



KAPSARC Submission to the UNFCCC on the Organization of the Veredas Dialogue

Author: Fatih Yilmaz, Principal Fellow, Climate and Sustainability, KAPSARC

Contact: fatih.yilmaz@kapsarc.org

Date: February 28, 2026

I. Background

Building on the Sharm el-Sheikh (SeS) Dialogue (2023-2025), CMA7¹ decided to hold discussions under the Veredas Dialogue on the implementation of Article 2, paragraph 1(c) of the Paris Agreement and its complementarity with Article 9 of the Paris Agreement. Acknowledging that there remains no common interpretation on the scope and manner of implementation of Article 2.1(c); taking into account the concerns and safeguards raised by Parties, and recognizing that efforts are already being made by Parties, in a nationally determined manner, for making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.

The Dialogue is to (a) convene at least once a year in conjunction with the first meeting of the Subsidiary Bodies of the year, beginning in June 2026, (b) convene during the Xingu Finance Talks as its annual high-level roundtable, and (c) raise dialogue outcomes for consideration by the CMA during the respective year. It is set to be reviewed at CMA10 in 2028.

It is to be organized in an open, transparent, and inclusive manner, open to all Parties and financial and non-financial stakeholders. Each year, Parties are invited to submit views on the organization of the dialogue on the 28th of February.

II. Context

Although the SeS Dialogue was unable to arrive at any substantive agreements regarding the scope of the implementation of Article 2.1(c), CMA7 acknowledged key concerns and safeguards raised by developing countries. These concerns may serve as guardrails to facilitate deliberations under the Veredas Dialogue and move toward more action-oriented outcomes. These include (i) the importance of pursuing the implementation of Article 2 holistically, with the implementation of 2.1(c) aimed at facilitating the achievement of Article

¹ https://unfccc.int/sites/default/files/resource/cma2025_L11E.pdf.

2.1(a) and (b); (ii) the understanding that Article 2.1(c) is complementary to, and not a substitute for, the provision and mobilization of financial support to developing countries under Article 9 of the Paris Agreement; (iii) bearing in mind that efforts to implement 2.1(c) are nationally determined, country-driven, and bottom-up in nature, respecting national sovereignty and taking into account national circumstances, especially those particularly vulnerable to climate impacts; (iv) ensuring that deliberations should be undertaken in a facilitative, enabling, non-punitive, and non-prescriptive manner; and (v) making sure that reporting and implementation ensure transparency without imposing an additional burden on the Parties.

Stocktaking during the SeS Dialogue outlined domestic and global actions by both public and private institutions to implement Article 2.1(c) and identified key opportunities and challenges that may be further considered as Parties deliberate on its effective implementation. The outcomes identified challenges in aligning financial flows, including (i) the lack of access to relevant climate data; (ii) the limited information to track progress; (iii) disparities in investments across geographical and sectoral areas; (iv) limited capacities to assess climate-related and corresponding financial risks, which in turn affect credit ratings and access to financing; and (v) the lack of coordination across the public and private sectors, as well as cross-jurisdictional efforts to implement Article 2.1(c), among others.

It was likewise noted through the SeS Dialogue that interactions across North-South networks, as well as across non-financial sectors (i.e., scientists, academics, policymakers, and civil society and corporate stakeholders), are critical for robust learning and collaboration. Parties recognized the need for greater involvement of the financial sector in addressing climate change, which will require system-wide capacity-building for key actors, including governments, central banks, large public and private financial institutions, and local financial institutions (e.g., community banks and sector-specific and local-level cooperatives).

III. Proposed Themes for the Dialogue

Drawing on KAPSARC's recent research, this paper presents three key proposals for consideration in the Veredas deliberations for 2026:

1. **A time-bound action plan to mobilize and deliver finance to developing countries:** Develop a comprehensive plan to accelerate the mobilization and disbursement of urgently needed funds, aligned with short-, medium-, and long-term objectives.
2. **Closing the financing gap for hard-to-abate sector technologies:** Address the relative underinvestment in hard-to-abate sector technologies by adapting technology-agnostic sustainability (i.e., Environmental, Social, and Governance) practices and crowding in capital at scale.

3. **A holistic and flexible finance framework for an inclusive energy transition:** Adopting a holistic energy transition approach that enables all relevant clean technologies to contribute to net-zero goals can help develop more flexible financial practices that reflect the needs and circumstances of all countries.

