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COP29: Temperature Overshoot, Policy Undershoot

Between November 11 and 22, world leaders, policymakers, investors and businesses are descending on the city of Baku, Azerbaijan for the 29th session of the Conference of the Parties (COP29).

In this article, we consider the meeting agenda against the background of both the climate itself and recent progress on climate policy and financing, and outline some of the thoughts we have been gleaning, ahead of COP29, from our conversations with institutional investors worldwide.

Another Year, Another Petrostate

Baku is well acquainted with welcoming diplomats and international investors to its shores, not for its futuristic skyline or Formula 1 race circuit, but for its rich oil history. Oil extraction dates back to ancient times here, and the development of modern drilling techniques and infrastructure in Baku set the stage for future oil exploration worldwide. It is perhaps ironic that it is playing host to the biggest global effort to address climate change.

The Azerbaijan COP29 Presidency has published a letter to the Parties and stakeholders, outlining the agenda for the climate summit.¹ Light on substance, the only quantifiable targets proposed are to boost global energy storage capacity six times above 2022 levels, reaching 1,500GW by 2030, and add or refurbish more than 80mn kilometers of grid globally by 2040.

As ever, climate finance will be a key focus. It will be the first time in 15 years that all nations come together to establish a New Collective Quantified Goal on Climate Finance (NCQG), aiming to replace the \$100bn-a-year goal set at COP15. Today, the financial needs of developing countries far outstrip what is currently flowing to them. Many believe that an agreement to mobilize more money to invest in a safe and prosperous future for developing nations is necessary for COP29 to earn its place in history. However, it is likely to be overshadowed by uncertainty over US commitment to climate action. Although President-Elect Donald Trump will not be taking

¹ H.E. Mukhtar Babayev, COP29 President-Designate and Minister of Ecology and Natural Resources, Republic of Azerbaijan, "COP29 Presidency Action Agenda Letter," at <https://cop29.az/en/pages/cop29-presidency-action-agenda-letter>.

office until 20 January 2025, this could leave US negotiators unable or unwilling to sign binding international agreements such as the NCQG on climate finance. Without engagement from the US, agreement on critical issues will be challenging.

One key initiative proposed by the Azerbaijan COP29 Presidency is the Climate Finance Action Fund (CFAF). The CFAF will be a public and private partnership, capitalized with voluntary contributions from fossil fuel-producing countries and companies. Members will commit to transfer annual contributions as a fixed-sum or based on volume of production. Baku intends to launch the venture with a contribution from Azerbaijan's state oil company Socar. The Fund will provide off-take agreement guarantees for medium and small renewable energy projects and offer facilities for concessional and grant-based funding for climate change adaptation in developing countries. The COP29 Presidency says the fund needs \$1bn and 10 countries as shareholders to launch. That amount pales in comparison to the \$30bn fund announced by the United Arab Emirates at COP28, with aims to mobilize \$250bn of private sector investment for climate action by 2030.

Elsewhere, the letter includes a call for action plans on hydrogen, methane reduction from organic waste, water, sustainable farming, tourism, green digitalization and climate resilience. However, as critics have been quick to point out, the agenda does not cover the plan to transition away from fossil fuels, a landmark agreement set in the final text of COP28 last year.

World on Course for Warming

In the run-up to COP29, the United Nations Environment Programme (UNEP) released its Emissions Gap Report 2024.² According to UNEP, to get on track for 1.5°C of warming, emission cuts of 42% are needed by 2030 and 57% by 2035. The report warns that a failure to increase ambition in new Nationally Determined Contributions (NDCs)—which serve as high-level roadmaps for national climate action—and “start delivering immediately” would put the world on course for a temperature increase of 2.6 – 3.1°C by 2100.

Either way, overshooting the 1.5°C threshold is likely to become inevitable by COP30. That may force an overhaul of existing national and sectoral policies, as well as climate benchmarks that rely on the 1.5°C scenario, which can have far-reaching implications for investors with existing climate commitments.

