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# **CLIMATE GOVERNANCE STATE OF ART: A SNAPSHOT ON CURRENT DISCUSSIONS ON SOLAR RADIATION MANAGEMENT**

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INSTITUTO DE CIÊNCIAS SOCIAIS



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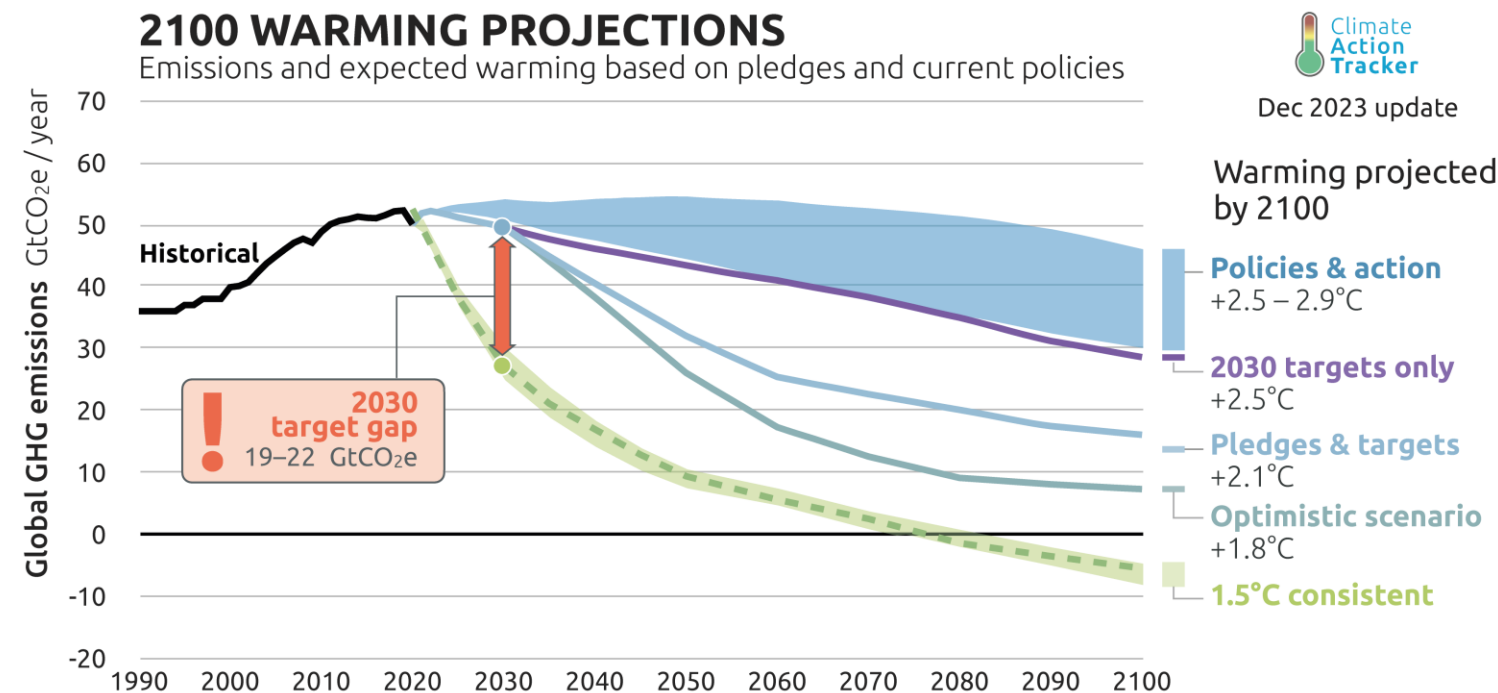
