actions in consideration of equity, drawing on, inter alia, the Sustainable Development Goals and Articles 2 and 4 of the Paris Agreement.</p>	<ol style="list-style-type: none"> <li>1. EPRG understands this new leadership practice to highlight the importance of Race to Zero as a facilitator and catalyzer that supports all entities’ in the Race to Zero. While the Race to Zero criteria aim to ensure credibility, they also serve as tools to support all actors to be able to “run faster” in the Race to Zero.</li> <li>2. Recognizing there is not a single approach to these issues, EPRG looks for initiatives and networks to engage seriously with both empowerment and equity, and to explain how they are weaving them throughout their approach.</li> <li>3. Empowerment may refer to how networks and initiatives enhance the ability of their member entities to reach (net) zero, but may also refer to how those entities in turn enhance the work of others. This latter role may be particularly important for, e.g., universities, faith groups, or other types of actors</li> </ol>	<ul style="list-style-type: none"> <li>• Actors should acknowledge/ recognize their historical contribution to climate change</li> <li>• WG discussed why ‘just’ has not been included here; more consideration of positive/negative impacts across chain/actors</li> <li>• However, ensuring just transitions is important. Suggest leveraging/adopting IPCC special report language on just transition, and ILO guidelines on just transitions.</li> <li>• WG discussed the importance of sharing monitoring technology, particularly for methane.</li> </ul>

- whose direct emissions may be less significant than their broader role in society.
4. Examples of promoting empowerment may include:
    - a. Training and capacity building events
    - b. Transfer of resources or supporting access to finance
    - c. Peer-to-peer exchange and learning.
    - d. Ensuring robust representation of all actors, including traditionally marginalized groups.
  5. Equity is one of the key concepts embedded in the Paris Agreement. EPRG recognizes that many different approaches and definitions of the term exist, and that these are often contested. For example, equity can refer to, inter alia, the division of GHGs emissions across actors between or within countries at different stages of development, the division of GHG emissions between or within countries at different stages of time, attention to the differential impacts of climate change on more or less vulnerable populations, the allocation of resources both to mitigation emissions and adapt to climate impacts, etc. EPRG seeks networks and initiatives to reflect on and explain their own approach to these issues.
  6. Recognizing the need for further discussion and deliberation around these issues, EPRG will aim to convene a special working group on equity and empowerment, together with Race to Resilience and other stakeholders, to develop more specific options for advancing this leadership practice across our community.

## References

- IPCC AR 6 WG III: [Mitigation of Climate Change](#)
- ILO's just transition guidelines
- Race to Zero: [Glasgow Breakthroughs](#)
- [No New Coal Power Compact](#)
- COP 26: [Coal to Clean Power Transition Statement](#)
- [Global Methane Pledge](#)
- IEA: [Net Zero by 2050](#)
- IEA: [Global Methane Tracker](#)
- IRENA's [Reaching Zero with Renewables](#)
- API template guidance for GHG reporting for O&G firms, which barely mentions scope 3:  
<https://www.api.org/-/media/Files/Policy/ESG/GHG/APITemplate10forGHGReportingGuidance.pdf>
- TPI Carbon Performance assessment for O&G: <https://www.transitionpathwayinitiative.org/publications/96.pdf?type=Publication>
- IIGCC NZ standard for oil and gas:  
<https://www.iigcc.org/download/iigcc-net-zero-standard-for-oil-and-gas/?wpdmdl=4866&refresh=62263fa8b58571646673832>
- General methane monitoring and mitigation:  
[https://iopscience.iop.org/article/10.1088/1748-9326/abf9c8?addl\\_info=2021%0AThe%20fastest%20way%20to%20slow%20warming](https://iopscience.iop.org/article/10.1088/1748-9326/abf9c8?addl_info=2021%0AThe%20fastest%20way%20to%20slow%20warming)
- On site monitoring: <https://pubs.acs.org/doi/10.1021/acs.est.1c06458>
- Satellite measurement of methane in Oil/gas: <https://www.science.org/doi/10.1126/science.aar7204>
- IEA: [Curtailing Methane Emissions from Fossil Fuel Operations](#)
- IEA: <https://www.iea.org/news/methane-emissions-from-the-energy-sector-are-70-higher-than-official-figures>
- Financial Times, [US gas industry pursues 'responsible' label to keep customers](#)
- Carbon Tracker, Hallmarks of Paris Compliance <https://carbontracker.org/reports/absolute-impact/>
- <https://carbontracker.org/reports/groundhog-pay-how-executive-incentives-trap-companies-in-a-loop-of-fossil-growth/>
- Methane-carbon tradeoff and perverse outcomes in oil and gas: <https://www.pnas.org/doi/full/10.1073/pnas.2006774117>

