



Beyond the GST: aligning global goals and national commitments

Workshop summary



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Colophon

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1. Introduction

1.1 Beyond the GST: aligning global goals and national commitments

This report offers a comprehensive summary of the II International ELEVATE Co-Creation Workshop – **Beyond the GST: aligning global goals and national commitments**, which was held online on the 22nd of February 2024. The event brought together more than 85 people at the forefront of climate research, action and political leadership in 30 countries.

The goal of the event was to provide an opportunity for a two-way knowledge exchange between project researchers and key stakeholders on the themes emerging from the recent Global Stocktake (hereinafter – GST) at COP28 and the path ahead to raise climate ambition. ELEVATE partners shared cutting-edge research insights with practitioners and decision-makers, who in turn were invited to provide the feedback necessary to align the key academic objectives of the project to concrete policy needs.

This iterative process of knowledge co-creation aims at facilitating the development of a new generation of net-zero pathways, whilst striving to address the implementation gap and working towards a just global transition. The event was the second of a series of international workshops organised by the ELEVATE project.





1.1 Overview of the workshop

The workshop commenced with an overview of the key workshop topics introduced by **Detlef van Vuuren** (PBL), the leading researcher of the ELEVATE project. Following the introduction, **Gintarė Zinkevičiūtė** (CS), invited participants to join the interactive sessions, delving deeper into the presented topics.

“**Raising ambition through sectoral action**” focused on the analysis of targeted sectoral measures, their potential to support the implementation of climate targets and the key constraints in replicating them. The activities around this theme were led by researchers **Elena Hooijschuur** (PBL) and **Leo Nascimento** (New Climate).

“**Navigating Just Transitions in the next round of NDCs: unravel the different dimensions, forms and metrics of justice**” aimed at investigating diverse perspectives to calculate fair emission allocations across different geographical regions and understanding the implications for the level of political ambition. **Setu Pelz** and **Elina Brutschin** (IIASA) led the sessions focusing on this topic. Additionally, **Mark Dekker** (PBL) and **Setu Pelz** (IIASA) introduced new ELEVATE tools – [Carbon Budget Explorer](#), and [Interactive Carbon Debt Explorer](#).

Furthermore, the event featured two panel discussions chaired by **Detlef Van Vuuren** and aimed at grounding the research topics into concrete national realities. During the first discussion, stakeholders from ELEVATE partner countries exchanged reflections on the challenges and the opportunities at the core of the efforts to align global targets and national commitments. **Jiang Kejun** (Energy Research Institute, China), **Ritu Mathur** (TERI, India), **Maciej Bukowski** (BJK, Poland) and **Maria Aljishi** (Ministry of Energy, Saudi Arabia) participated in the discussion.

In the afternoon panel discussion, stakeholders shared their views on **the concrete meaning of transitioning away from fossil fuels during this critical decade**. The session included interventions from Lara Aleluia Da Silva Reis (ELEVATE researcher at the European Institute of Economics and the Environment), **Roberto Schaeffer** (Federal University of Rio de Janeiro, Brazil), **Lauritta Boniface** (youth negotiator, Nigeria), **Ryna Yiyun Cui** (University of Maryland, USA), **Jacob Werksman** and **Alban Kitous** (European Commission).

The full workshop agenda and speakers' slides are available on the [ELEVATE website](#).

