EIA Briefing to the 95th Meeting of the Executive Committee of the Multilateral Fund (ExCom95)

4 – 8 December 2024

Addendum addressing Stage I KIP submission for Nigeria

The Stage I KIP proposal for Nigeria was uploaded to the ExCom95 meeting portal after drafting of the EIA briefing was concluded. As such, it was not reflected in the review of KIPs included in the main briefing document. In this short addendum, EIA provides a review of Nigeria's Stage I KIP.

Document 95/70: Nigeria, Stage I KIP

Revised consumption data

The Government of Nigeria has requested a revision to its HFC consumption data covering the baseline years of 2020-2022, suggesting that weaknesses in its reporting system – including the fact that reporting of HFC consumption was voluntary between 2020-2021 – have resulted in an established baseline that does not reflect the country's actual HFC consumption needs. In 2024, UNDP undertook a mission to Nigeria to corroborate the country's situation and collect more accurate data; this updated data has been submitted to the Ozone Secretariat and will be considered by the Implementation Committee at its 74th meeting, in 2025. If approved, the revision would increase the country's baseline from 15,187,779 CO_2-eq tonnes to 22,619,715 CO_2-eq tonnes.

The analysis below is conducted based on the revised data provided in Nigeria's KIP, however EIA is concerned at the significant increase in the baseline, which puts it far above current HFC consumption levels.

Review of KIP

The Stage I KIP for Nigeria proposes to reduce the country's HFC consumption by 10 per cent from the baseline in 2029. Until that point, Nigeria is proposing to apply consumption targets that reflect the freeze at 100 per cent, based on the revised data submitted to the Ozone Secretariat. As a result, EIA notes that consumption will continue to grow in the country, with the proposed level of consumption in 2029 being 21 per cent higher than average consumption between 2020-2022 (see Table 1). Although EIA recognises that Nigeria's consumption would be expected to grow beyond this in an unconstrained scenario, we nonetheless call on Nigeria to consider increasing its ambition.

We remind all ExCom members of our call for KIP consumption limits to reflect actual HFC use and demand, noting again that an approach which establishes consumption limits based on average HFC consumption during the baseline years (with allowances for reasonable and justified growth) would ensure that all countries submitting KIPs are equally committed to curbing HFC growth.

Table 1: Comparison between average consumption in 2020-2022 and proposed HFC consumption in 2029 (CO_2-eq tonnes)

Country	Kigali baseline (revised data)	Average HFC consumption 2020-2022 (revised data)	Proposed HFC consumption in 2029	% difference between proposed HFC consumption in 2029 and…	
				… Kigali baseline (%)	… average consumption 2020-2022 (%)
Nigeria	22,619,715	16,890,614	20,357,742	-10	+21

Turning to the proposed activities under Nigeria's Stage I KIP, EIA is pleased to note the emphasis placed on preparatory activities to facilitate the scaling up of natural refrigerant- and hydrocarbon-based technologies in the country. Alongside updates to the training curricula for technicians, EIA particularly welcomes the pilot project for the commercial refrigeration sector, which will see the installation of two R-290 monoblocs in cold rooms for food storage, the demonstration of an indirect glycol/chilled water-cooling system in an industrial cold room application, and the replacement of an R-410A-based multi-split commercial AC with an R-290-based centralised system. Also in the commercial refrigeration sector, EIA appreciates Nigeria's proposed conversion of 15 SMEs to the manufacture of R-600a-based equipment.

In the context of these efforts to lay the groundwork for a wider adoption of natural refrigerants and hydrocarbons, EIA is disappointed that Nigeria is proposing to convert two residential AC manufacturing lines at its enterprise HPZ to HFC-32. HFC-32 is not a low-GWP refrigerant and baking-in an ongoing reliance on HFCs in this sector increases the risk that a second transition will be required when the country's deeper, more stringent phase-down steps take place. Noting that other countries and regions have adopted standards that allow for the safe and effective use of hydrocarbon-based technologies in this sector, EIA urges Nigeria to reconsider its choice of refrigerant.

Finally, the Government of Nigeria have also proposed in their Stage I KIP to phase-out HFCs from the foam manufacturing sector. Whilst EIA supports the goal of phasing-out HFC use from this sector, we note several concerns about the proposed use of HFO-1233zd as the selected alternative. It has been noted in previous reports to the ExCom that HFO-based technologies in the foam sector are prohibitively expensive while multiple agreed projects have reverted to high-GWP HFCs due to a lack of availability of the HFO blowing agents. In addition to this, there are significant climate, health and environmental concerns associated with HFO breakdown products, many of which are PFAS. HFO-1233zd forms up to ten per cent TFA and also forms HFC-23 in the atmosphere through UV photolysis.[1] We remind Nigeria that hydrocarbon- and water-based technologies have now been successfully adopted in many countries, and that these technologies are ultra-low- or zero-GWP alternatives which are future proof.

[1] Kauffeld, M. (2024). *Keynote at Atmo Summit: PFAS – A growing concern in the HVACR industry*. Accessible at: https://atmo.org/presentations/keynote-pfas-a-growing-concern-in-the-hvacr-industry/