# Question responses

## Question 1: How, if at all, is this topic currently reflected in the Race to Zero starting line criteria, lexicon, and interpretation guide? What are the strengths and weaknesses of the current starting line criteria approach

Written responses from individualWG members to Question 1 are presented below without attribution as supplemental responses. Many of these comments and recommendations are captured in the tabular responses above.

- **Starting line criteria** – There is no explicit mention of fossil fuel transition or non-CO2 gases. Although the group discussed it is implicit in the requirement to meet both short- and long-term GHG emissions reductions pledges.
  - **Leadership practices** – There is no explicit mention of fossil fuel transition or non-CO2 gases but the WG discussed targets must cover all scopes of greenhouse gas emissions for businesses and investors.
  - **Interpretation guide** – There is no explicit mention of fossil fuel transition or non-CO2 gases except the role that offsets can play in neutralising fossil carbon emissions.
  - **Lexicon** – There is minimal explicit mention of fossil fuel transition or non-CO2 gases. The replacement of fossil-burning power with renewable energy is cited as an example of GHG reductions. Terminology around net zero, climate neutrality, etc. cover all GHGs and not just CO2.
- 
- SBTi are reviving the work on an O&G methodology; that said there are pathways developed and in development for fossil fuel sectors that might provide an alternative benchmark if an alliance can demonstrate credible verification - the WG discussed it does not feel a particularly comfortable place to require something in the criteria that doesn't exist.
  - Reading of the criteria is that it brings together GHG when describing the requirements - think this is appropriate for starting line criteria as breaking out the different GHGs may make this unwieldy. There could be a reference to indicate an expectation specific GHGs (e.g. methane) should be covered explicitly in alliance commitments where these are particularly material.
  - Instinct is we wouldn't want to make a timeline around fossil fuel phaseout a starting line criteria e.g. for financial institutions, as this is quite a nuanced issue - it would seem beneficial if NZ-committed financial institutions are financing energy company transition plans that align with their 1.5C strategy, as this can accelerate decarbonisation, but blunt phaseout timelines applied at financial institution level can instead have the perverse consequence of seeing finance disengage/divest from the energy sector and so leave it financed by those not committed to net zero, potentially extending the life of emissions-intensive assets. For that reason it would be better that the starting line criteria are couched in terms of demonstrating how activity is part of a 1.5C aligned strategy, though it may be helpful to call out specific strategies relating to fossil fuels / the energy sector.
  - May also want to distinguish the energy and non-energy uses of fossil fuels.
- 
- Explicit targets on non-CO2 climate gases should be encouraged, as these contribute to the near term warming and will need to be removed in the short term to ensure 1.5 degrees is not exceeded.
- 
- Is it worth being more explicit that the interim target for pledges in the starting line criteria covers all GHG? I think the intention is that it does, but might be worth being crystal clear.
    - Setting a target for each GHG in starting line criteria may be unwieldy (methane may be an exception)- though worth seeing if can

be more explicit in some of the initiatives that are part of Race to Zero (or for certain sectors)

