PERRY WORLD HOUSE
University of Pennsylvania

POST-CONFERENCE REPORT

Climate Cooperation in Transition

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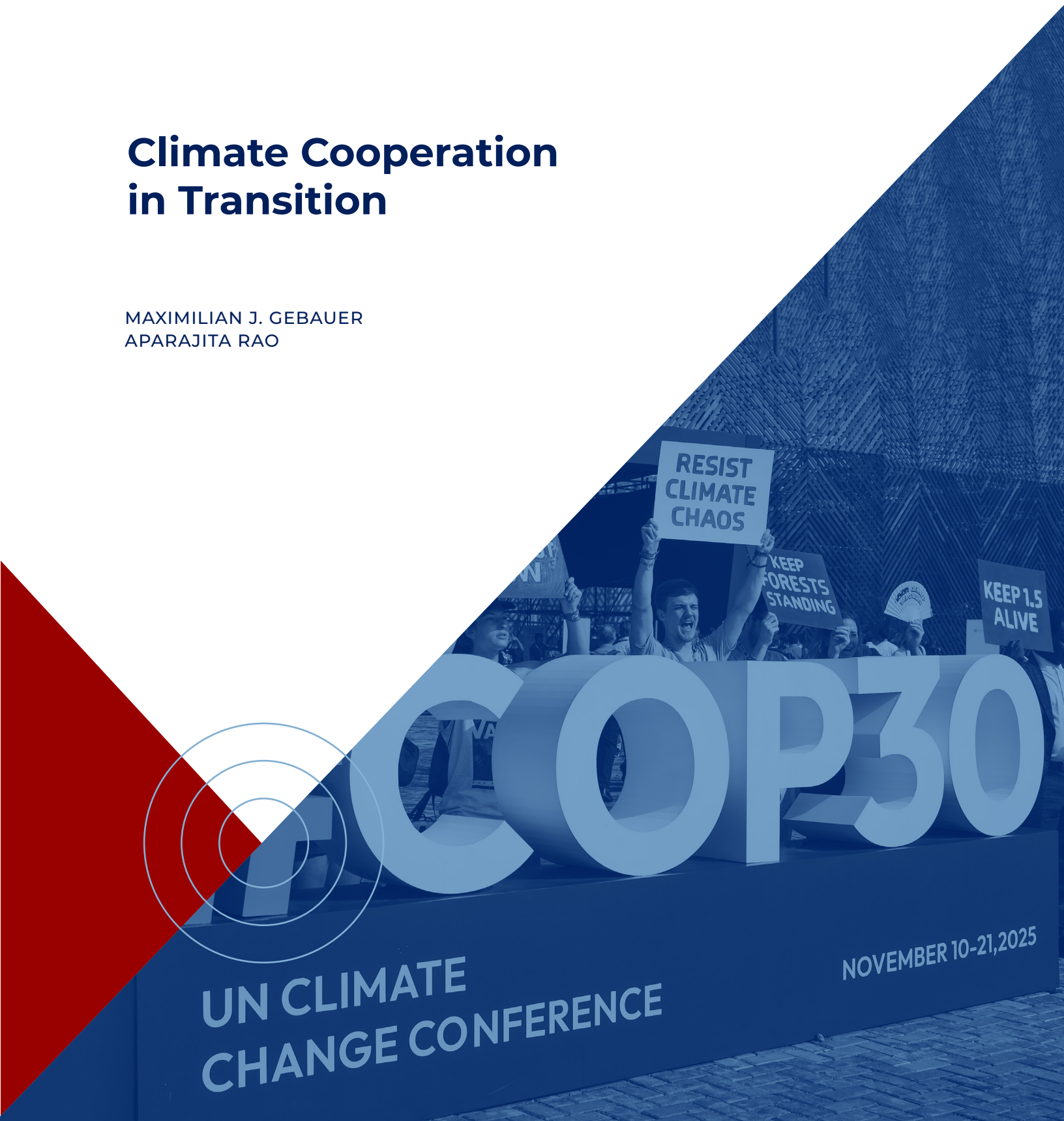

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ABOUT PERRY WORLD HOUSE

Perry World House is a center for scholarly inquiry, teaching, research, international exchange, policy engagement, and public outreach on pressing global issues. Perry World House's mission is to bring the academic knowledge of the University of Pennsylvania to bear on the world's most pressing global policy challenges and to foster international policy engagement within and beyond the Penn community.

Located in the heart of campus at 38th Street and Locust Walk, Perry World House draws on the expertise of Penn's 12 schools and numerous globally oriented research centers to educate the Penn community and prepare students to be well-informed, contributing global citizens. At the same time, Perry World House connects Penn with leading policy experts from around the world to develop and advance innovative policy proposals.