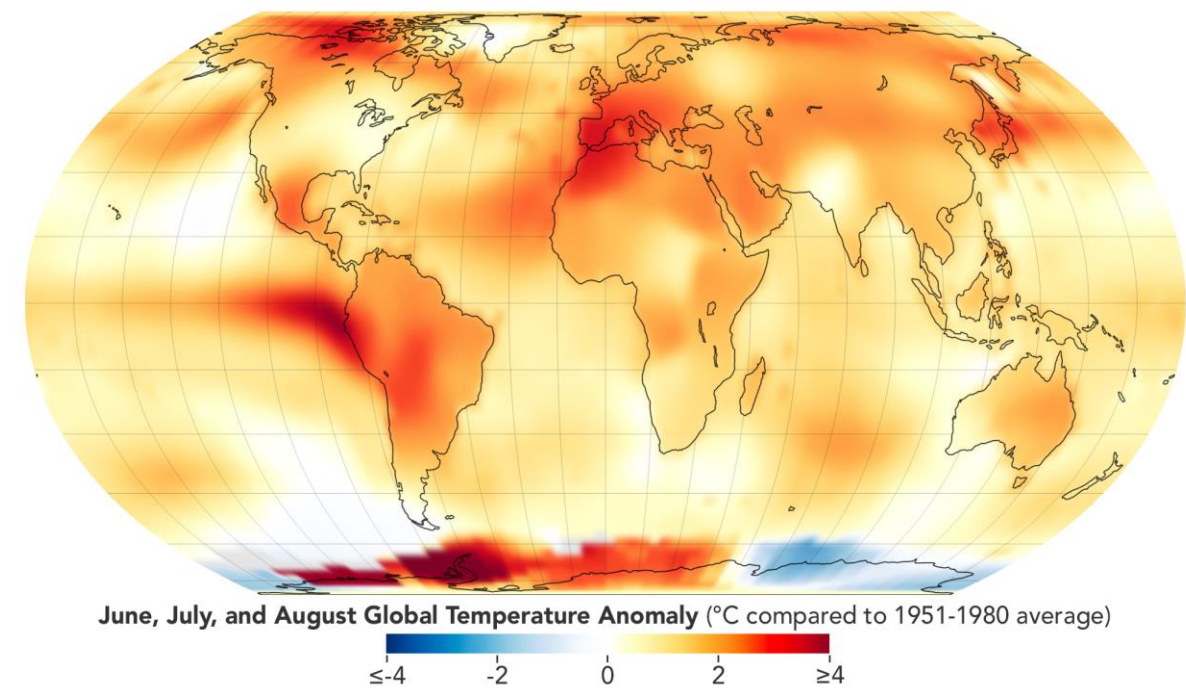
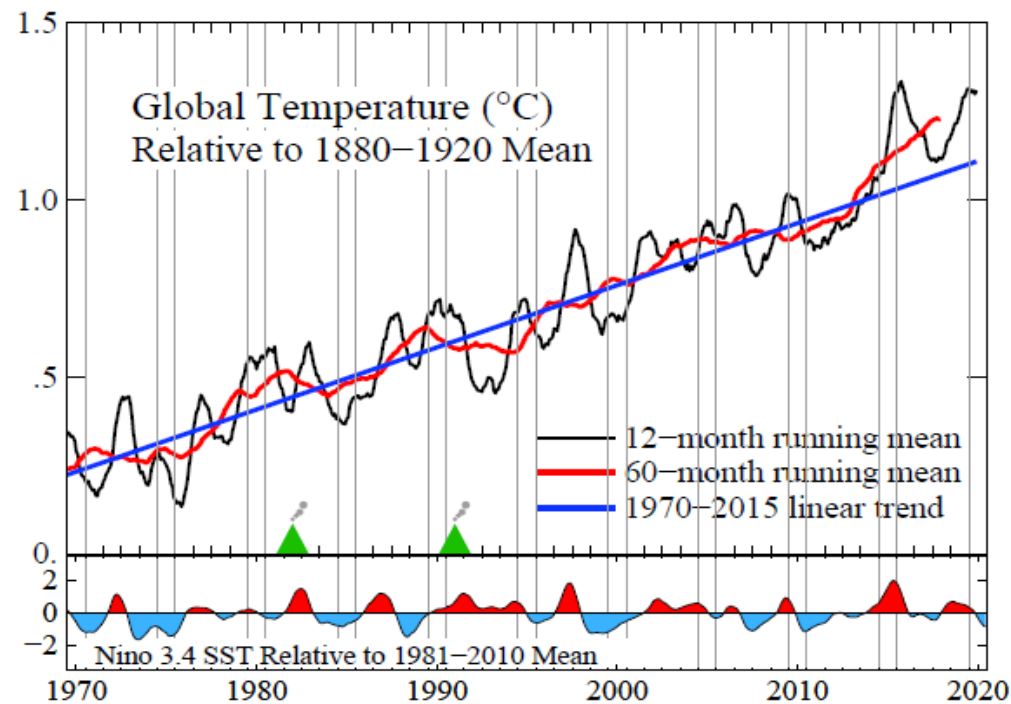
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- ❑ The reason to be of my presentation
- ❑ Where are we at in terms of climate governance?
- ❑ How can the ISWI contribute?
- ❑ A snapshot on current discussions on Solar Radiation Management (SRM)
- ❑ References



