EXCLUSIVE INTERVIEW

> At COP30, Pakistan called for reforms to simplify access to climate funds such as the Green Climate Fund, while also pledging to self-finance disaster recovery rather than rely solely on emergency assistance from abroad

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ICMA: How can climate finance reach the people who are hit hardest by floods, droughts and other disasters?

Sherry Rehman: Pakistan's experience shows that money pledged is not necessarily money delivered. After the 2022 floods, billions were pledged at the 2023 Geneva conference, yet most funds were loans, not grants. At the same time, of Pakistan's USD 5.3 billion in climate finance allocations, large percentages remained undisbursed except in key projects like resilience housing, largely due to weak project design, slow approvals, and bureaucratic delays.

To reach people on the ground, projects must demonstrate measurable impact, something financiers now explicitly demand due to trust deficits. Key ministries like Planning and Climate Change must ensure disbursals and utilisation on time. Funds must also prioritise community-scale adaptation in agriculture, housing, water, and health. For the tens of millions repeatedly affected, speed, transparency, and local delivery matter more than headline pledges.

Proven models matter. The Sindh housing reconstruction programme succeeded because it had independent governance, transparent audits, and clear beneficiary outcomes, attracting large-scale financing.

ICMA: What does climate justice really mean for Pakistan and how should the global community share responsibility?

Sherry Rehman: We now all know that climate injustice is a lived reality in Pakistan, which contributes less than 1% of global emissions. According to the AIIB Report, Pakistan was ranked 149 out of 187 countries on the ND-GAIN climate vulnerability index. The country experiences an average of seven prolonged heatwaves per year since 1997, while the floods of 2022 displaced millions and, again in 2025, affected 9 million people.

If climate justice is real, then alongside NDCs, we need Internationally Determined Contributions (IDCs): clear, transparent commitments from the Global North to the Global South, formally recorded by the UNFCCC. That is what fairness and shared responsibility must look like. To this day, there is no formal definition of climate finance at the UNFCCC, which means there is always the risk of double-counting in the "climate" aid delivered to Pakistan.

What are IDCs? They build on exactly the transparency, modalities, and mechanisms that the Global South needs to ensure that all commitments on public, private, and blended finance follow through. Pakistan has the right to ask for Internationally Determined Contributions for financing and must voice its own agenda.

Climate justice should mean recognizing that Pakistan faces a USD 348 billion climate finance gap by 2030, ensuring that finance is grant-based, not debt-driven, especially when climate inaction could cost USD 250 billion by 2030 and USD 1.2 trillion by 2050.

This financing must not be vague, classified as ODA, or depend on "private pathways" to unlock climate support for the vulnerable. It must be measurable, accessible, and delivered with speed and predictability.

This is why Pakistan proposed IDCs as a mechanism to bring transparency and accountability to the pledges and promises made since Copenhagen. The USD 100 billion per year commitment never materialized at anywhere near the level needed by countries exposed to climate shocks. Multilateral forums such as COP are the venues to change that. Developing countries like Pakistan rely on multilateralism to deliver climate justice, but the collapse of many donor commitments has left these promises largely unrealized.

ICMA: With Pakistan's ambitious NDC targets, how can international funding be used most effectively?

Sherry Rehman: Pakistan's NDC 3.0 commits to a 50% emissions reduction by 2035, with 17% unconditional and 33% conditional on international finance. The total financing requirement is USD 565.7 billion. Between 2021–2025, Pakistan has achieved 37% of its targeted emissions reduction without external aid. Between 2019–2021, Pakistan received USD 5.4 billion in climate-related finance, of which 74% went to mitigation, while adaptation received only USD 1.37 billion, despite Pakistan's extreme climate exposure.

To use funding effectively, Pakistan must prioritize high-impact, climate-rational projects aligned with its National Adaptation Plan (2023) and National Climate Finance Strategy, rather than pursuing fragmented or piecemeal proposals.

Redirecting finance toward adaptation measures such as flood protection, water security, climate-resilient agriculture, health systems, and early warning systems will deliver the greatest returns in terms of resilience and survival.

ICMA: Can you tell us about the Pak C_2 energy transition task force and its potential impact on the region?

Sherry Rehman: The Pak–C_2 region, comprising of Pakistan, Kazakhstan, and Uzbekistan, with a combined population of 308.25 million and a GDP of USD 848 billion (IMF), possesses the scale, capacity, and shared challenges to lead the Global South in defining a collective energy transition pathway. The transition cannot happen in silos. South Asian forums like SAARC remain largely inactive because of India's depoliticization of the region, even on climate actions which are essentially transboundary. Therefore, Pakistan could pivot toward Central Asia to bargain collectively, build regional consensus, and move forward together in this defining decade. We can only hope to meet the challenge at multilateral forums together — not in isolation.