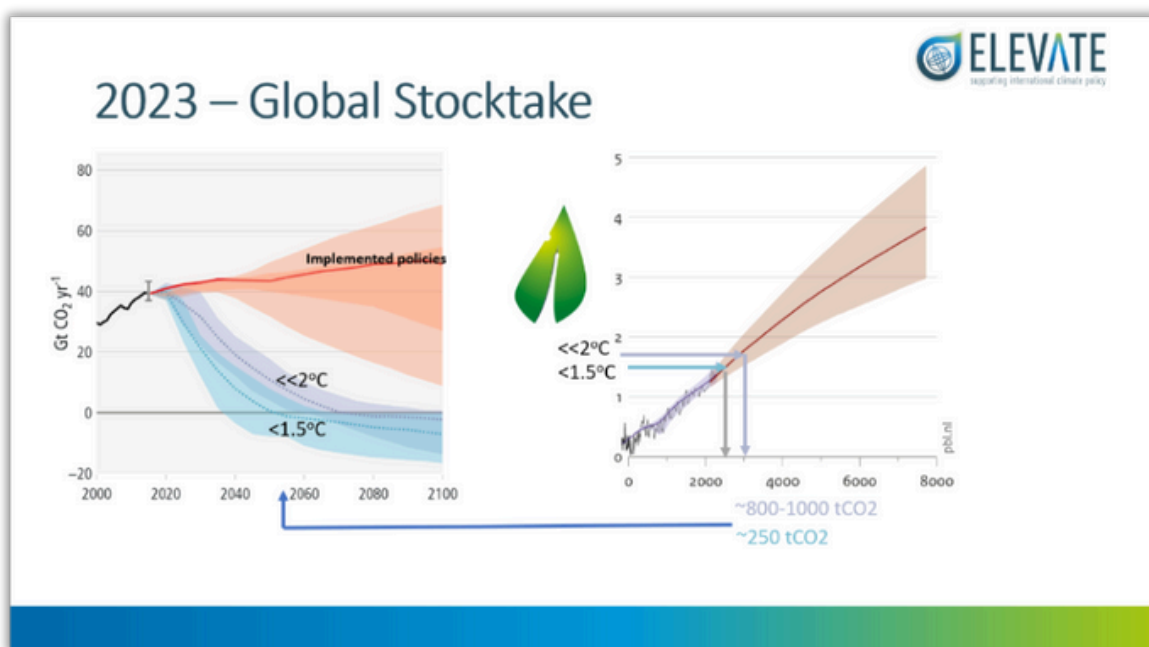


2. Introduction

2.1 The critical decade: how can we keep 1.5 alive?

Detlef van Vuuren (PBL), kicked off the workshop by presenting the key insights from the ongoing research to address the decisive question on how can we keep 1.5 alive in this critical decade. The ELEVATE project brings together global and national modelling teams and climate policy experts to analyse the current state of global climate ambition, outline the path forward and connect this body of research with the policy community responsible for the implementation of climate pledges.

Integrated Assessment Models provide a roadmap to net zero, offering plausible global and regional emissions pathways and mitigation options crucial for achieving Paris Agreement goals. It's evident that there is a significant gap between implemented policies and the targets that are in place (Picture X). At the current implementation pace, the planet is expected to warm between 2.2°C and 3.5°C above pre-industrial levels as indicated by the Intergovernmental Panel on Climate Change (hereafter – IPCC). The outcome of the GST confirmed that climate action in this decade will be critical to determining our chance to achieve the goals of the Paris Agreement. Bringing down the emissions is imperative. The good news is that there is a pathway to go well below 2°C if countries deliver their promises on net-zero targets.



Picture 1. Snippet from the presentation illustrating the gap between currently implemented policies and the projected pathways needed to achieve net zero.



To tackle this challenge, ELEVATE equips policymakers with robust scientific tools to support the production of more ambitious policies, overcome implementation barriers, promote international collaboration and ensure a transition grounded in fairness and justice.

Further reading: How far countries have come on their way to net-zero and how different formulations of net-zero targets can influence whether they will be reached sooner or later. Read the latest insights in the ELEVATE Annual Net-Zero Report 2023 ([here](#)).

2.2 Reflections from National Stakeholders: aligning global goals and national commitments

To facilitate mutual learning and best practice exchange, ELEVATE invited speakers from partner countries to reflect on the current developments in their countries. In the first panel, experts from China, India, Poland and Saudi Arabia shared that their countries are showing robust commitments to scale up ambition in the next round of Nationally Determined Contributions (NDCs). Increasing investments in clean energy such as solar and hydrogen shed a promising light on new potential for international cooperation. However, there is still an urgent need to build additional capacity to face country-specific barriers.

China has exponentially increased its solar power production, but national researchers are aware of the need to increase international cooperation to achieve long and short-term climate goals. A similar situation is seen in India, still heavily relying on coal despite increasing investments in renewable energy. Furthermore, high storage costs and difficulties in grid integration could further complicate the efforts to scale up the energy transition in these countries. In Poland, the implementation challenge is well-represented by the lack of a clear national pathway towards a green transition. Moreover, to avoid increasing the implementation gap, especially for developing countries such as Saudi Arabia, it will be important to keep the outcome of past climate commitments in mind during the next round of NDCs.

A recurring theme emerging from the discussion was the necessity to strengthen the flexibility of climate targets to make them compatible with other pressing needs of national communities. Climate policies should promote all-society development rather than competing





priorities. For instance, in Poland and India alike a key requirement for a just transition will be to continue ensuring low-cost access to energy for all. Despite the currently high costs of production, green hydrogen appears a promising venture for the future, as countries including China, India and Saudi Arabia are increasingly investing in this energy source which is anticipated to become a key resource in the decarbonisation of the world economy.

Panellist further discussed how the involvement of the private sector and investment in carbon capture and removal technologies could be crucial factors to speed up the transition. Sharing best practices for sector-specific decarbonisation and continuing to build effective multilateral cooperation within and beyond COPs emerged as key aspects to ensure no countries are left behind in this decisive time for climate action.