Despite Baku presenting an opportunity to encourage countries to substantially strengthen their NDCs, all eyes appear to be already focused on Brazil. The city of Belém will host COP30 and many are touting this as a more critical milestone, as it marks the quinquennial deadline for countries to submit new NDCs under the Paris Agreement. Many believe that holding policymakers to account in the lead-up to COP30 will be vital to ensure that the next round of NDCs are ambitious, resilient and aligned with the 1.5°C goal.

Energy Transition Green Shoots—But Strong Headwinds

Ahead of COP29, the International Renewable Energy Agency (IRENA) has released its first progress assessment of the COP28 twin targets to triple renewable energy capacity and double energy efficiency by 2030.³

The report finds that except for solar photovoltaics, capacity additions for all renewable technologies are significantly behind target, and current national plans are projected to deliver only half of the required growth in renewable power by 2030. Although investment in renewables reached a record high of \$570bn in 2023, IRENA estimates that \$1.5tn a year is needed between 2024 and 2030 to meet the target. Similarly, energy efficiency improvements have been marginal since 2022.

Despite this, the energy transition is accelerating in the global real economy. Solar capacity additions increased at a rate of 34% a year and wind by 19% between 2000 and 2023. Global electric vehicle sales have grown by 53% a year over the past decade. However, as we have seen over the past twelve to eighteen months, owning the largest companies involved in these sectors has generally been considered a poor investment in the equity markets. As these companies pursue efforts to penetrate markets and achieve scalability, all whilst operating on very tight margins, any threats from other market competitors can prove catastrophic on returns.

² UNEP, *Emissions Gap Report 2024*, at <https://www.unep.org/resources/emissions-gap-report-2024>.

³ IRENA, *Delivering on the UAE Consensus: Tracking Progress Toward Tripling Renewable Energy Capacity and Doubling Energy Efficiency by 2030*, at https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2024/Oct/IRENA_UAE_Consensus_2030_trippling_renewables_doubling_efficiency_2024.pdf.

⁴ BloombergNEF, *Energy Transition Investment Trends 2024: Tracking global investment in the low-carbon transition* (January 2024), at <https://assets.bbhub.io/professional/sites/24/Energy-Transition-Investment-Trends-2024.pdf>.

The biggest competitor of all is undoubtedly China. Despite the phasing out of national subsidies in 2020 and 2021, and modest growth in 2023, China spent \$676bn on its energy transition last year, a massive 38% of the worldwide total, driven by the technologies' economic attractiveness as well as supportive policies such as long-term supply contracts.⁴

The U.S. is the second-largest funding destination for energy transition technologies, with a total of \$303bn spent in 2023.⁵ Importantly, in these politically divided times, there are commitments in every U.S. state and territory. Of the 280 major clean energy projects announced off the back of the Inflation Reduction Act (IRA), some 31% have been in states with a Democratic trifecta, 21% have been in states with divided government, and around 48% have been in states with a Republican trifecta. In 2023, 142,000 clean energy jobs were created, contributing over 50% of the new jobs in the U.S. energy sector and almost 5% of all new jobs in the U.S.⁶

The new administration under President-Elect Donald Trump may narrow the impact of the IRA through administrative and regulatory actions, with consumer clean energy credits for electric vehicle sales and residential energy efficiency, heat pumps and solar credits most at risk. As we went to publication the House of Representatives had yet to be called, but preliminary results suggest a Republican sweep. This will enable the administration to repeal parts of the IRA using a Congressional Review Act resolution, budget reconciliation or appropriations process. However, the new government is likely to take a more cautious approach to initiatives benefiting "red" or "purple" states, such as domestic manufacturing, carbon capture, hydrogen and nuclear power. While the scale of the changes remains to be seen, these rollbacks are anticipated to significantly influence the U.S. energy transition and efforts to address climate change.