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The Pak–C2 Regional Energy Transition Taskforce can coordinate cross-border action and unlock shared opportunities. The Taskforce could focus on joint R&D in renewable technologies and green hydrogen; regional grid integration under CASA-1000 and other corridors; unified green finance frameworks to attract large-scale climate investment; and transparent tariff and policy mechanisms to ensure predictability for investors.

Pakistan and Uzbekistan have pledged carbon neutrality by 2050, while Kazakhstan, a regional manufacturing powerhouse, can play a leading role in developing low-emission industrial processes. These represent pathways to joint prosperity that can unlock capital in ways that are both creative and potentially transformational, but they will require federal focus and strong ownership in execution.

ICMA: What innovative financing or public-private partnerships can help accelerate climate adaptation?

Sherry Rehman: Pakistan is already moving beyond traditional aid because of intense competition for climate funds. Parametric insurance now covers 9.1 million farmers globally, offering rapid post-disaster payouts. Financial tools under exploration include green sukuk, panda bonds, carbon markets, and green investment classification systems and taxonomies.

The country also needs to shift toward mobilizing domestic and private-sector finance, recognizing that reliance on international climate funds alone is insufficient and increasingly competitive.

At COP30, Pakistan called for reforms to simplify access to climate funds such as the Green Climate Fund, while also pledging to self-finance disaster recovery rather than rely solely on emergency assistance from abroad.

This shift is essential because:

1) Pakistan needs USD 40–50 billion annually for adaptation.
2) International climate finance is loan-heavy, complex, and slow.
3) Dependence on global funds alone is no longer viable.

Public-private models that combine risk-sharing, digital tools, and transparency are now central to scaling adaptation efforts.

ICMA: How can early warning systems be strengthened so communities are better prepared before disasters strike?

Sherry Rehman: Pakistan's geography makes early warning a matter of survival. Our land mass contains 13,032 glaciers, the highest number outside the polar regions, and 3,044 glacial lakes, at least 33 of which are classified as dangerous. These pose a risk to 2 million people downstream, including 800,000 in immediate danger.

The current early warning landscape is still suboptimal. Despite investments, many warnings remain informal and arbitrary — in one instance, a shepherd alerted communities of an incoming GLOF. Glacier water mass has declined by 16% in just a few years, and each lake burst due to high temperatures wreaks havoc, destroying livelihoods and infrastructure, including bridges, within minutes. People in the path of such calamities require upgraded and reliable warning systems.

Even for river overflows, digital early warning systems can evacuate up to 90% of at-risk populations. The path forward involves integrating AI, satellites, sensors, and community evacuation protocols, especially since the UN recognizes early warning as a human right. Pakistan must coordinate agencies like PMD, NDMA, and the Flood Commission with private-sector weather forecasting entities for timely and effective warnings.

ICMA: Each province faces unique climate challenges. How can Pakistan build a coordinated, resilient response?

Sherry Rehman: While provinces have developed tailored strategies, especially in health, climate policies are rarely explicitly integrated, despite their clear adaptation benefits.

A coordinated response requires federal-provincial alignment through shared data, GIS-based catastrophe modelling, common screening standards, and harmonized project pipelines, ensuring that local priorities feed into national resilience planning rather than compete with it.

> **Pakistan must end unsafe construction and enforce climate-resilient land-use planning. The catastrophic 2022 floods exposed how fragile and poorly located structures collapsed within moments**

The federal planning process remains entangled in numerous aging projects that have not been financed, yet are still included in the PSDP planning, complicating integration with provincial needs. The Water Ministry remains under-leveraged, even as Pakistan's water crisis intensifies, and water planning cannot be separated from climate or environmental planning across sectors. This situation must change.

ICMA: How can businesses play a real role in climate action while supporting local communities?

Sherry Rehman: Businesses have a decisive role in Pakistan's climate response because every industry depends on energy, water, and stable supply chains, all of which are increasingly disrupted by climate change. Corporate climate action must therefore become a core business strategy, focused on adaptation, mitigation, governance, and accountability.

First, corporate adaptation is essential for business survival and community resilience. Companies must prepare for climate shocks such as extreme weather, resource scarcity, and supply chain disruptions by investing in resilient infrastructure, climate-smart supply chains, and resource-efficient technologies. These investments reduce operational risks, protect jobs, and ensure continuity for communities that rely on local industries and services.