Key Takeaways on the Climate Policy Database:

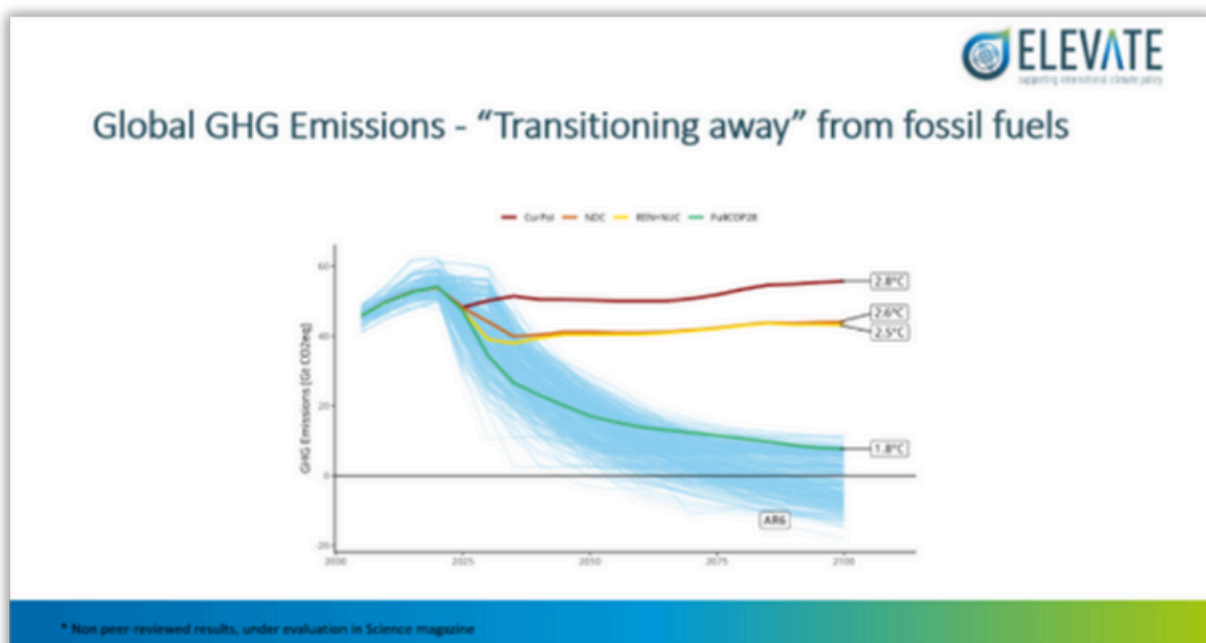
- Despite concrete efforts to increase ambition at the national level, countries require the capacity to address country-specific barriers in the implementation of climate targets;
- Increase investments in clean energy, such as hydrogen and solar, can constitute an opportunity to enhance international sectoral collaboration and accelerate the transition;
- Climate policies should account for country-specific challenges and leveraging the synergies with other measures promoting national development.



2.3 Panel discussion: What does “transitioning away from fossil fuels” mean in this critical decade?

In the following panel discussion, experts from Brazil, The United States, Nigeria and the European Commission shared their insights on national priorities and reflected on the key outcomes of the COP28. The UAE consensus is considered a landmark agreement as it is the first agreement that acknowledges the need to “transition away” from fossil fuels to avoid the most disastrous consequences of climate change.

As pointed out by ELEVATE researcher **Lara Aleluia da Silva Reis**, this event signed a much-needed alignment of international negotiations with climate science. However, behind the text lies the complex work of uncovering the concrete means to operationalise ambitious climate pledges. To investigate this, researchers analysed two scenarios: one encompassing renewables, energy efficiency, and nuclear agreement and another incorporating the additional commitment to transition away from fossil fuels. They found that to be sufficient for meaningful climate impact the agreements on low-carbon technology need to be accompanied by a constant decline in fossil fuel usage. “In order to fully heal ourselves, we need to stop consuming fossil fuels” – concluded Lara, drawing on an analogy of healing by quitting smoking. Additionally, non-CO₂ emissions mitigation and negative emissions were discussed as important targets for future COPs in order to avoid overshooting 1.5°C in the near term.



Picture 2. Snippet from the presentation displaying initial findings of the COP28’s fossil fuel statement analysis.



Panellists from ELEVATE partner countries shared their views on the importance of initiating a wider societal transformation, and, especially in developing countries, aligning the next round of NDCs with national long-term strategies. The synergy between local climate policies, even at the subnational level, and international targets has the potential to create a positive feedback loop and stimulate climate ambition at multiple governance levels.

Some countries face unique challenges in transitioning away from fossil fuels depending on their particular context. In Brazil, one-third of the country's emissions are non-CO₂, 90% of the power sector is sourced from renewables and the use of biofuel is widespread. The main efforts towards decarbonisation, thus, are directed towards contrasting illegal deforestation, which can be interpreted as a matter of domestic enforcement rather than technological or political capabilities. For Brazil, achieving net zero is likely to be dependent on the country's ability to manage effective inter-sectoral negotiations and produce negative carbon emissions to mitigate non-CO₂ greenhouse gases.

The importance of investments in mitigation technologies and on parallel ambition-raising processes from NDCs was also a key point raised within the EU context. As an additional factor, it was pointed out that in 2022 the EU spent the equivalent of 4.2% of its GDP on imported fossil fuels. Reducing this number would result in significant resources being redistributed towards green energy investments.