- In response to the SBTi methodology, would need to understand how 'stuck' SBTi O&G methodology is before suggesting another route- as that could risk duplication/misalignment.
  - Timeline questions could be approached in different ways- e.g. investment in new vs use. As noted in the last meeting- might be easier to coalesce on a criteria about investment (especially since IEA has come out clearly here) than use given the disparities in sectors/geographies.
- 
- Lexicon: no clear differentiation between scope 1+2 CDR vs. scope 3 CDR from FF sector. E.g., not evident that there is a difference between DAC (which could count against scope 1, 2, 3) and CCS (which counts only against scope 1+2, but some firms are trying to count this as scope 3 to enable continued FF extraction). Similarly not clear for plugging methane leaks and reducing fugitive emissions overall from O&G extraction in particular.
  - Unsure if SBTi is considering these distinctions in its updated O&G guidance, but it's worth ensuring against duplication.
- 
- Pledge criteria focuses on interim targets (i.e. 2030) that are compatible with (or reflect fair share contribution towards) 50% reduction in CO2 while 2040 net zero target focuses on GHG. Is this deliberate? If so, more clarity should be provided on appropriate post-2030 non-CO2 reduction targets
  - Would welcome more discussion on SBTi methodology updates; if an oil and gas major for example has set a 2050 net zero target inclusive of Scope 3 emissions, why is this not credible? What would support credibility
  - For 'Plan' and 'Proceed' providing more specifics or examples of how actions will reduce reliance on coal, petroleum and gas (e.g. projected % reduction in consumption in each category)
- 
- Agree that having targets for each GHG in starting line criteria will be challenging. A few things that we could add:
    - Interim pledges (2030) for all GHG, with maximum efforts on CO2
    - Efforts to reduce methane emissions with interim targets
    - Ideally, I think the pledge could also have something on power sector decarbonisation but appreciate the challenges of sectoral call outs in minimum criteria
    - Phasing out unabated fossil investments
  - In the subsequent, "Plan" and "Pledge" sections, presenting 2030 targets and actions on decarbonizing the power sector, and targets/plans for unabated fossil fuel phase out.

**2. In practice, is this topic addressed consistently across the various Race to Zero partners? What different approaches can be seen?**

**To what extent can a frontier of best practice(s) be defined?**

**3. How can Race to Zero best address this topic in its minimum criteria (the floor below which members may not fall)? Consider both temporal guidance and level of specificity as well as the different entities in Race to Zero (companies, financial institutions, cities, etc..).**

**4. How should Race to Zero encourage leadership on this issue (the stretch goals which members should aim for)? Where do we see inspiring examples of leadership? What guidance can it provide to Partners for driving upward convergence?5. How could Race to Zero and its Partners expect these strengthened and enhanced criteria to be operationalised by members? Expectations should include indications of timeline, metrics for reporting etc.**

The section below summarises WG group discussions which help answer the questions above. These discussions are covered under 4 broad headers: 1. Overarching comments 2. Coal 3. Oil and Gas 4. Non-CO2 gases

## 1. Overarching

### Overarching comments

- A tension exists in that we know that based on 40 gigatonnes of CO2 emissions annually, the carbon budget will be bust in less than 10 years. Hence, targets for net zero/ keeping 1.5C alive that fail to take this into consideration are non-aligned as we will overshoot our temperature goal. Recommendation: net zero targets need to be grounded in scientific evidence, and include transition pathways that leave no overshoot.
- Maximise emphasis on interim (2030) targets, with milestones every 3-5 years.
  - The framing calls for the international community to achieve Net Zero by 2050– in alignment with IPCC 1.5 scenario. However, under BAU, we will have reached the 1.5C ceiling by 2030 (actually, before, sometime towards the end of this decade). Race to Zero signatories should go to greater lengths to show their decarbonisation plans in the run up to 2030, preferably through an interim target, as well as a 2050 target.
  - Interim pledges (2030) for all GHG, with maximum efforts on CO2
- This call for input overlaps with discussions taking place in the transition plan criteria group. This, and transition plans group should be grounded in a pathway/scenario as “net zero” could be anything. **RTZ scheme should endorse specific scenarios for signatories to adopt, as we need standardisation of approaches to truly measure/compare commitments.**
- “Net Zero” plans should be attached to a specific scenario so that they link to a temperature outcome, the degree of NETs required is understood, and the interim pathway is clear.