Second, mitigation efforts are equally critical and commercially viable. Reducing the environmental footprint of business operations through renewable energy adoption, energy efficiency, cleaner production technologies, and circular economy principles directly supports emissions reduction while lowering costs over time. Transitioning away from high-emission practices—particularly in energy-intensive sectors such as cement and fertiliser, as emphasised in Pakistan's Nationally Determined Contributions (NDCs).

Third, climate considerations must be embedded in corporate governance and board-level decision-making. Climate risk is now a financial and strategic risk. International guidance, including OECD frameworks and the IFC's progression matrix and climate tip sheets, provides boards with tools to integrate climate into corporate purpose, strategy, risk management, and performance monitoring. The IFC guidance specifically helps boards identify, track, and respond to climate-related risks and opportunities, ensuring climate action is treated as a driver of long-term value, not a side issue.

Fourth, Pakistan's Green Taxonomy is a game-changer for credible corporate climate action. Green Taxonomy will create a common sustainability language—a "dictionary for sustainability"—for businesses, financiers, and policymakers. It will allow clear classification of economic activities, budget tagging and tracking, transparent reporting, accountability, and differentiation between green, transition (amber), and high-carbon (red) activities.

This framework ensures sustainability is measurable, comparable, and enforceable, not a tick-box exercise. The State Bank of Pakistan, working with the World Bank, has confirmed that Pakistan's taxonomy is globally aligned, joining 50 countries worldwide, including 14 in Asia, that have adopted similar systems. This initiative was approved in July 2025.

Fifth, businesses must address pollution, waste, and energy challenges together. With the Indus River now the second most polluted river in the world, and with no reliable data on waste dumping, corporate responsibility becomes unavoidable. Investment in low-cost incentives for plastic reduction, waste-to-energy technologies, and resource recovery systems is essential.

Finally, large corporations must use their influence to shape behaviour and culture. It is the responsibility of major companies to use their high-budget advertising and outreach platforms to promote green consumption, carbon neutrality, environmental literacy, gender inclusion, and a culture of conservation. This form of leadership integrates sustainability into everyday choices and aligns corporate power with the public good.

In short, when businesses align with Pakistan's NDCs, adopt Green Taxonomy, integrate climate governance at board level, and invest in clean energy, circular economy, and resilient systems, they protect their future while delivering real, lasting benefits to local communities.

However, the EU's Carbon Border Adjustment Mechanism (CBAM), which prices the carbon content of imports to prevent carbon leakage and support the EU's 2050 net-zero goal, poses a growing challenge for Pakistan, particularly as textiles are expected to be included from 2030. With the EU as Pakistan's largest export market and textiles its key export, even small carbon-related cost increases could erode competitiveness in a highly price-sensitive sector.

Pakistan is especially vulnerable due to structural issues: steadily rising industrial emissions driven by increased coal use, the often-overlooked problem of imported or "embedded" carbon in raw materials and intermediate inputs. Together, these trends heighten Pakistan's exposure to future CBAM costs, threaten export market access, and risk misalignment with its international climate commitments unless urgently addressed.

ICMA: Floods, air pollution and water contamination are urgent—what practical strategies can address these crises together?

Sherry Rehman: Floods, air pollution, and water contamination are not separate crises in Pakistan; they are different symptoms of the same structural failures in planning, governance, and environmental management. Addressing them together requires hard choices, enforceable standards, and people-centred solutions, not isolated fixes.

First, Pakistan must end unsafe construction and enforce climate-resilient land-use planning. The catastrophic 2022 floods exposed how fragile and poorly located structures collapsed within moments. A hotel was washed away in seconds, raising the fundamental question of why construction was ever permitted on floodplains and stormwater paths. Alarmingly, similar failures reappeared during the 2025 floods, showing that lessons were not institutionalised. Pakistan cannot continue building on floodplains, nullahs, and natural drainage corridors. Strong, climate-resilient infrastructure and strict zoning enforcement are non-negotiable. This is not about halting development, but about ending the dangerous normalisation of risk that repeatedly turns rainfall into disaster.

Second, nature-based solutions must be community-owned, not contractor-driven. Nature-based projects only endure when local people are recognised as custodians, not passive beneficiaries. The mangrove restoration in Keti Bunder succeeded because fishing families and coastal communities were empowered to govern access, monitor tidal flows, and maintain restored delta creeks. Similarly, community-led watershed restoration in mountainous regions—terraces, springs, and forest cover—stabilises slopes and reduces flood risk in ways no short-term contractor can replicate. Local ownership is not charity. It is the only model that survives political change, funding cycles, and climate uncertainty. Communities are agile and responsive if they have basic development needs addressed, such as sanitation and waste management, which remain under-addressed and under-financed in Pakistan's urban centres.