In Nigeria, a federal republic, the widening gap between national policies and state-level implementation is a pressuring issue. Energy poverty is still a reality even in locations where targeted measures have already been rolled out, showing the need to improve context-specific policy assessments.

Stimulating ambition at different levels of climate governance and allowing for the flexible integration of multiple climate initiatives has great potential for longer-term climate goals. In the US, this translates into an "all-society approach": recognising that policy innovation often happens at the state level first, federal resolutions leave space for sub-national initiatives. This strategy aims at fostering the conditions to enhance collective ambition and increasing the pace of the country's economic transformation.

A common aspect emerging from the discussion was the production and distribution of climate knowledge. In the case of Nigeria, limited awareness of the concept of just transition and energy





security among young people and rural communities poses a challenge for more participatory policies: rolling out educational programmes could play a crucial role in closing this disparity and increasing societal engagement. Furthermore, panellists emphasised that bringing more evidence-based insights into the negotiation rooms will be key to driving effective results and could further support parties in accounting for specific national circumstances and unique challenges.

Key Takeaways on the Climate Policy Database:

- Stimulating ambition at multiple governance levels and across different sectors can be a winning strategy to cascade national action whilst accounting for local contexts;
- Countries could benefit from sharing best practices around non-Co2 mitigation and technologies aimed at achieving negative Co2 emissions – these processes will be essential to achieve the goals of the Paris Agreement;
- It is crucial to build political capacity in areas such as Just Transition and energy security, and strengthen civil society's participation in decision making.

2.4 Raising ambition through sectoral action

2.4.1 Topic Introduction and Research Findings

Despite its reliance on the ambition-raising mechanism based on Pledge and Review procedures, the Paris Agreement cannot guarantee full accountability for the development and implementation of NDCs. To support the acceleration of climate action, ELEVATE researchers analysed sector-specific measures which might be most effective to raise ambition without widening the implementation gap. The analysis included three main steps – first, researchers identified good practice sectoral measures in different sectors. Second, they mapped the effect of these measures on sectoral indicators. Finally, the potential impact of replicating good practice sectoral measures in other parts of the world was quantified. It is important to note that the countries have different contexts and good practice may vary across them. Furthermore, the assumption that measures can be replicated elsewhere does not account for implementation constraints. These limitations are being addressed in the ELEVATE project.



Goals of the interactive session:

- Complete a “reality check” in relation to the rolling out of the sectoral measures in different countries.

Key questions:



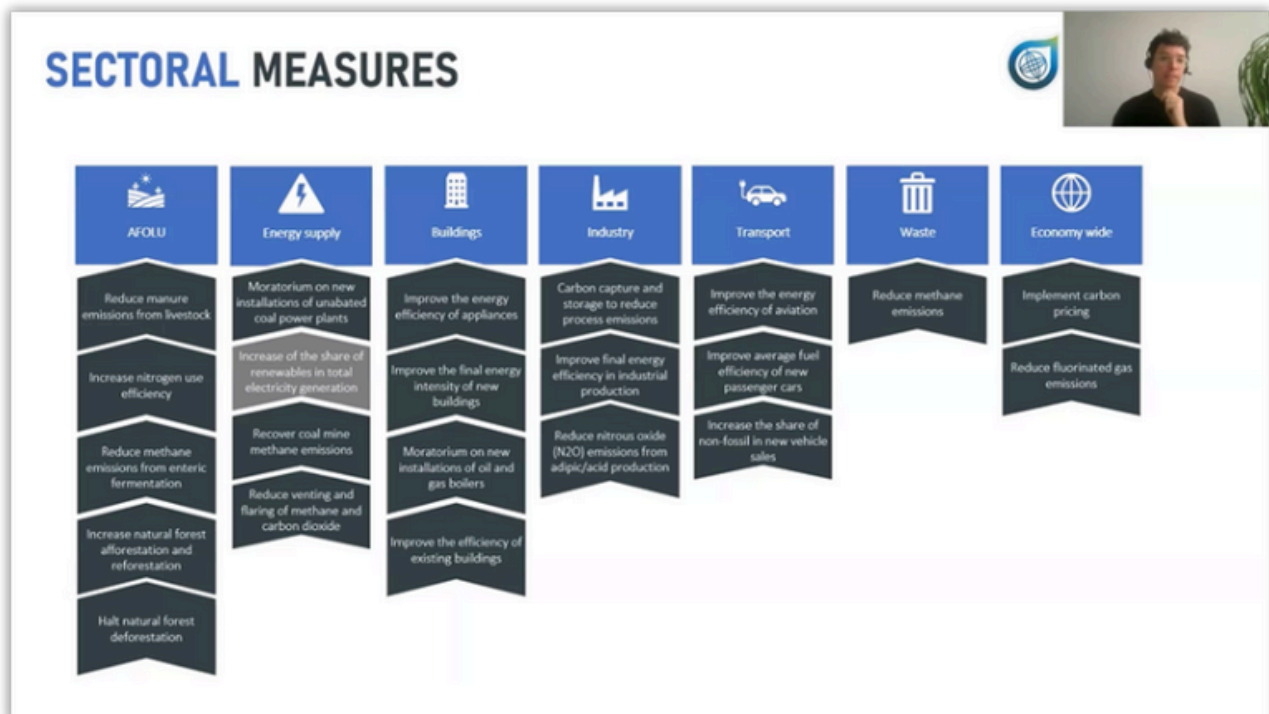
What is the political relevance of the identified sectoral measures within your country?