### Comments on Minimum Criteria

- Minimal criteria should be universal, not sector-specific, and compatible with the 1.5C no/low overshoot pathway. At the same time, need to ensure that sectoral loopholes are captured.
  - Interpretation needs more details and some general agreement on sectoral targets e.g. future date of ‘phase-outs’ for (unabated) fossil-fuel-based assets (e.g. coal both newbuild (earlier date) and generation (later date), future date for [X%] share of clean power by 2030, 2040, etc.]. Actors should demonstrate in ‘Plan’ and ‘Proceed’ phases how plans/actions shift towards these sectoral targets that are compatible with net zero
  - Ensure that criteria apply meaningfully to O&G + Coal sector without creating opportunity for continued FF extraction pathways through carve outs, offsets, etc. In other words, universal criteria but mindful to obviate sector-specific loopholes.
  - Useful to call out for explicit strategy/approach in relation to high emitting sectors (including Energy where FF use dominates) - key are energy, steel, aviation, cement, AFOLU
  - Some members were unsure if it's helpful to distinguish fossil fuels from the broader energy transition; and fossil fuel from energy companies. As we ultimately need the energy companies of today to transition to be the net-zero energy companies of tomorrow.
  - Members also cautioned that minimum criteria should stay focused on overall NZ transition and I think this needs to be sector-agnostic, almost philosophical. Or they run risk of a patchwork of sector-specific criteria that makes EPRG prone to sector level lobbying / requests for special treatment. This patchwork would risk being incoherent and potentially undermine what RTZ stands for.
- Suggested priority sectors for decarbonisation by a few WG members, in order of urgency and speed of action -

- Power
- Oil & gas
- Coal mining
- Energy-intensive industry (e.g. steel, cement, chemicals, aluminium)
- Explicit targets on non-CO2 climate forcers
  - Setting a target for each GHG in the starting line criteria may be unwieldy (methane may be an exception)- though worth seeing if can be more explicit in some of the initiatives that are part of Race to Zero (or for certain sectors)
  - Should be encouraged with some explanation in the plan phase, as these contribute to the near term warming and will need to be removed in the short term to ensure 1.5 degrees is not exceeded.

### **Emission Scope**

- Emphasise the importance of accounting for scope 3 emissions, specifically for oil and gas companies.
- Carbon Tracker's report *Hallmarks of Paris Compliance* <https://carbontracker.org/reports/absolute-impact/>. Hallmarks are that a) ambitions must be framed on an absolute basis, b) cover scope 1, 2 and 3 emissions, and c) account for activities based on a company's full equity share.

### **Specifics for energy companies**

- Transition plans for fossil fuel companies/fossil fuel sectors should be different to most others inc power / utilities companies, to reflect the *demand loss* for their products, whereas most other industries *need to decarbonise* the manufacture of their product, but demand is likely to remain/grow. Clearly companies that supply the fossil fuel industry (e.g. drilling rig manufacturers) are also exposed to demand loss too but we think that distinction works to first order.
  - This framing moves the argument on from who is *responsible* for end use emissions, and shifts focus to transition plan.
  - We've inputted heavily into SBTs, along these lines; note that SBTi has not been able to reach agreement how to address companies with oil and gas production operations, but recognises that they need to be treated differently.
- For integrated companies, targets for fossil fuel part of business should be separate from other activities (e.g. separate the emissions intensity of a company's electricity generation from its fossil products).

### **Finance**

- Increasing investment in renewables is as important as phasing out fossil fuel finance: Most net-zero studies show a need to dramatically increase renewable energy. Pathways to net zero are typically against an overall backdrop of rising energy demand and so it's probably important that fossil fuel phaseout isn't captured independent of the need to scale clean energy supply and infrastructure alongside plans for phasing out fossil fuels - this focus on what should be financed is often lost in a focus on what shouldn't be.
- One aspect to be slightly mindful of are the anti-trust / competition concerns that those in alliances with a more concentrated member set have, eg insurers, credit rating agencies. They will find it more challenging to include specific restrictions on who they provide services to, as opposed to nesting requirements more broadly around alignment of a plan/strategy with net zero.