# Reason to be of my paper



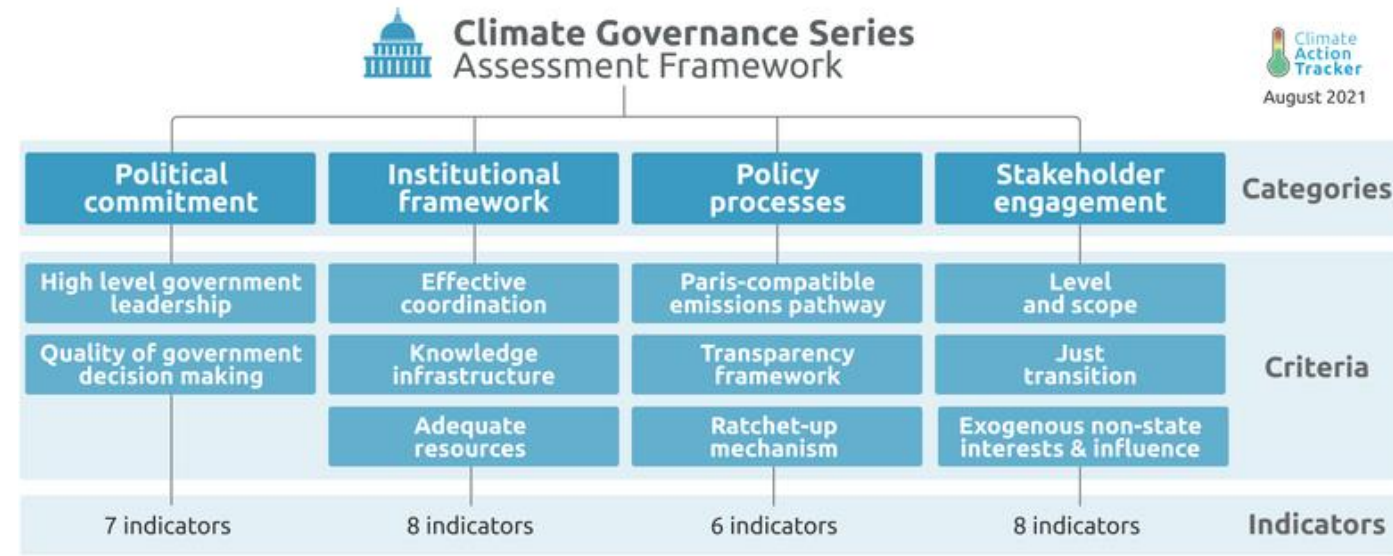
# When assessing Climate governance



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- international governance
- national governance
- transnational governance
- city and subnational governance
- polycentric governance
- experimentation and innovation
- leadership and pioneership
- economic analysis
- adaptation strategies
- evolution of climate governance



[https://climateactiontracker.org/documents/865/2021-08\\_CAT\\_ClimateGovernance\\_MethodologyNote.pdf](https://climateactiontracker.org/documents/865/2021-08_CAT_ClimateGovernance_MethodologyNote.pdf)



# Where are we at on global climate governance?



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## *Proposals from major authors*