Through its rich programming, Perry World House facilitates critical conversations about global policy challenges and fosters interdisciplinary research on these topics. It presents workshops and colloquia, welcomes distinguished visitors, and produces content for global audiences and policy leaders, so that the knowledge developed at Penn can make an immediate impact around the world.

> SECTION 1

Background

<< Armed conflict and regional tensions are redirecting political and financial capital further away from climate change and towards national security. >>

The global effort to tackle the climate crisis stands an inflection point. The 30th Conference of Parties (COP30) has just concluded in Brazil, marking the tenth anniversary of the Paris Agreement. While the most devastating of scenarios seems to have been avoided, global warming remains a serious threat. Atmospheric CO_2 concentrations are nearing 450 ppm with temperature increases broaching the 1.5°C mark.

Along with this science, countries reflecting on the state of climate action will also take stock of a changed socio-economic and political landscape. Armed conflict and regional tensions are redirecting political and financial capital further away from climate change and towards national security. Multilateralism is contracting. The United States has withdrawn from the Paris Agreement and dismantled its development assistance. The resulting leadership, finance, and ambition vacuum has invigorated discourse on the future of global climate action. The need for surefooted diplomacy and careful path planning has never been more acute.

In response, on October 16 and 17, 2025, Perry World House (PWH) and the United Nations University (UNU) Centre for Policy Research convened a high-level workshop titled "Climate Cooperation in Transition." Building on a prior discussion held on the margins of the UN General Assembly that examined the legacy and geopolitics of the Paris Agreement, it explored the drivers and barriers to global collaboration and policymaking on climate action. It focused on three key areas: (1) stocktake and strategy, (2) energy transition and security, and (3) the role of the real economy and finance. This report distills insights from those discussions, highlighting ideas and pathways to help decisionmakers navigate the transitions underway and strengthen efforts to confront the climate crisis.

> SECTION 2

Stocktake, Strategy and Geopolitics

<< Does the Paris Agreement represent a locus for strategy going forward or should alternative mechanisms and arrangements be granted greater priority? >>

At the outset of the meeting, experts considered emerging trends reshaping the global climate landscape. These included the impacts of large-scale biome changes, particularly in vulnerable countries; demographic shifts—such as immigration and aging populations—that strain social welfare systems and complicate climate-related decision-making; and the explosive growth of gigawatt-scale data centers powering artificial intelligence, which is driving new demand for electricity and energy security. The workshop then opened with a discussion on the successes and challenges of the Paris Agreement (PA). Experts asked if its foundations are strong enough to withstand present geopolitical challenges. In particular, they addressed the question, does the PA represent a locus for strategy going forward or should alternative mechanisms and arrangements be granted greater priority?

Many discussants were optimistic that the PA will remain a relevant anchor for climate ambition. It has already shown great resilience—for example, no other nations have yet followed the United States in leaving the Agreement, and it broadly weathered the COVID-19 pandemic. The PA regime has also demonstrated adaptability, especially the pivot from the 1.5°C to 2.0°C target and the emergence of loss and damage as a legitimate goal, something considered unthinkable at the inception of the PA. Common critiques of the PA, like timeline (in)compliance by nations concerning Nationally Determined Contributions (NDCs), are not unique to the PA but are characteristic of international climate governance more broadly. Given these outcomes, participants outlined a tripartite strategy for advancing the PA: Preserve, Strengthen, and Supplement. The preservation of the Agreement was not unconditional, with general accord that preservation should center on the aspects that will help countries meet the present moment. It was stressed that realistic targets for strengthening the PA include identifying and promoting new multi-polar leadership models and responding to the inability of current nationally determined contributions (NDCs) to close the emissions gap and keep warming to 1.5C.

Supplemental recommendations centered on the growing importance of entities such as sub-national governments, private sector, and civil society organizations working in the periphery of the PA as such. Key examples include the U.S. Climate Alliance, a coalition of states organized around the pursuit of net-zero during the first Trump Administration and the recently announced Gates Adaptation Fund, a private initiative committed to over one billion USD to fund adaptation efforts

across the developing world. Not everyone agreed on the PA's current and future prospects. Some stressed that the flexibility and non-binding nature of the PA were a core liability as there is no penalty for failing to meet stated objectives. For example, in 2009, developed country parties had taken the lead in mobilizing $100 billion per year in climate finance by 2020. However, this goal was only met in 2022 with no penalty for the previous years' shortfall. Others argued that these features were crucial for its original adoption and core to its ability to help achieve emissions targets. Such failures have eroded trust in multilateral institutions such as the UNFCCC, which risks having spillover effects for the PA.