## **2. Discussion on Coal**

### **Coal Phase Down and Out**

- IEA net zero report says no new fossil fuel investments (Net zero by 2050: A roadmap for the global energy sector, mentions the requirement that unabated coal-fired generation be cut by 70% by 2030, including the phase-out of unabated coal in advanced economies, and phased out in all other regions by 2040)  
[https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroBy2050-ARoadmapfortheGlobalEnergySector\\_CO RR.pdf](https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroBy2050-ARoadmapfortheGlobalEnergySector_CO RR.pdf)
- Looking at coal phase out and phase down - making sure that pledges and plans are in line with commitments - having some dates in mind will be sure. Need to ensure that actions are in line with the clean power objectives.
- Perhaps actors with exposure to the coal sector are encouraged/asked to set out policies/plans specifically with respect to the phasing out of coal exposure.
- On timelines, the R2Z 2050 net zero stipulation for example does cause some issues with bringing in non-state actors in emerging & developing economies who have longer dated targets - i.e. the risk that high ambition can trade-off against geographical breadth. Will need some care with the language here as we wouldn't want to inhibit activity that would involve engaging with coal assets in order to accelerate their phaseout.
- Is it sufficient to say phase out of coal? Or should we differentiate between different sectors? More clear for power, but tech of industry to replace coal is less clear. How do we deal with some of the non-energy uses? If not included in the criteria - they need to be thought through.
- Can be explicit on coal use - draw upon IPCC AR6, IEA and other international pledges (such as: No New Coal Power Plants; Glasgow Power Breakthroughs, Global Methane pledge)
- Prioritise power sector and clean energy targets
- Criteria don't talk about the non-financial side of support, i.e EPC. Many companies are investing in coal projects by supporting EPC
- Limiting/ending any form of support (such as EPC) to new coal pipeline projects.

### **Finance and taxonomy**

- Investments - have a goal on phasing out finance in coal. Finance targets need to be complemented with what we are doing under oil and gas as well.
- Having conditions for ramping down coal while ramping up RE - conditions that we could draw upon for coal investments
- Criteria should mention no investments in coal EPCs as well
- Starting to see some developing banks buy coal assets to phase them out early (could be considered/captured when looking at finance criteria).
- OECD has come up with some exceptions for coal fired plants (backed with some form of carbon removal). Some financiers are looking at coal with CCUS (<https://www.oecd.org/newsroom/agreement-reached-at-oecd-to-end-export-credit-support-for-unabated-coal-fired-power-plants.htm>). But tech and emission reductions need to be proven and method robust.
- Green, amber, and red in EU taxonomy – Taxonomy is likely to label coal as red (power and mining) - could have significant implications for investments. Some discussions around creating a yellow category in the EU taxonomy. But R2Z may not need to touch on this. Gas and nuclear are still being discussed as a transition fuel and may remain green - problematic. Qualifies that solid fossil fuels can't be clean.

### **Subnational actors**

- What are the specific implications for subnational govts? Whether that needs to be included in the criteria? - insufficiently explored

### 3. Oil and Gas

#### Oil and Gas Phase down

- Team emphasised need to focus on 1.5 degree objective.
- Leadership criteria: should be explicit on nearer-term plans (i.e. 2030)
- Need to pledge to reach net zero, and have a defined pathway for how companies will get there – i.e. a pathway for absolute emissions from oil and gas consistent with a credible/recognised scenario
- As in coal, may be helpful to set an expectation for those actors with oil & gas exposure to set out specific policies in relation to how they will manage that exposure. The slight difference is an expectation that oil & gas will be more longed lived in the energy mix but also in its non-energy uses which might make us more cautious about wanting R2Z to stipulate a timeframe around a phasing out.
- At minimum - companies should link emissions cuts to production cuts (i.e in line with carbon budget), rather than focus on emissions intensity, companies should publish breakeven prices (so investors know which projects shouldn't proceed)
- O&G should be responsible for Scope 3 emissions and across chain (i.e. pre-production venting, flaring, combustion) - very few players looking at these currently
- Is there a way to encourage other sectors to engage with their exposure to O&G?
- For oil and gas production companies:
  - Targets need to be *credible* – i.e. based around production cuts, rather than just reliant on as-yet-unproven CCUS technologies, or the widespread purchase of offsets etc (this is an area we are developing in this year's iteration)
  - Carbon Tracker employs its “least cost” methodology to identify capex that falls outside a given scenario. (which is then a strategy-agnostic measure of transition, rather than considering % of overall annual capex on fossil vs non-fossil; e.g. a company in wind-down will have 100% capex on fossil, even if it as actually aligned, whereas a company which is investing in renewables will see fossil % of overall capex decline even if it sanctioning projects that are not aligned). Carbon tracker is happy to share more on our capex alignment work, which is what appears in the CA100+ report out analysing O&G capex plans
  - One recommendation to see work on remuneration incentives, and how these must be consistent with overall strategy which itself is “net zero” aligned. The Carbon Tracker report <https://carbontracker.org/reports/groundhog-pay-how-executive-incentives-trap-companies-in-a-loop-of-fossil-growth/> finds that O&G CEOs are incentivised through their pay to maximise production volumes. This produces bad climate outcomes and should ideally be addressed in transition plans