Which of the identified implementation constraints apply to your country? Are there additional barriers that could challenge the assumption of replicability of these measures?



Are there any additional considerations that these models should address?



Picture 3. Snippet from the presentation including the overview of the discussed sectoral measures.



Attendees discussed the need for new spaces for international dialogues. These dialogues could help decision makers to better understand which countries are (or are not) actively contributing to achieving net-zero. Attendees noted that this was unlikely to occur in the UNFCCC.

2.4.2 Key outcomes and stakeholder insights

Participants shared that the sectoral measures identified by researchers received different degrees of political attention in different countries. Stakeholders from Brazil reported that almost all measures are not yet at the centre of the political discourse, partially because of heavy lobbying activities and vetted interests. A participant from France reported that all measures received attention in the country, but not always positively.

Continued dependency on fossil fuels for energy production or country development is a key barrier across most countries. In addition to this, the polarisation of the public discourse around climate policy, including limited public acceptability of specific measures, or the perception that mitigation initiatives are not broadly aligned with other societal needs, are a key concern even for countries that do not heavily rely on fossil fuels. Moreover, farmers' protests in the EU were mentioned as a recent example of this tendency in relation to Agriculture and Land Use policies.

Stakeholders noted that not all selected constraints applied to their own country – for instance, countries like the Netherlands and Saudi Arabia do not have coal mines. Participants from Brazil, India and Palestine, shared that, when applicable in their countries, most measures were dependent on receiving financial and technical support. Further barriers included limited state capacity to enforce these measures, or the absence of a democratic system that could promote citizens' inclusion in decision-making. Limited grid capacity and existing vulnerability to climate change impacts were mentioned as additional implementation challenges which do not figure in the barriers identified by researchers so far. Furthermore, participants noticed that the proposed measures were exclusively supply-driven, whilst including a demand-side perspective could significantly enrich the analysis. The chemical and infrastructure sectors were cited as areas that could be worthy of inclusion for further investigation. Additionally, participants expressed that it would be beneficial to also look into hard-to-quantify measures, as they could become a reliable source of information in support of international negotiations. Some participants noted that the measures were a little too specific and expressed in very technical





terms, which might prevent these measures from being discussed in national political agendas. Overall, stakeholders found the sectoral approach useful to identify low and high hanging fruits and to help visualising the ways in which individual countries could contribute towards global goals.

ELEVATE researchers will continue to leverage stakeholders' insights to improve the current list. This analysis will feed into the global and national emission pathways development exploring the outcome occurring if countries were to implement sectoral measures similar to the "best performing" countries within a given regional group.

Key Takeaways on Net-Zero Feasibility Constraints:

- The sectoral approach helps to identify low and high hanging fruits, providing insights on how countries could contribute towards global climate goals through specific interventions.
- Countries face external (i.e. lack of financial flows and limited technology transfer opportunities) as well as internal implementation constraints (i.e lack of governance structure to support long-term climate policies or polarisation of public opinion around climate policies);
- Additional constraints highlighted by stakeholders include polarisation of the public discourse around climate policy, including limited public acceptability of specific measures, or the perception that mitigation initiatives are misaligned with other societal needs.
- Further analysis could include a demand-side perspective and additional areas, such as chemical and infrastructure sectors.

