



ELEVATE, ENGAGE, and COMMITTED

at the Climate Conference in Bonn



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1. Introduction

1.1 ELEVATE, ENGAGE and COMMITTED at Climate Conference in Bonn

The international co-creation workshop held in Bonn brought together experts from across the world to exchange ideas for the development of a new generation of net-zero pathways. Stakeholders were invited to shape the ongoing research, building on the latest findings from cutting-edge Horizon Europe projects – **ELEVATE, ENGAGE and COMMITTED** (see About Us section).

The workshop featured valuable insights from distinguished participants, including leaders from national delegations (Brazil, Germany, Netherlands, Bhutan and Vanuatu, among others), representatives from international organisations (UNFCCC, OECD, Independent Global Stocktake), civil society constituency groups (RINGO, YOUNGO), and well-known researchers. Stakeholders were encouraged to maintain their engagement by participating the Global Forum to ELEVATE climate ambitions.

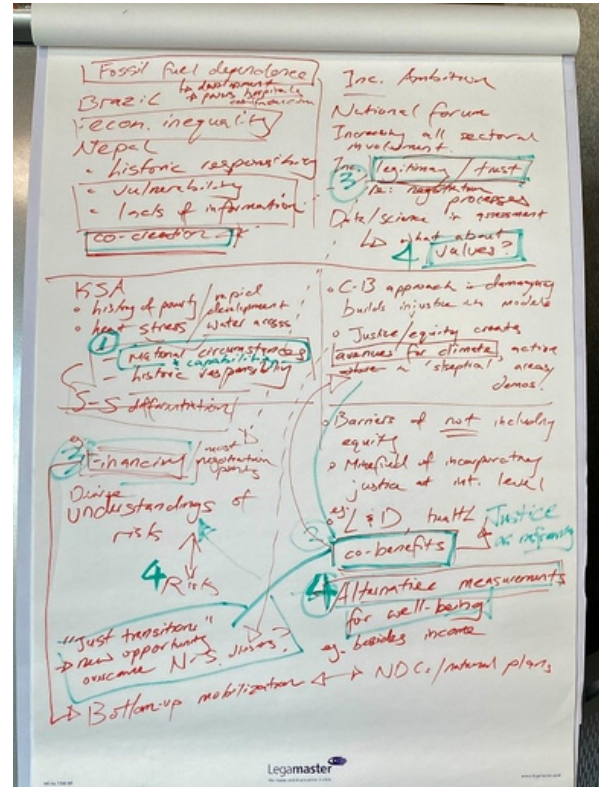


Overview of the Workshop

In the first session, **Takeshi Kuramochi (New Climate)** presented an up-to-date assessment of NDCs, national policies and transformative policy packages. The presentation was followed by reflections from **Casey Cronin (Climate Works, iGST)** and **Tulio Andrade (Ministry of Foreign Affairs of Brazil)**. Researchers invited participants to share feedback on the Climate Policy Database and reflect on how climate policies might drive transformative change.



In the next session, participants joined interactive break-out room sessions. In the first break-out room — facilitated by **Julie-Anne Hogbin (Climate Strategies)** — participants explored how justice, fairness and equity could support ambitious climate action. **Elina Brutschin (IIASA)** and **Sean Jiaming Low (Aarhus)** provided scientific research and insights. In another break-out room — facilitated by **Gintarė Zinkevičiūtė (Climate Strategies)** — stakeholders focused on policy decisions underlying net-zero targets and strategies for increasing the ambition towards global net-zero pathways. **Detlef Van Vuuren (PBL)** chaired the session and shared background on net-zero targets. Both groups reconvened in the plenary session to share key takeaways.



The final session, led by **Christoph Bertram (University of Maryland)**, explored the impact of feasibility constraints on global net-zero scenarios, offering insights from the ENGAGE project's latest research. **Rūta Bubnienė (UNFCCC)** and **Oliver Geden (German Institute for International and Security Affairs)** provided their reflections on the topic, followed by an open discussion with other stakeholders. The workshop concluded with remarks from **Detlef Van Vuuren (PBL)**, summarizing the workshop's key takeaways and extending an invitation to stakeholders to stay actively engaged in forthcoming workshops.

This workshop was the first in a series of co-creation workshops planned by the ELEVATE project to strengthen interaction between scientists and policymakers. Discover the full workshop agenda by [clicking here](#).



1.2 The Global Forum to ELEVATE climate ambitions

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

The Forum enables international cooperation and mutual learning between policymakers, advocates from civil society, industry actors, and world-leading researchers. The exchange of cutting-edge research and insights from practitioners is instrumental in upholding credibility, legitimacy, and efficacy in advancing climate action.