(1) A Time-Bound Action Plan to Mobilize and Deliver Finance to Developing Countries

Estimated global investment needs for the transition to net zero are approximately US\$5-7 trillion annually through to 2050 (Yilmaz et al. 2022). While global investment levels lag far behind what is required, hovering around US\$2 trillion annually over the last few years, investment gaps (i.e., the difference between model-estimated needs and actual transition investment levels) are extremely large in developing countries. Among the major factors contributing to these gaps, access to necessary finance is perhaps the most significant, given the high concentration of private sustainable finance flows in developed countries.

Given the scale of investment needs, public and cross-country flows, including those from Multilateral Development Banks (MDBs) and dedicated Multilateral Climate Funds (MCFs), are critical as a first step, although expanded mobilization of private financial resources will also be essential. However, studies find that global private sustainable finance flows are concentrated in a small number of developed countries, while flows to developing countries, where they are most needed, remain strikingly limited (Cilekoglu and Yilmaz 2025; Yilmaz and Cilekoglu 2024). Various factors may underpin this pattern, including underdeveloped financial systems and limited adoption of sustainability practices, high investment and climate-related risks, and insufficient climate policy initiatives compared with those in developed countries.

Considering these realities, a holistic action plan is needed to accelerate the mobilization and delivery of urgently needed funds to developing countries, such that:

- a. In the *short term*, mobilizing financial flows from developed (i.e., Annex I) to developing countries (i.e., Non-Annex I) through grants and concessional finance is critical to address urgent financing needs. Additionally, strengthening multilateral frameworks, MDBs, and MCFs, such as the Green Climate Fund, is also important for bridging the financing gap in developing countries. These funds can be particularly efficient when blended with other private or public funds to lower financing costs and derisk low-carbon technologies, making them more appealing to investors (Yilmaz and Cilekoglu 2025). For instance, credit and bond guarantee programs are traditional blended finance practices that are successful at accelerating investment into targeted areas, including energy transitions, which can also contribute to the development of financial institutions and capital markets (Garbacz et al. 2021).

- b. In the *longer term*, given the scale of investment required for both mitigation and adaptation, significantly more private finance will be needed to address longer-term net-zero investment needs. Therefore, in the mid- to long-term, supporting the development of local sustainable finance infrastructure, as well as the relevant capital markets and institutions, will be critical for developing countries to further accelerate their access to private finance (Yilmaz 2026). The capacity building of national and local financial institutions is key to improving environmental and climate awareness of sustainable finance and strengthening sustainability literacy. These measures can also help increase capacity for climate data collection and analysis, conduct risk assessments, and comply with sustainability reporting and transparency requirements (Cilekoglu and Yilmaz 2025). Conducting such capacity-building through strengthened North-South cooperation, alongside experience sharing via South-South cooperation, would help leverage best practices and expand networks across financial institutions.
- c. Policymakers should foster an enabling environment for the financing of low-carbon initiatives by: (i) advancing sustainability disclosures and taxonomies, (ii) mobilizing blended finance mechanisms through the use of public funds to derisk private capital, and (iii) implementing comprehensive policies and finance frameworks that send clear signals around long-term national priorities to encourage private sector investments/participation (Cilekoglu and Yilmaz 2025).

(2) Closing the Financing Gap for Hard-to-Abate Sector Technologies

Decarbonizing hard-to-abate sectors (e.g., petrochemicals, steel, and cement) is essential to achieving global net-zero ambitions, given their central role in domestic and international supply chains. However, these industries face structural constraints: many of their core processes cannot be easily decarbonized through conventional electrification or standard renewable energy solutions. As a result, transitioning to environmentally sustainable production pathways is more complex, and credible strategies increasingly depend on technologies such as carbon capture, utilization, and storage (CCUS) and clean hydrogen (Yilmaz 2024).

Many hard-to-abate industries have migrated and expanded in developing countries due to various historical factors, including comparatively less stringent environmental regulations. As a result, CCUS and clean hydrogen are often especially important in shaping decarbonization pathways in these contexts. However, both technologies are highly capital-intensive, requiring substantial upfront investment, which is an enduring constraint in the Global South, where limited access to affordable finance continues to impede large-scale deployment (Roychoudhury, Hatipoglu, and Yilmaz 2024).