Third, every new project must meet mandatory green resilience standards. All urban and infrastructure developments should reserve at least 10% of project land for integrated green or blue space, not decorative landscaping, but functional rain gardens, wetlands, and green corridors that absorb stormwater, cool cities, and restore biodiversity. This approach is already standard in high-density cities such as Singapore and Seoul, where green infrastructure is treated as a core urban system, not optional aesthetics. Pakistan must follow suit to break the flood-pollution-heat cycle.

Fourth, pollution control must be treated as a public health and climate emergency. Pollution is a serial killer in Pakistan: 256,000 deaths annually linked to air pollution, 11 million children under five affected by smog in Punjab's worst-hit areas, USD 22 billion annual economic cost, nearly 6.5% of GDP. Children breathe twice as fast as adults, making pollution a generational injustice.

Fifth, transport, industry, and agriculture must shift simultaneously. Pakistan adopted the National Clean Air Policy in 2023, under which:

- **Transport:** Enforce vehicle inspection and maintenance, retire high-emitting heavy commercial vehicles, improve fuel quality to Euro-5 and Euro-6 standards, and prioritise clean buses on high-demand routes.
- **Industry:** Complete the transition to cleaner brick kiln technologies, mandate continuous real-time emissions monitoring, and require standardised third-party audits with public compliance reporting.
- **Agriculture:** Ensure strict implementation of the ban on crop residue burning with strong monitoring.
- **Waste:** Prevent open burning of municipal solid waste.
- **Households/Residential:** Promote use of low-emission cooking technologies.

Moreover, Pakistan recently introduced the New Energy Vehicle Policy (NEVP) 2025–30, which aims to see 30% of new sales comprising new energy vehicles (NEVs) in two-and three-wheelers, passenger cars, light commercial vehicles (LCVs), buses, and trucks by 2030.

It also targets 50% NEV sales by 2040 and aspires to reach a net-zero transport fleet by 2060. The policy aims for 100% of new vehicle sales across all segments to be NEVs by 2050. The NEVP also envisions the establishment of 3,000 charging stations by FY30, including Level 3 fast chargers and Level 2 chargers, with the target for FY26 set at 240 charging stations.

Sixth, water contamination and plastic pollution must be tackled at scale. Pakistan recycles only 1% of plastic, compared to a global average of 9%. Plastics choke drains, worsen flooding, and contaminate water bodies, with 9 million gallons of sewage discharged into Rawal Dam daily and the Indus River being the second most polluted river in the world. Banning single-use plastics, as already done in Islamabad, must be expanded nationwide. Investment is needed in plastic-to-material technologies, waste-to-energy, and circular economy models that reduce pollution while addressing energy shortages.

Finally, Pakistan must shift from mega-projects to innovation at scale. This is not the era of big dams, especially when funding gaps and cost overruns persist. The future lies in distributed innovation: plastics converted into usable materials, students and startups leading new environmental solutions, and nature-based solutions monetised through carbon credits, as demonstrated by the Delta Blue mangrove project.

ICMA: How can citizens, civil society and local governments turn climate policies into visible, measurable results?

Sherry Rehman: Civil society and local governments can support community-level monitoring, transparent reporting, and participatory planning, ensuring projects demonstrate real benefits for farmers, households, and vulnerable groups. Citizens everywhere in the world are actually making the change, including in Pakistan, where renewable energy is being utilised across the board, helping to reduce high losses from a leaky and inefficient power grid. Pakistan's rooftop revolution is a case in point, where low-cost solar panels from China have transformed the energy and emissions landscape. Pakistan is now the world's 6th-largest solar market.

A whole-of-country approach will require Pakistan holding its own Conference of Parties, where key agencies, both provincial and federal, come together to reshape the climate and resilience landscape while generating aligned and updated data for clear policy responses.

ICMA: What key lessons from recent climate disasters should shape Pakistan's future policies and infrastructure for stronger resilience?

Sherry Rehman: The central lesson is that reactive responses are no longer viable. The 2022 floods, subsequent Punjab floods destroying 2.5 million acres of farmland, and accelerating glacial melt, show that Pakistan must shift to proactive, digital, climate-smart adaptation.

Future policy must prioritise early warning systems, climate-proof infrastructure, transparent, high-quality project design, diversified financing beyond loans and people-first adaptation.

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