- **Coordination and integration** : aligning policies from local to global levels and transitioning from fragmented systems to integrated governance structures;
- **Stakeholders' participation and engagement**: inclusion of varied groups in decision-making and addressing obstacles to collaborative efforts
- **Ambition and implementation**: high climate commitments, broad engagement in non-mandatory initiatives
- **Funding and resource allocation**: adequate resources for city-level climate actions
- **Institutional support and legitimacy**: new global climate bodies, ensuring new institutions are both credible and effective, and smoothly transitioning from existing fragmented systems to more integrated structures;
- **Accountability and transparency**: ensuring non-state market-driven systems are reliable and effective, upholding high standards of accountability and openness in governance processes and harmonizing these approaches with governmental policies;
- **Leadership and dynamics**: leveraging the influence of proactive leaders

### *Sources:*

*Ostrom E. (2009)*

*Victor D.G. (2011)*

*Bulkeley H. et al. (2014)*

*Biermann F. (2014)*

*Wurzel R.K.W. et al. (2020)*

*Cashore B. et al. (2021)*

*Pattberg P. et al. (2022)*





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The word cloud features the word "Whether" in the largest font, centered at the top. Below it, "ethical" is also large. Other prominent words include "debates", "raises", "risks", "philosophical", "interventions", "harm", "natural", "generations", "decisions", "role", "rights", "when", "fix", "seen", "value", "may", "considered", "their", "Moral", "integrity", "violation", "responsibilities", "philosophical", "interventions", "harm", "natural", "generations", "decisions", "role", "rights", "when", "fix", "seen", "value", "may", "considered", "their", "Moral", "integrity", "violation", "responsibilities". Smaller words include "changes", "questions", "make", "future", "climate", "view", "implications", "planet", "integrity", "violations", "responsibilities", "philosophical", "interventions", "harm", "natural", "generations", "decisions", "role", "rights", "when", "fix", "seen", "value", "may", "considered", "their", "Moral", "integrity", "violation", "responsibilities", "philosophical", "interventions", "harm", "natural", "generations", "decisions", "role", "rights", "when", "fix", "seen", "value", "may", "considered", "their", "Moral", "integrity", "violation", "responsibilities".

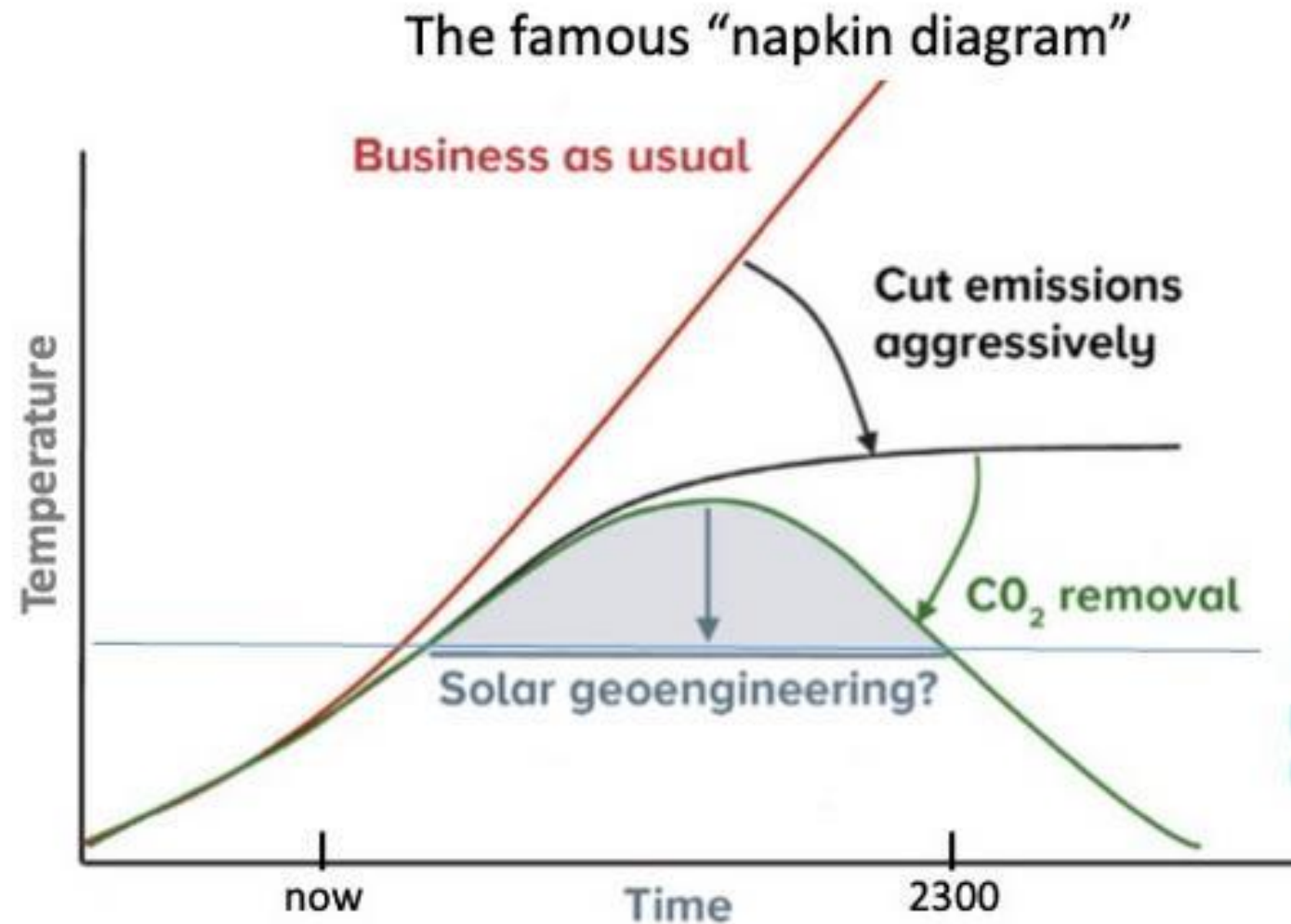
# Reason to be of my paper: *future climate change scenarii based on different strategies:*