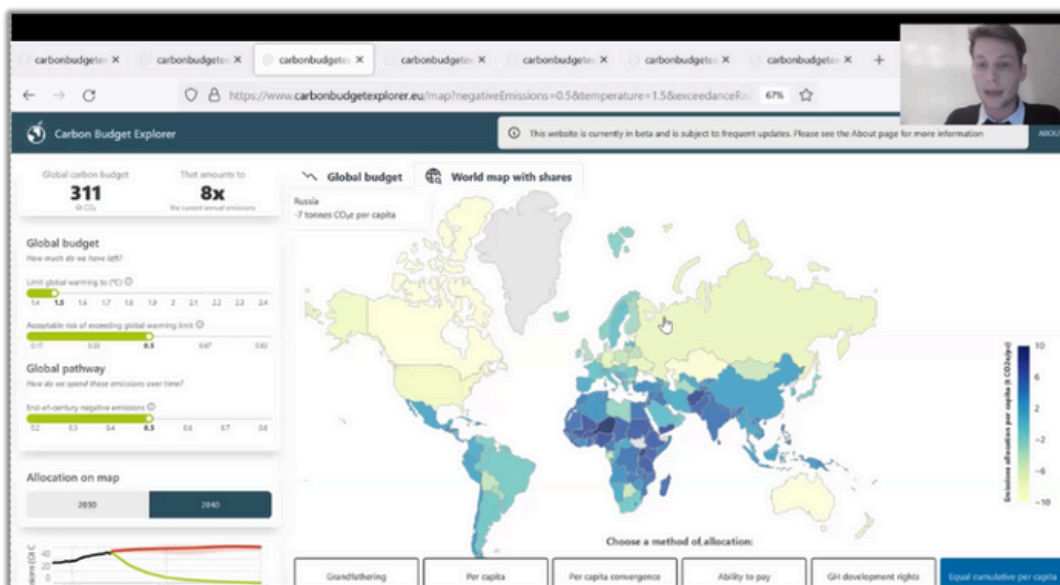


2.5 Navigating Just Transitions in the next round of NDCs: unraveling the different dimensions, forms and metrics of justice

2.5.1 Topic Introduction and Research Findings

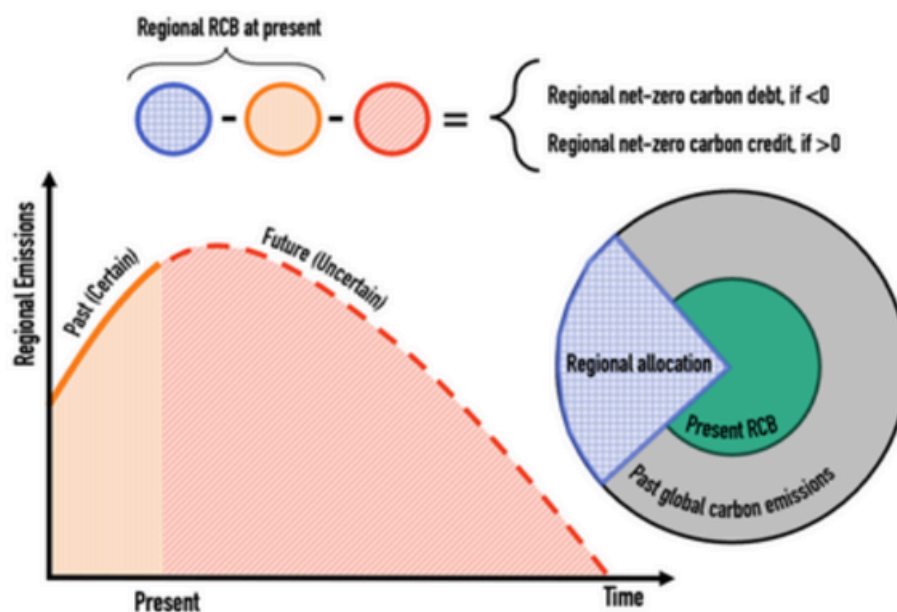
Climate justice is a wide area of inquiry concerned with the inequitable impact of climate change on different people and places, as well as the responsibilities associated with this. It can be interpreted at different scales and through different dimensions, metrics and patterns. ELEVATE scientists focus on understanding ways in which principles of justice and fairness can be quantified and made an integral part of climate resolutions. Their approach is grounded in an inter/ intragenerational perspective on distributive and corrective justice, looking at the ways in which responsibilities and limited resources can be distributed fairly in the future, and past wrong-doings adequately addressed. As such, their focus areas include the analysis of emission pathways and considerations on the fair allocation of future emissions. To operationalise these insights, the ELEVATE team created new tools for international and national policymakers as well as other stakeholders in inclusive decision-making that were showcased in the workshop.

Carbon Budget Explorer allows navigating through the implications of different views on fairness, and informs decisionmakers about the consequences of one's view on fairness and the requirements of climate targets. The calculations in this tool act as a 'mirror' to reflect on how the ambition gap can be closed and evaluate NDCs in light of fairness. Try out this tool here: <https://www.carbonbudgetexplorer.eu/>



