Republic of Korea – Concise Input to the COP30 Presidency-led Roadmap on "Transitioning Away from Fossil Fuels in Energy Systems in a Just, Orderly and Equitable Manner (TAFF)"

The Republic of Korea welcomes the COP30 Presidency's initiative to develop a practical, action-oriented Roadmap to support implementation of the Global Stocktake outcomes, including the call to transition away from fossil fuels in energy systems in a just, orderly and equitable manner. We view the Roadmap as a facilitative tool to map key barriers, identify enabling factors, and compile actionable options and good practices—without creating new obligations or prescribing a single pathway.

1. Guiding principles for the Roadmap

To be effective and broadly usable, the Roadmap should:

- Reaffirm the long-term objective of achieving net-zero greenhouse gas emissions. Recognizing that global temperatures may approach or temporarily overshoot 1.5°C, the Roadmap should reinforce the importance of sustained mitigation efforts and reaffirm the shared understanding that sustained emission reductions and a trajectory toward carbon neutrality are essential for all Parties, while recognizing the differentiated pathways through which this goal can be pursued.
- Be non-prescriptive and flexible, recognizing that there is no "one-size-fits-all" pathway. It should provide a menu of differentiated options consistent with national circumstances, development priorities, and energy-system realities.
- Integrate energy security, affordability, and reliability as essential design considerations. Transition pathways must be implementable while maintaining stable energy supply, grid resilience, and social acceptance.
- Embed a just transition perspective across all actions, including impacts on workers, communities, and vulnerable households, and encourage inclusive stakeholder engagement at all levels.
- Focus on implementation and enabling conditions, leveraging existing institutions and channels rather than establishing new mechanisms or duplicative reporting frameworks.

2. Priority levers to accelerate implementation

Korea suggests the Roadmap emphasize the following levers, with practical examples and "how-to" guidance:

(i) Strengthen implementation enablers, governance and legal frameworks

- Enhance institutional capacity, whole-of-government coordination, and planning frameworks that translate long-term goals into near-term investment and policy sequencing. Legislative underpinning is essential: countries should be encouraged to share experiences on enacting or strengthening legal frameworks—such as framework climate acts, sectoral mandates, and binding planning obligations—that provide policy certainty, accountability, and a durable basis for cross-ministerial cooperation.
- Promote transparent, inclusive decision-making and stakeholder engagement across national and subnational levels to strengthen legitimacy and manage distributional impacts. Strong policy leadership from central government, combined with active coordination among line ministries, sub-national governments, the private sector, and civil society, is critical to ensure coherent and effective implementation.

(ii) Mobilize transition finance and improve access to investment

- Prioritize actions that improve accessibility, efficiency, and alignment of existing climate finance channels with country-driven transition priorities. In particular, the concept of transition finance—financing that supports the managed and phased transformation of carbon-intensive industries and infrastructure toward lower-emission pathways—should be recognized as a critical complement to conventional green finance.
- Scale de-risking and blended finance solutions (e.g., guarantees, insurance, concessional tranching/first-loss structures) to crowd in private capital for transition-relevant infrastructure and industrial transformation. For developing countries and emerging economies in the Global South, where the investment gap is most acute, strengthening the mobilization of concessional and grant-based finance, alongside capacity to attract private flows, remains essential.
- Support project preparation and pipeline development (technical assistance, feasibility studies, regulatory readiness) to move from ambition to bankable projects. Multilateral development banks and international financial institutions should play a catalytic role in de-risking early-stage transition investments in emerging economies.

(iii) Accelerate technology deployment and enabling infrastructure

- Highlight the critical role of grids and system flexibility (transmission expansion, grid modernization, storage, demand response, digitalization) as "no-regrets" enablers that unlock carbon-free energy at scale.
- Promote energy efficiency and electrification (buildings and industry) and other demand-side measures that reduce system costs while cutting emissions.
- Encourage the rapid deployment of best available technologies (BAT) alongside continued investment in innovation. While next-generation technologies for hard-to-abate sectors remain important, maximizing the deployment of proven, commercially available solutions—including high-efficiency equipment, industrial heat pumps, and advanced grid management systems—can deliver immediate emission reductions at lower cost and risk.
- Facilitate technology cooperation and innovation partnerships that improve affordability and deployment readiness, including capacity-building for technology absorption in developing countries.