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1. *Business as usual, representing no reduction in greenhouse gas emissions*
2. *Aggressive cuts in emissions alone*
3. *Aggressive cuts in emissions combined with CO<sub>2</sub> removal methods*
4. *Emissions cuts, CO<sub>2</sub> removal, and climate intervention techniques that modify solar radiation in the atmosphere*



Proposal for how to combine aggressive emission reductions, CDR (Carbon Dioxide Removal) and RM (Radiation Management) to achieve a stable climate and avoid the worst effects of global warming.

1.5°C above pre-industrial global mean temperature.

Shepherd (2009); source: Lockley et al. (2019) :

# The SRM case discussed at UNEA6

Source : verbatim of 1<sup>st</sup> round table with negotiators - 20th Feb. 2024, Nairobi, Kenya

=> General support for fostering scientific understanding of SRM technologies but caution expressed. Few countries and NGOs expressed strong opposition. But the resolution did not get to consensus:

- **Scientific understanding and evidence-based discussions:** debates on SRM should be grounded in solid scientific evidence and rigorous analysis of its potential risks and impacts;
- **Acknowledgment of uncertainties and substantial knowledge gaps**, particularly in critical areas such as socioeconomic impacts and risks beyond scientific and technological aspects;
- **Prioritization of GHG emissions reduction;**
- **Inclusivity and transparency:** any discussion or research on SRM should entail a high degree of comprehensiveness, inclusivity, and transparency, like established processes like those of IPCC;
- **Preferential approach to research focus:** physical science aspects, potential impacts, and risks, rather than solely on technologies needed for deployment or policy development;
- **Utilization of existing bodies and initiatives and avoidance of duplication:** IPCC and SBSTA-UNFCCC, WMO-WCRP, etc.
- **Differences between developed and developing Member States**

The resolution invited governments and stakeholders to nominate scientific experts to be part of the conversation, for diversity and multi-disciplinary approach.





# .. Hence opportunities, including for ISWI.. in the global climate governance process



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- Enhancing climate monitoring
- Disaster Risk Reduction
- Interdisciplinary collaboration
- Capacity building
- Data sharing and joint projects

On SRM.. ISWI findings and infrastructure could (indirectly?) support research relevant to SRM by providing valuable data, technologies, and collaboration opportunities.



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Thanks  
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