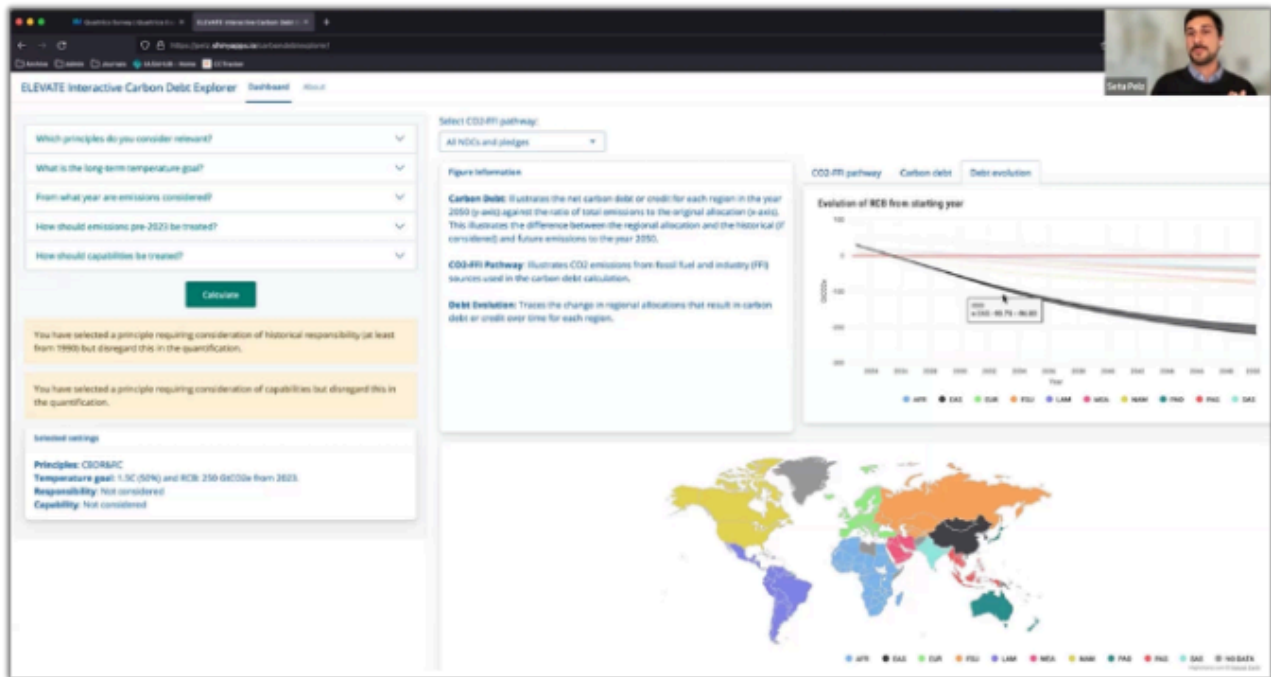
Picture 4. Demonstration of the Carbon Budget Explorer.

Furthermore, researchers introduced to the audience the concept of Carbon Debt. Net-zero carbon debt is a measure that contrasts 'fair' allocations with expected emissions trends and allows one to define exceedance and drawdown responsibilities. Researchers explained that carbon debt is being generated in an unequal manner, and will continue to accrue, worsening the likelihood and magnitude of 1.5°C exceedance. Continued CO₂ emissions will cause unequal tangible climate impacts over time, irrespective of 'fair' claims and will increase burdens to future generations in all regions. Responsibility for this exceedance and associated additional burden and damage may be argued proportional to carbon debt.



Picture 5. Visual representation of Net Zero Carbon Debt.

The presentation was followed by the demonstration of the ELEVATE Interactive Carbon Debt Explorer allowing users to explore various scenarios grounded in an individual's principled assessment of regional 'fair' shares and visualise the results across 10 aggregated macro-regions. Try out this tool here: <https://pelz.shinyapps.io/carbondetexplorer/>



Picture 6. Demonstration of the ELEVATE Interactive Carbon Debt Explorer.

Goals of the interactive session:

1. Understand whether learning about the concept of carbon debt affects stakeholders' opinions about the current regional ambition in NDCs.
2. Gather feedback on the concrete utility of such tools for the work of practitioners, negotiators and policymakers.

Methodology:



Participants were invited to fill out a survey on the perceived level of ambition of NDC pathways in the 10 regions



Participants were subsequently given some time to explore the interactive tool in small groups.



Afterwards, researchers asked participants to fill out the survey again.



2.5.2 Key outcomes and stakeholder insights

After analysing the results of the two surveys (prior to and after discussing the concept of carbon debt), researchers concluded that awareness of the concept of carbon debt appeared to have influenced opinions on the level of NDCs' ambition, with perceptions trends shifting in different ways for different regional contexts. Researchers clarified that the activity was not to be intended as a scientific data-gathering exercise, but rather as a preliminary exploration of the usage of the tool, its role in informing the design of scenarios and as an incentive for further discussions.

Participants found the exercise useful to reflect on the different assumptions influencing the establishment of “fair” emission allocations. One researcher stated that the tool was helpful to realise that, regardless of the different ethical principles chosen to drive these assumptions, the tool showed some countries having a consistently larger carbon debt, highlighting their “clear” obligations towards low-emitting and more vulnerable countries.

On the whole, participants had different opinions on the way the knowledge created by the tool could be employed in practice. An EU negotiator reported that the use of the tool might lead to “polarising discussions” that could result counter-productive in the negotiation rooms. Rather than allowing parties to blame each other over the principles behind emission allocations, it might be useful to practice a narrative and find the tools to manage these discussions, whilst still pushing for the 25 greatest emitters to step up their ambition and support more vulnerable countries. Another negotiator mentioned that the tool would benefit from showing clearer connections between the principles employed in the model and specific passages in the Paris Agreement or other international climate agreements.

Some participants pointed out that equity and justice are far-reaching areas beyond the emissions space. Even if retaining the focus on mitigation, the tool could be enriched with the inclusion of other justice perspectives, including adaptation and loss and damage.