Current investment in these technologies remains severely inadequate, falling far below the levels required by global net-zero pathways, and beyond the technical challenges and policy uncertainties, stigmatization also appears to be present among financiers toward these technologies (Sieminski and Yilmaz 2022). According to the IEA (2021), annual investments required to achieve net zero are estimated at US\$205 billion for carbon CCUS and US\$165 billion for clean hydrogen (2021–2030), yet current average annual investments stand at only US\$6.3 billion for CCUS and US\$5 billion for clean hydrogen (Yilmaz 2024). Most existing projects have been financed primarily through government subsidies. This financing approach is more common and feasible in developed countries, which is why CCUS and clean hydrogen projects currently tend to be concentrated there. Developing countries, despite being most in need of such technologies due to their high economic dependence on hard-to-abate sectors, are often unable to provide the scale of incentives required to attract investment.

Developing countries are under pressure to decarbonize hard-to-abate sectors to avoid the adverse financial implications of global and jurisdictional decarbonization policies, such as the EU’s Carbon Border Adjustment Mechanism. Uncoordinated policy implementations and technology-prioritized project financing (e.g., renewable energy) may stigmatize or hinder investment in the low-carbon technologies needed by developing countries (Yilmaz 2024). Some key recommendations to promote investments in essential technologies for hard-to-abate sectors include the following:

- a. The adoption of comprehensive plans/policies that outline decarbonization pathways for heavy industries and other hard-to-abate sectors to send clear signals to investors.
- b. Greater flexibility to address the needs of hard-to-abate sectors, along with enhanced inclusiveness in transition technologies and financing, particularly for developing countries, requires a more holistic approach within sustainability frameworks to support low-carbon technologies.

(3) A Holistic and Flexible Finance Framework for an Inclusive Energy Transition

Considering the long-term global goals of the Paris Agreement, Parties’ contributions are shaped by their development status and are subject to their national circumstances and endowments. One-size-fits-all approaches cannot address the needs of all regions and countries. Global transition narratives should therefore be more holistic, technology-agnostic, and inclusive in identifying the relevant technologies needed to reach net zero. Such a transition framework can help align sustainable finance practices with national circumstances, thereby strengthening support for transition efforts, especially in developing countries.

The Circular Carbon Economy (CCE) concept,² launched in 2020 and endorsed by G20 leaders, could better serve as a flexible net-zero transition concept. It provides a promising framework for more inclusive transition strategies, expanding the use of “reduce, recycle, and reuse” to include “remove” in the context of addressing carbon emissions. Using such a framework allows for the consideration of various technologies and activities, providing greater flexibility for developing countries that often have more carbon-intensive or hard-to-abate industries and greater barriers in accessing technology and financing for low-carbon initiatives.

The CCE Index,³ developed by KAPSARC, monitors global net-zero transition performance and potential for 125 countries, and it could also be a useful tool for the Veredas Dialogue discussions (Luomi et al. 2026). The CCE Index covers a comprehensive set of quantitative metrics for (a) emission circularity performance (implementation of transition technologies such as renewable energy, nuclear energy, fuel switching, natural sinks, CCUS, etc.) and (b) net-zero transition enablers (such as adopting policies and regulations, technology and innovations, financing, business environment enhancements, and system resilience). Over the past five years, from 2021 to 2025, the CCE Index indicates incremental yet varying levels of progress across countries and technologies. Among the key findings from the latest edition of the CCE Index is that a significant share of the world’s population continues to live in countries that are falling behind in the transition (Luomi et al. 2026). This may indicate a lack of resources to pursue net-zero or transition strategies, raising concerns from a just transition perspective.

Increasing access to existing financial mechanisms, such as highly concessional loans and grants, is essential to boost finance flows to developing and vulnerable countries. Likewise, financing frameworks must adopt a more holistic approach that considers the real economic, development, and transition needs of developing countries, and, in particular, the varied technologies needed to make a dent in emissions reductions in hard-to-abate sectors on the path to net zero.

IV. Proposed Work Modalities

It is important for the Veredas Dialogue to draw lessons from past stakeholder engagements. This should be done by emphasizing the need to ensure deliberations move toward action-oriented/concrete outcomes. Concerns raised and safeguards established during the SeS Dialogue should be honored in order to avoid re-opening agreed elements.