Key topics for The Forum include:

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-  Transformational national and global policies and mid-century strategies

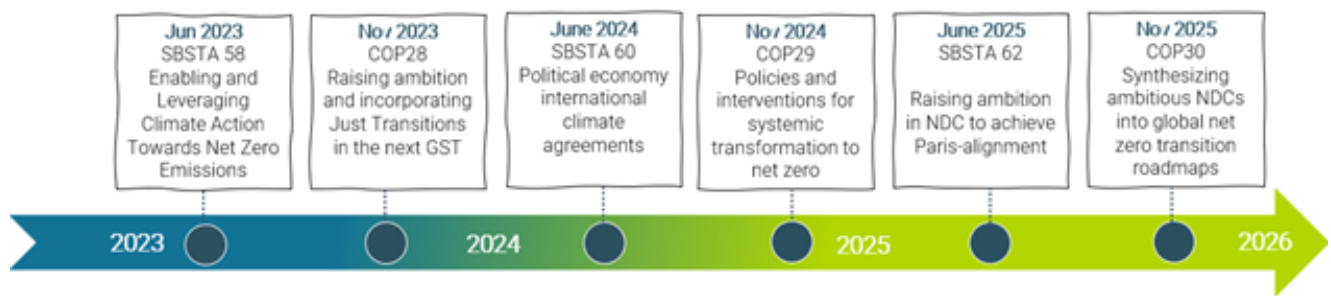
 -  Technological innovation and behavioural levers to accelerate sectoral action

 -  Options to increase the effectiveness of international climate governance and policy

 -  Strengthening representation of justice in climate mitigation pathways
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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 introduce the latest project findings into UNFCCC processes (**Picture 1**).





Picture 1. Overview of the ELEVATE international co-creation workshops

2. Summary of the Workshop

2.1 Good practice policies to increase ambition for 2030 & Beyond

2.1.1 Topic Introductions and Research Findings

Researchers introduced participants to the [Climate Policy Database](#), an open access and collaborative resource for climate policymakers and researchers. The database contains climate mitigation policies for 192 countries—allowing decisionmakers to visualise policy coverage across various sectors, mitigation areas, and policy instruments.

Researchers use the database to model emission projections under current policies and compare these with NDC targets. This analysis provides a baseline for annual European Commission reports and most Horizon projects. There are challenges, however, in determining what qualifies as a climate policy. For example, publicly announced plans or strategies alone do not qualify, while individual executive orders to implement such plans or strategies do qualify. Policies often also come with official end date, prompting questions about how to integrate them into extended scenarios.

The research identifies successful climate policies and considers what would happen if these policies were enacted globally. Based on the research data, expanding successful policies internationally could achieve pathways compatible with 2C by 2030 and reduce the costs of climate change. Researchers are exploring ways to make these global findings relevant to regional and national policymakers.

Explore the complete presentation here: [Presentation](#)



2.1.2 Stakeholder Inputs & Insights

The researchers asked stakeholders to share how climate policies evolve during implementation, and where decision makers get information for climate policymaking. Stakeholders also reflected on ways to support the global expansion of successful climate policies.

Participants highlighted the usefulness of the Climate Policy Database. In response to the question regarding policy evolution, participants emphasized the importance of identifying whether policies were passed by minority or majority governments. A key concern for both researchers and decision makers was ensuring that the policy database stayed current. Participants stressed the need for ongoing engagement with policymakers to maintain the database.

Stakeholders indicated that regional policy clustering would make the tool more user friendly, as this feature would allow policymakers to draw inspiration from similar countries. Similarly, coding the policies for key indicators of success, such as equity, would be useful. Participants also raised questions regarding the metrics used to differentiate high and low impact policies, and how the database measures policy credibility. These questions will be further explored in an upcoming ELEVATE paper examining the credibility and quality of net-zero pledges. One question for further exploration was the linkages between financial feasibility and net-zero pledges.

The Brazil delegation shared a successful example of leveraging cross-ministerial collaboration to ensure policy continuation. The Brazil Forest Code harmonized forestry production and environmental protection in 2012 by strengthening cooperation between the foreign ministry and the environmental ministry. The government also launched a committee on climate change to bring together policymakers, scientific advisory bodies, and civil sciences. By taking a participatory and collaborative approach, the Brazilian government was able to expand, implement, and maintain strong policies.





Key Takeaways on the Climate Policy Database:

1. Ensuring that the database is regularly updated is critical to decision makers and researchers who rely on the data. Frequently engaging with policymakers can support efforts to ensure the database is accurate.
2. Policymakers take inspiration from other countries. Clustering the countries by region and profile could increase the tool's applicability.
3. Policymakers are interested in understanding policy credibility—including financial feasibility.