Finally, gathered feedback shows that the tool contributes to a better understanding of the carbon debt concept. Stakeholders noted that the tool could be utilised for the negotiation process and contribute to raising the ambition of the NDCs. Nonetheless, translating the complex scientific language could further improve the tool and make it more relevant and accessible for stakeholders.





Key Takeaways

- The concept of carbon debt prompted a collective reflection on the perceptions of the adequacy of the level of climate ambition in different geographical regions;
- Preliminary results suggest that exploring the different criteria used to calculate fair emission allocations, and the visualisation of resulting scenarios, might be useful tools to strengthen the inclusion of justice considerations in mitigation targets;
- Justice is a multi-faceted and complex dimension: beyond emissions, it is important to account for other aspects, such as adaptation challenges and loss & damage.





3. The Global Forum to ELEVATE climate ambitions and co-creation workshops

A series of six international and eight national co-creation workshops will be organised throughout the ELEVATE project to engage national and international stakeholders in co-designing a new generation of net-zero pathways. The exchange of cutting-edge research and insights from practitioners is instrumental in upholding credibility, legitimacy, and efficacy in advancing climate action.

Key topics of the co-creation workshops include:

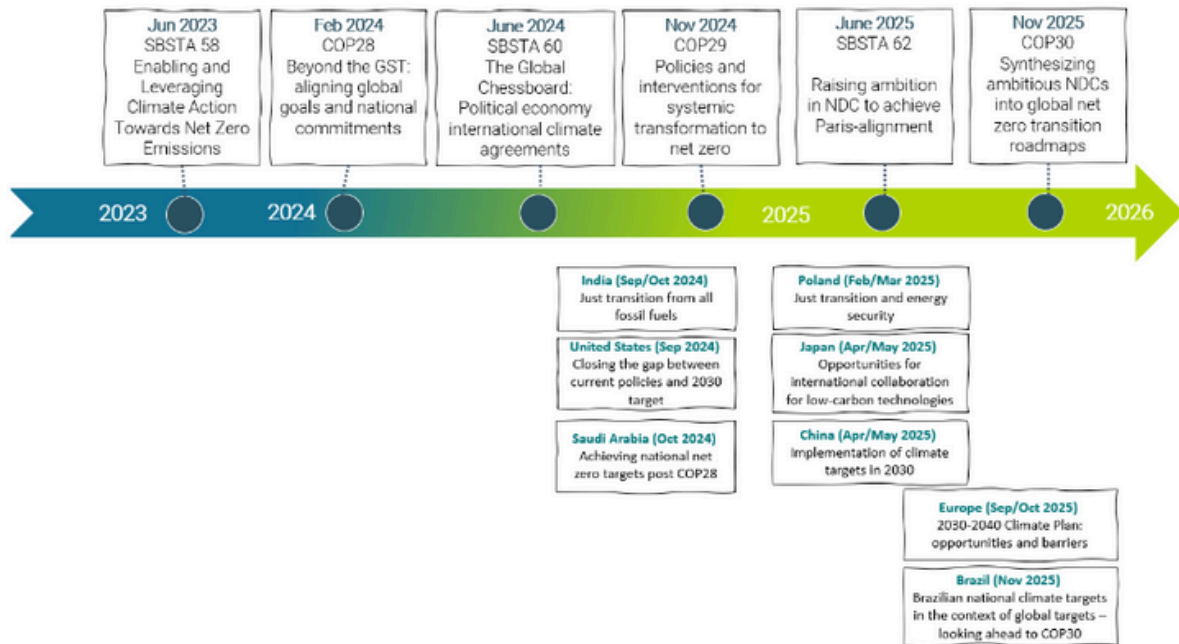
- Transformational national and global policies and mid-century strategies;
- Technological innovation and behavioural levers to accelerate sectoral action;
- Options to increase the effectiveness of international climate governance and policy;
- Strengthening representation of justice in climate mitigation pathways.

These workshops are conducted adjacent to the annual Conference of Parties (hereafter – COP) and Subsidiary Body for Scientific and Technological Advice (hereafter – SBSTA). Hosting workshops in tandem with UNFCCC meetings allows experts to engage with policymakers during critical decision-making windows. This enables ELEVATE to introduce the latest project findings into UNFCCC processes.

Furthermore, the ELEVATE project established the Global Forum to Elevate Climate Ambitions, calling on international thought leaders to shape a new generation of net-zero pathways. The Forum enables international cooperation and mutual learning between policymakers, advocates from civil society, industry actors, and world-leading researchers.

For further details, please refer to the Terms of Reference ([here](#)).





Picture 7. Overview of the ELEVATE co-creation workshop series.





About us

ELEVATE aims to develop new scientific insights to support the preparations of Nationally Determined Contributions (NDCs) and national climate policies focused on achieving net-zero emissions in line with the Paris Agreement. The project is developed by a transdisciplinary consortium of national and international climate research teams interacting actively with policymakers and other stakeholders in climate policy and the Sustainable Development Goals (SDGs).

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