In response and to preserve the PA, they also discussed the economics around the Paris Agreement. Some argued that future efforts should focus on the real economy impacts of the PA, highlighting that it is an investment product that yields beneficial returns to people in terms of preserving lives and livelihoods. Others, however, recalled how the PA helped create a sustainability market bubble that burst when returns broadly failed to meet expectations, causing a blowback against Environmental, Social, and Governance (ESG) products.

Communication and marketing appeared as central mechanisms for strengthening the PA. Rhetoric around targets, what success looks like, and questions about how we can make metrics persuasive and action guiding were central to the discussion. Respondents discussed how abstract future impacts could become action-guiding by making them tangible, e.g. quantifying the real economic benefit to the globe for each additional increment of warming avoided. Likewise, participants were interested in revising how NDCs are computed, especially how it could be broadened to reward countries that invest heavily in manufacturing and exporting technology like solar panels used by other nations to improve their NDCs. On such a model, credit for global emissions reductions might be more equitably split between the nation that invested heavily in green technology and the nation(s) that imported such products to reduce emissions within their borders, improving incentives for manufacturing-based economies to engage in such mutually beneficial practices.

<< Communication and marketing appeared as central mechanisms for strengthening the Paris Agreement. >>

> SECTION 3

Energy Transition and Security

<< Diversification of energy production sources could both increase grid resiliency via a reduction in the risk of systemic shocks from geopolitical conflict while simultaneously decreasing overall carbon emissions from energy production. >>

This discussion focused on Europe and recent developments affecting the green energy transition. Participants emphasized that impacts from the ongoing Russia-Ukraine war on energy supply along with pressure to increase defense spending have shifted the priorities of European countries away from climate action and towards national defense and energy security. They also noted that when the European Union's historical reliance on cheap Russian gas became politically unviable, it moved to rapidly decouple its energy provision from Russia. Countries turned to more carbon intensive energy sources that could meet demand quickly.

Experts saw opportunity in this challenging outcome. While EU countries moved away from gas toward more carbon intensive fuel sources, they noted that energy security concerns could be leveraged to gain public buy-in for national renewable energy investment. Renewable energy could offer a path towards greater energy independence from petrostates. They highlighted that capitalizing on this and increasing the share of renewables, however, would require solving the baseline production (and storage) problem inherent in the transient nature of wind and solar.

Nevertheless, diversification of energy production sources could both increase grid resiliency via a reduction in the risk of systemic shocks from geopolitical conflict while simultaneously decreasing overall carbon emissions from energy production. Discussants also pointed out that traditional solutions like nuclear are not cost competitive, due to construction cost overruns, high insurance premiums, and historic political hostility compounded by public fear of the technology. Experts also thought that demand-side interventions could also play a role. They cited examples coming from Nordic nations where governments help citizens optimize when to be intensive energy consumers.

On the political side, participants expressed broad concern that the combination of elevated energy prices and the heightened salience of national security is nudging electorates toward strongman archetype leaders who are less inclined to back ambitious climate measures. Cost-of-living pressures and a sharper focus on immediate security needs shorten voters' time horizons, making promises of firmness, rapid relief, and policy simplicity more attractive than complex transition packages whose benefits arrive later. In this environment, climate policies are easily recast as burdensome or discretionary, and leaders who foreground

sovereignty and control often signal a willingness to slow, dilute, or selectively exempt sectors from decarbonization commitments. This dynamic is amplified by recent lukewarm rhetoric from U.S. leadership regarding NATO's mutual defense obligations, which many see as injecting uncertainty into alliance reliability and encouraging a more defensive, nation-first posture across key EU states. The cumulative effect is a political climate in which multilateral coordination, and by extension aggressive climate action, can appear secondary to immediate security imperatives, raising the risk of policy whiplash, delayed targets, and underinvestment in the transition unless climate ambition is consistently framed as integral to affordability, resilience, and energy independence.

> SECTION 4

The Real Economy and Finance

<< By 2050, the United Nations estimates that nearly three quarters of the world's population will reside in cities. Currently, urban areas host 55 percent of the global population and account for over 70 percent of global greenhouse gas (GHG) emissions. >>

In the final discussion of the day, experts concentrated on the nexus of climate action and the real economy. With the United States withdrawing from the Paris Agreement and many of the largest greenhouse gas emitters skirting leadership, they focused on the ability of subnational actors, e.g. cities, regions, public utilities, and private firms, to flatten the emissions curve. By 2050, the United Nations estimates that nearly three quarters of the world's population will reside in cities. Currently, urban areas host 55 percent of the global population and account for over 70 percent of global greenhouse gas (GHG) emissions. They consume more than two-thirds of the world's energy.