#### Finance

- Many WG members recommended the need to end finance in new oil and gas infrastructure.
- Though, a few pointed out that the wording/criteria shouldn't be such that it inadvertently inhibits activity that would see actors accelerating the transition from oil & gas activity or indeed reducing its carbon intensity via a perceived boycott of engagement with the sector

#### Standardise metrics

- Would be helpful to understand the differences between current standards/metrics/evaluations (i.e. SBTi); as a baseline for WG to evaluate. Group discussed that there aren't currently good standards to benchmark against
- Standardise common metrics across initiatives/around common goals (i.e. align with investment community e.g. Climate Action 100)

### Disclosures and monitoring

- On scope 3 emissions for O&G, need for “best practice” on methodologies to estimate petroleum industry value chain GHG. Current best practices set by industry advocacy groups themselves lack consistency and detail beyond stating that scope 3 “involves an increased level of complexity, assumptions, and uncertainty, and should therefore be considered carefully.” (API template guidance for GHG reporting for O&G firms, which barely mentions scope 3: <https://www.api.org/-/media/Files/Policy/ESG/GHG/APITemplate10forGHGReportingGuidance.pdf>)
- One missing piece among many that can be tackled here is explicitly requiring that scope 3 includes not just emissions related to the firm's own upstream production but also any energy traded by the firm.
- TPI published guidelines on estimating scope 3 for O&G firms, applying standard IPCC fuel-specific emissions factors. (Note that IIGCC does not describe a precise method for estimating scope 3 for O&G but includes clear guidance on scope 3 reduction.)
- All companies should be required to disclose emissions, so can aggregate and compare to implied budget under a trajectory to meet climate objective (close to 2 degrees or 1.5 degrees) (TPI Carbon Performance assessment for O&G: <https://www.transitionpathwayinitiative.org/publications/96.pdf?type=Publication> IIGCC NZ standard for oil and gas: <https://www.iigcc.org/download/iigcc-net-zero-standard-for-oil-and-gas/?wpdmdl=4866&refresh=62263fa8b58571646673832> )
- On disclosures, O&G should disclose embedded carbon in resources/reserves (Carbon Tracker Initiative paper on this - <https://carbontracker.org/reports/carbon-trackers-letter-to-financial-accounting-standards-board-fasb-april-2013/>)
- Should provide guidance on carbon budgets and specific information we need to see i.e. decarbonization objective by 2030, demonstrated understanding of transition
- On Gas - massive rise in the precision by which we can track non-CO2 emissions in the supply chain.
- More on disclosures, methane monitoring captured in the inputs on starting line criteria and interpretation guide
- For transparency, emissions targets Oil and gas activities should be separate from other activities, e.g. electricity generation

### 4. Non-CO2 Gases

- Ensure there is coherence between pledge and plan for both CO2 and non-CO2 gases
- Specify action to phase out non-CO2 gases (other than methane) with both 2030 and 2050 targets
- If we think methane is the key other ‘forcer’ then being a) specific that the NZ commitments relate to GHG overall and b) an expectation of specific actions in relation to high methane emitting activities. Include “and 30% global reduction in methane gases by 2030.” (More on methane covered in Oil and gas section)
- WG emphasised the importance of setting targets for all GHG gases, perhaps not in the starting line criteria but in interpretation guide. This should be encouraged with some explanation in the plan phase, as these contribute to the near term warming and will need to be removed in the short term to ensure 1.5 degrees is not exceeded.
  - Setting a, explicit target for each GHG in starting line criteria may be unwieldy (methane may be an exception)- though worth seeing if can be more explicit in some of the initiatives that are part of Race to Zero (or for certain sectors)
- For non-CO2: Cumulative emissions and MRV are important.
- For non-CO2 monitoring, WG discussed the need for better tracking, better establishment of baseline (i.e. leaks). Satellite based data could be a game changer.
- There is a need to consider the GWP potential used to assess methane, as this is often underestimated. RTZ should consider providing explicit guidelines on this