2.2 New frontiers in justice and climate modeling

2.2.1 Topic Introduction and Research Findings

The presentation introduced new research methods that incorporate justice into Integrated Assessment Models (IAMs). IAMs provide insights for decision makers developing climate policies, but these models have been criticised for failing to include justice considerations in their outputs. Some researchers have attempted to address these concerns by integrating justice elements into IAMs. For example, by embedding fairness principles into pathway development. Yet these attempts have been ad-hoc—often substituting emissions and income indicators for metrics of human well-being.

ELEVATE research proposes a new, interdisciplinary framework that centres human well-being and recognises the multi-dimensional nature of justice (distributive, procedural, and recognition). The framework reflects different perceptions of justice and incorporates intergenerational and interregional concerns to provide decision makers with justice-centric findings and recommendations.

Explore the complete presentation here: [Presentation](#)





2.2.2 Stakeholder Inputs & Insights

The session engaged stakeholders to a) understand what types of justice concerns should be incorporated into models and b) share new findings. The session included a participatory dialogue, where attendees reflected on the what justice means in relation to climate and energy, and how climate justice could improve net-zero ambition.

Participants highlighted the importance of placing values, such as well-being and humanity, at the centre of decision-making. To support decision makers and inform inclusive policymaking, models must engage with these concepts. Participants indicated that climate models should reflect national realities. For attendees, this meant models should allow for different national needs and contexts, and researchers should be aware that notions of justice vary internationally.

Participants recommended that modellers identify diverse metrics for what it means to live a ‘good life.’ This would ensure that model findings are relevant for different contexts. Participatory research is critical to establishing these metrics. One example came from Ghana, where external actors provided boreholes, but failed to engage the community before constructing them in ancestral sites—an action that was perceived as unjust by the community. This example foregrounds the importance of integrating stakeholder needs and diverse perceptions of justice into modelling and policymaking.

Participants indicated that models could provide insights on economic, technical, financial, and institutional capacity to help decision makers identify gaps and develop ambitious just transition plans. Numerous participants indicated that historically high emitters bear a greater responsibility for the climate crisis. They suggested that this should be reflected in climate models and related policymaking. While there were concerns that this approach could decrease ambition, others emphasized that taking an equitable approach could reduce barriers, increase support for climate policies, and accelerate action.





Key Takeaways on Incorporating Justice in IAMs:

1. Incorporating social values into climate modelling is essential to inform ambitious just transition policies and promote well-being.
2. An important part of incorporating justice into IAMs is acknowledging different national needs and contexts. This includes varied understandings of justice, and the increased responsibility of historically high emitting countries.
3. Diverse metrics, beyond income and GDP, are needed to measure what it means to live a 'good life.'
4. Stakeholder participation is critical to identifying nuanced and varied understandings of justice, fairness, and living well.

2.3 Policy decisions underlying net-zero targets

2.3.1 Topic Introduction and Research Findings

The IPCC report states that we cannot limit global warming without achieving net-zero, but 'net-zero' has multiple framings. For example, some net-zero interpretations include CCUS or global warming potential (GWP), while others do not. These differing interpretations affect model outcomes and decision-making. Our research clarifies how varied understandings of net-zero could impact efforts to achieve 1.5C.

When grouping scenarios together, we found that achieving 1.5C requires global emissions to peak before 2025—with a 43% reduction by 2030 and net-zero by 2050. We explored conditions to achieve net-zero for both CO₂ emissions, and greenhouse gas (GHG) emission more broadly. We found that to achieve net-zero GHG emissions, we must engage in negative CO₂ emissions to account for GHG gases in hard to abate sectors. We will therefore reach net-zero CO₂ 15-20 years before we reach net-zero emissions among all GHGs.





The models also incorporated a ‘fairness’ approach, where high emitters have an earlier net-zero target than low emitters. The models found that under current policies, we will breach 3.5C by 2100. If we incorporate existing net-zero pledges into the model, however, we will reach 1.9C by 2100. The models suggest that if all countries without net-zero pledges implement realistic net-zero pledges (based on their economic context), global temperatures would increase by 1.6C by 2100.

Explore the complete presentation here: [Presentation](#)

2.3.2 Stakeholder Inputs and Insights

In small groups, participants reflected on ways to encourage more countries to commit to net-zero. Participants also considered the barriers and enablers for stronger net-zero targets, and discussed the actions governments could take to achieve ambitious action.

Participants indicated that while the findings were useful, long-term net-zero goals need to be translated into immediate policy goals and sustainable development projects to accelerate climate action. Participants suggested that this would support immediate decision-making needs, as long-term, ambiguous net-zero goals may not be the highest policymaking priority.

Numerous participants suggested that finance, capacity, and technology barriers hinder implementation, and addressing these barriers is key to enabling ambitious net-zero policies. By enshrining net-zero pledges into law, policymakers could increase investor confidence and secure the funds needed to overcome these barriers. Raising awareness about climate goals among investors is therefore key to accelerating net-zero policy implementation.