While drawing lessons from past stakeholder engagements, it is critical that *the dialogue design be innovative and creative. Strategic engagement with key stakeholders, especially those who were not involved in previous dialogues*, is also necessary. New approaches must

² <https://www.cceguide.org/guide/>

³ <https://cceindex.kapsarc.org/cceindex/home>

be adopted, and more stakeholders must be engaged to gather deeper insights and achieve more practical outcomes.

Finally, the *principles of inclusivity, transparency, comprehensiveness, and balance* must guide the Veredas Dialogue throughout its implementation. In this context, there must be explicit consideration of national circumstances and the specific needs of developing countries to transition to net-zero economies. This includes, but is not limited to, differences in governance structures, capacities, and constraints within financial systems; economic priorities; and technology solutions suited to hard-to-abate sectors on which developing economies might depend.

References

- Cilekoglu, Akin A., and Fatih Yilmaz. 2025. "Determinants of Sustainable Finance Flows: A Literature Review." Riyadh: King Abdullah Petroleum Studies and Research Center (KAPSARC). <https://www.kapsarc.org/our-offerings/publications/determinants-of-sustainable-finance-flows-a-literature-review/>.
- Garbacz, Weronika, David Vilalta, and Lasse Moller. 2021. "The Role of Guarantees in Blended Finance." OECD Development Co-operation Working Paper 97. May. https://www.oecd.org/content/dam/oecd/en/publications/reports/2021/06/the-role-of-guarantees-in-blended-finance_cef700a2/730e1498-en.pdf.
- International Energy Agency (IEA). 2021. *NetZero by 2050: A Road Map for the Global Energy*. <https://www.iea.org/reports/net-zero-by-2050>.
- Luomi, Mari, Fatih Yilmaz, Hind Aldhuwaihi, and Thamer AlShehri. 2026. "The Circular Carbon Economy Index 2025: Results." Riyadh: King Abdullah Petroleum Studies and Research Center (KAPSARC). <https://www.kapsarc.org/our-offerings/publications/the-circular-carbon-economy-index-2025-results/>.
- Roychoudhury, Jitendra, Emre Hatipoglu, and Fatih Yilmaz. 2022. *Enhancing Environmental, Social and Governance Frameworks to Scale Up Climate Finance*. Policy Brief, Task Force 9. Think 20 (T20) Indonesia. https://www.t20indonesia.org/wp-content/uploads/2022/08/TF9_Enhancing-environmental-social-and-governance-frameworks-to-scale-up-climate-finance.pdf.
- Sieminski, Adam, and Fatih Yilmaz. 2022. "Investing in Net-Zero Emission Ambitions: Global ESG Frameworks and CCUS Projects." Riyadh: King Abdullah Petroleum Studies and Research Center (KAPSARC). <https://www.kapsarc.org/our-offerings/publications/investing-in-net-zero-emission-ambitions-global-esg-frameworks-and-ccus-projects/>.
- Yilmaz, Fatih, Fahad Alswaina, Fateh Belaid, Mohamad Hejazi, Mari Luomi, Salaheddine Soummane. 2022. "Closing the Investment Gap to Achieve Paris Agreement Goals." Riyadh: King Abdullah Petroleum Studies and Research Center (KAPSARC). Submission

to the UNFCCC Global Stocktake, August 18.
https://unfccc.int/sites/default/files/resource/202208101704---KAPSARC_GST%20submission_4%20August%202022.pdf.

Yilmaz, Fatih. 2024. "Financing the Decarbonization of Hard-to-Abate Sectors: Trends, Issues, and Ways Forward." Bank for International Settlements.
https://www.bis.org/ifc/publ/ifcb63_26.pdf.

Yilmaz, Fatih. 2026. "The Global South's Sustainable Finance Gap: The Role of Financial Development." Riyadh: King Abdullah Petroleum Studies and Research Center (KAPSARC). <https://www.kapsarc.org/our-offerings/publications/the-global-south-s-sustainable-finance-gap-the-role-of-financial-development/>.

Yilmaz, Fatih, and Akin A. Cilekoglu. 2024. "Why Does Sustainable Finance Not Flow into the Global South?" Riyadh: King Abdullah Petroleum Studies and Research Center (KAPSARC). <https://www.kapsarc.org/our-offerings/publications/why-does-sustainable-finance-not-flow-into-the-global-south/>.