Looking for Clarity From COP

For asset managers and asset owners alike, it feels like this COP offers more questions than answers. In the run up to the Conference, we spoke to Heads of Sustainability at some of the world's largest institutional asset owners and asked what was top of mind.

1. Should investors leave 1.5°C targets and decarbonization benchmarks behind?

While recognizing its rigidity and emphasizing the importance of realism in the way debates and objectives are framed, asset owners generally agree that the 1.5°C target is an important aspirational "North Star" that helps drive systemic change and engagement.

Some research shows that we have already breached the target, as the world warms faster than scientists expected. The consensus is that it will be breached by the time of COP30, particularly as we are seeing political backlashes against high energy prices and the costs associated with the energy transition, as well as a surge in energy consumption, driven in part by data centers in a new age of artificial intelligence, which could lead to the recarbonization of fossil fuel power plants.

If the threshold is breached, carbon budgets will be smaller than previously thought. It would necessitate a comprehensive revision of current national and sector-specific policies, along with climate benchmarks based on the 1.5°C scenario, potentially affecting investors with existing climate commitments in significant ways.

2. Should investors give much greater focus to adaptation and resilience?

Asset owners recognize the growing importance of adaptation and resilience to climate change. They highlight the need for consistent definitions and frameworks to establish how adaptation can both complement and be considered on its own merits alongside climate mitigation and climate solutions.

Adaptation tends to be less attractive than mitigation because results and returns are harder to predict and measure. The benefits manifest over time, making governments and policymakers historically less likely to get credit for adaptation efforts, thereby dampening enthusiasm. Some adaptation and resilience investments, such as public infrastructure with a multidecade operational lifetime, may not generate a return for investors. And because building resilience to physical climate risks means addressing a full system, not just an individual company's assets, trying to assess the need for a particular adaptation investment with standard climate investment models may be necessary, but is far from sufficient.

Overall, a lack (or perceived lack) of projects constrains investment. There is an acknowledgment of the complexity and hyperlocal nature of adaptation efforts, and the need for a multi-stakeholder approach to effectively manage risks and opportunities.

⁵ *Ibid.*

⁶ U.S. Department of Energy, 2024 U.S. Energy & Employment Jobs Report (USEER), at <https://www.energy.gov/policy/us-energy-employment-jobs-report-useer>.

3. How should investors manage “China risk” while also trying to accelerate real-world emission reductions at low marginal cost?

China is undoubtedly the world’s renewable powerhouse. The International Energy Agency (IEA) believes that China will reach its 2030 national target for wind and solar photovoltaic installations in 2024, six years ahead of schedule.⁷ Numerous investors overlook this due to a lack of direct exposure to Chinese assets, and that poses risks—as seen in developed markets like European auto manufacturers, and the global solar industry.

Asset owners note the importance and challenge of understanding indirect exposures and the role of China in the global supply chain. There is a call for intentionality and a total fund perspective when considering China-related risks and opportunities. It is also important not to overlook the elevated risk of human rights and forced-labor issues. The energy transition is inherently global: even amid rising protectionist policies and tariffs, asset owners cannot fail to neglect China’s role today and in the future.

Concluding Remarks

The juxtaposition of Baku’s rich oil history with the urgent need many investors believe is necessary for climate action underscores the complexities of the global energy transition. While efforts to establish new climate finance goals and initiatives like the CFAF are steps forward, the lack of a comprehensive plan to move away from fossil fuels highlights ongoing challenges. The world remains on a trajectory of warming, necessitating significant emissions cuts and ambitious NDCs by COP30.

Despite the acceleration in renewable energy investments, the path to achieving global targets faces strong headwinds, with geopolitical tensions and protectionist policies further complicating progress. As the energy transition continues to gain momentum, especially in China and the U.S., international cooperation and innovation remain crucial to overcoming these hurdles.

⁷ IEA, *Renewables 2023* (January 2024), at <https://www.iea.org/reports/renewables-2023>.

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