(iv) Align policy packages and sequence actions pragmatically

- Encourage sharing experience on designing effective policy packages, focusing on implementation features such as coverage, phase-in approaches, predictability, and revenue recycling—while managing competitiveness and social impacts in line with national circumstances.
- Emphasize that policy mixes work best when combined with complementary measures (innovation support, infrastructure investment, skills development, targeted assistance for households and communities).

(v) Leverage cooperative platforms and partnership models as accelerators

- Use the Roadmap to connect Action Agenda initiatives and cooperative platforms to country needs—supporting partnerships that accelerate implementation, share solutions, and align resources with nationally determined priorities.
- Recognize the value of structured partnership models such as the Just Energy Transition Partnerships (JETPs) as practical vehicles for mobilizing finance, technology, and capacity-building support in emerging economies undertaking ambitious energy transitions. The Roadmap could highlight lessons from such initiatives—including on investment planning, stakeholder coordination, and resource mobilization—as replicable elements that other countries and partnerships may draw upon.

3. Relevant national experience and lessons learned

Korea's experience in advancing the energy transition offers insights into both the structural challenges that can impede progress and the enabling conditions that support effective implementation.

Like many industrial economies, Korea has encountered a set of structural challenges in scaling up renewable energy deployment. These experiences have generated practical lessons that inform Korea's current approach, particularly regarding: (a) the importance of sustaining long-term policy predictability and investment signals in the energy sector, where gaps in continuity can affect the confidence of investors and the coherence of industrial planning; (b) the need to actively maintain and develop domestic renewable energy supply chain capacity, as vulnerability in this area can reduce competitiveness and increase dependence on external sources; and (c) the critical role of proactive engagement with local communities and stakeholders to secure social and local acceptance for the siting and deployment of renewable energy infrastructure.

Drawing on these experiences, Korea is now pursuing a more integrated and coherent approach:

- Consistent and predictable energy policy: Korea is strengthening long-term policy frameworks and legal instruments, including the Korea Green Transformation (K-GX) Strategy, to provide durable investment signals and support coordinated industrial alignment across government and the private sector.
- Active participation across global supply chains: Korea is working to position domestic industry as a competitive player across global renewable energy supply chains, leveraging multi-level engagement—from manufacturing to deployment—to build supply chain resilience and enhance industrial readiness for the transition.
- Building energy consensus and social acceptance: Korea recognizes that broad public support and local community engagement are foundational to the success of the energy transition. Korea is exploring community benefit-sharing models that enable citizens and local communities to participate directly in the economic opportunities created by renewable energy deployment, fostering local ownership and social consensus around the transition.

More broadly, Korea is advancing a whole-of-society approach to climate action, supported by coordinated planning across government ministries, economic associations, and diverse stakeholders. Sectoral transition pathways in energy, industry, buildings, and transport are being developed with the objective of enhancing national competitiveness while driving sustainable growth. Korea’s experience underscores the importance of sustained whole-of-government coordination as a foundation for credible and implementable transition strategies.

4. Key barriers to address

Common barriers that the Roadmap can help address include:

- Financing constraints and limited access to affordable capital, especially for high up-front infrastructure investments and for the phased transformation of energy-intensive industries and infrastructure toward lower-emission pathways.
- Implementation bottlenecks (permitting, grid constraints, project preparation gaps, and limited institutional capacity).
- Technology and supply-chain constraints, including uneven readiness for deployment at scale and limited absorption capacity in developing countries.
- Social acceptance and distributional impacts, which require proactive just transition measures, community benefit-sharing, and sustained stakeholder engagement.

Closing

Korea stands ready to continue engaging with the COP30 Presidency and partners to ensure the Roadmap is practical, inclusive, and supportive of implementation across diverse national circumstances. We encourage the Roadmap to serve not only as a toolbox of options, but also as a practical guide for implementation that helps Parties identify relevant enabling conditions, sequence actions, and connect priorities with investment and cooperation opportunities—including through transition finance mobilization and just transition measures—while fully respecting the nationally determined character of each Party's transition pathway. In this way, the Roadmap can support more credible, orderly, and equitable progress on the ground.