Experts noted that the central challenge to sub-national climate action is that while these actors control many practical levers of decarbonization, they rarely command the balance sheets, borrowing authority, or cross-jurisdiction coordination needed for projects at the scale traditionally handled by national governments. That gap is reinforced by institutions built around state signatories to the Paris Agreement. This means that cities and other local entities often reach major pools of climate finance only indirectly given mechanisms such as the GCF and GEF are not built to service such entities. Yet the locus of the problem is increasingly urban and cities with rising population, energy use, transport needs, and emissions trajectories are locked out of access to finance.

Experts highlighted that unlocking capital at this level requires rethinking funding mechanisms to fit local realities, creating predictable revenue streams, streamlining approvals and procurement, and building the capacity to structure bankable projects. Municipal bonds offer a promising way to channel private savings into local infrastructure; however, realizing that potential depends on coordination among many smaller issuers. Standardized criteria for project selection and reporting, pooled or regional vehicles that aggregate deals to achieve scale, and accessible technical support can help localities use the instrument effectively.

Participants emphasized that attracting private capital in an era of broad ESG skepticism requires a fundamentals-first approach to product design: the "climate" label cannot substitute for credible cash-flow projections, transparent risk allocation, covenant strength, and performance under standard underwriting models. Meeting the market "where it is" means building instruments that score

well on the metrics investors already use, IRR and NPV, debt service coverage, tenor and refinancing risk, credible downside cases, and presenting data in a format that supports conventional credit analysis. In that vein, aggregating smaller project bonds into diversified pools could lower idiosyncratic risk and return volatility, potentially broadening the investor base. However, making pooled structures work demands a high degree of coordination across disparate issuers, including standardized documentation, aligned disclosure, and pipeline managers who can effectively curate and monitor assets over time. Participants flagged this coordination tax as a persistent obstacle for subnational actors. Some argued that overcoming it will require rethinking climate leadership beyond the Paris Agreement's state-centric architecture, favoring more decentralized, networked pathways in which cities, utilities, and firms advance on shared standards without waiting for top-down directives. Others were skeptical that such a rhizomatic model can reliably deliver concrete, efficient progress, warning that loose coordination risks fragmentation, uneven quality, and slower execution against key goals.

Looking beyond the traditional multilateral architecture anchored by a few leading states, participants pointed to regional coalitions, a form of "minilateralism," as pragmatic pathways for faster climate progress. In this model, neighboring countries, provinces, cities, and firms align around concrete projects, cross-border power pools, green-corridor logistics, joint procurement, shared standards, and pooled financing, without waiting for universal consensus. The appeal is speed, experimentation, and the ability to tailor solutions to regional resource mixes and political realities while still maintaining interoperability through light, common rules. The risk is fragmentation and uneven quality, but arguably this is preferable to no action at all.

> SECTION 5

Conclusions and Recommendations

<<In sum, the workshop points to a pragmatic path forward: preserve the Paris Agreement as an anchoring point but adjust tactics to fit the present geopolitical and market realities to mobilize effective action with speed. >>

In sum, the workshop points to a pragmatic path forward: preserve the Paris Agreement as an anchoring point but adjust tactics to fit the present geopolitical and market realities to mobilize effective action with speed. As highlighted in the first session, concrete recommendations in this framing can be framed as a three-part approach: Preserve, Strengthen, and Supplement.

1. **Preserve** the Agreement's core architecture via the rebuilding of confidence by clearly communicating benefits and translating and better marketing abstract targets into tangible, near-term economic gains and the preservation of lives and livelihoods.

2. **Strengthen** the Paris regime by nurturing multipolar climate leadership, tightening the reliability of NDCs through novel accounting methods and compliance mechanisms to close the gap between targeted goals and current projections.

3. **Supplement** the traditional state-centric approach with subnational and private actors through the use of new financial products to aid sub-national governments' mitigation and adaptation projects, improve coordination amongst disparate regional and sub-regional actors to mitigate the coordination tax, and refocus financial instrument design on business fundamentals rather than labels.

To secure political buy-in in an era of increased geopolitical tension and energy insecurity, actors should work to reframe clean energy investment as a path to energy independence, increased grid resilience to shocks, and energy-price stability. Taken together, these steps aim to preserve the essential aspects of the Paris Agreement and to build upon them to address the world as it is, not how it was at the time of the Agreement's original enactment.

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