Participants suggested that building awareness among the public is necessary to increase pressure on policymakers for ambitious net-zero targets. Providing clear metrics for success and external verification could also improve transparency and government accountability.

Participants indicated that in addition to immediate and specific goals, policymakers need clear net-zero targets and potential scenarios for the second half of the century to start planning effective policies now.





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.

Key Takeaways on Building Ambition for Net-Zero Targets:

1. Long-term net-zero targets must be translated into immediate, actionable, and specific goals to support decision-making.
2. Policymakers need a clearer picture of scenarios that span the second half of the century in order to start making effective policies now.
3. Addressing financial, capacity-related, and technological goals is key to implementing net-zero policies. Increased investment in net-zero policies is needed to overcome these barriers. Modelling and policymaking can increase investor confidence by creating clear, consistent, and binding net-zero targets.
4. Developing clear metrics for accountability and external verification could improve transparency and government accountability for net-zero targets.
5. Decision-makers need new spaces for open and honest dialogue on global net-zero





2.4 The Impact of feasibility constraints on global net-zero scenarios

2.4.1 *Topic Introduction and Research Findings*

IAMs have been used to develop scenarios based on climate policies and changing technologies. The latest IPCC assessment considers the feasibility of these scenarios. ENGAGE has built on these efforts to model the characteristics that make scenarios more or less feasible. The research identifies a realistic temperature limit based on these constraints.

The model assesses various dimensions—including technological, geophysical, institutional, socio-cultural, and economic—to consider whether the actions needed to reach net-zero are realistic. The research found that unprecedented institutional actions are required to reach net-zero. This suggests that increasing institutional capacity, rather than focusing on technological constraints, should be a high priority for decision makers working towards net zero.

The model indicates that climate scenarios that allow different countries to commit to different degrees of action are more likely to succeed. When all findings are taken together, the model suggests that in the best-case scenario, there is a 17-30% likelihood that temperatures will peak below 1.5C.

Explore the complete presentation here: [Presentation](#)

2.4.2 *Stakeholder Inputs and Insights*

After hearing the presentation, participants were asked if they believed the research was relevant to international climate negotiations. Participants also reflected on the aspects of existing mitigation scenarios that may not be feasible.

Participants highlighted that the information was a useful contribution to the upcoming NDC cycle. Those in attendance appreciated the effort to communicate a realistic scenario that was not overly optimistic.





Participants noted, however, that the research needed to be translated into a simpler format for decision makers. Participants also raised questions regarding the accuracy of the feasibility assessments, given that these models must incorporate changing technologies, evolving consumer tastes, and political will. Participants indicated that more work is needed to model national level constraints, particularly related to political and cultural systems. This is important as net-zero policies will affect citizens' daily lives, and politicians may be reluctant to disenfranchise their electorate.

Key Takeaways on Net-Zero Feasibility Constraints:

1. Unprecedented institutional action is required to achieve net-zero. When all enablers and disablers are considered, there is only a 17-30% likelihood that temperatures will peak below 1.5C.
2. Aligning high impact research with NDC cycles enables decision makers to use findings in their policymaking.
3. The research needs to be translated into easily accessible formats to support policymaking.
4. Translating the findings into national level recommendations would support efforts to increase countries' institutional capacity.





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Key Questions for Researchers:

- How can researchers translate long-term findings into immediate, contextually relevant, and actionable policy recommendations?
- What methods can modellers employ to make global findings more relevant for national decision-makers?
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- What methods can modellers employ to make global findings more relevant for national decision-makers?
- How could modellers work more closely with policymakers to ensure that the policies included in databases and analyses are up to date?
- Can IAMs be tailored to reflect the realities national decision makers face, such as different national contexts and varied notions of justice?
- How should researchers engage with local stakeholders to ensure that their realities and needs are reflected in models?
- How could researchers and policymakers collaborate to develop clear and consistent net-zero targets to increase investor confidence?
- What formats would make research findings most accessible to policymakers?
- How do we determine who bears increased costs of transitions? Can models help with this?
- How can modellers communicate a model's limitation to decision makers in a comprehensible way?





3. 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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ENGAGE is a consortium of international and multidisciplinary leading research groups that aims to co-produce knowledge for designing cost-effective, technologically sound, socially and politically feasible pathways that can meet the objectives of the Paris Agreement. ENGAGE will also quantify avoided climate change impacts at the regional and national levels and identify concrete policy portfolios that maximise co-benefits and minimise trade-offs.



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COMMITTED aims to reinforce global climate change mitigation efforts by supporting the work of Asian researchers and experts on national and sectoral greenhouse gas emissions modelling. This is done by strengthening capacity building for GHG emissions modelling and exchanging best practices and know-how between leading EU and Asian modellers working closely with the government.

