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Methodologies Panel
UNFCCC

10 November 2023

Dear Sir / Madam

Feedback on Annex 7, MP92 re fNRB values

Thanks for the opportunity to provide feedback on the Info Note on fNRB default values. Attached is our technical submission in the template format requested.

In addition to the technical comments, we seek to highlight a major challenge that the ultra-conservative values being proposed will create:

- Governments in the global south seek to transition their nations away from charcoal/wood, and onto modern energy solutions. The only material energy cooking energy transition that has occurred to date in developing countries has been the urban transition to fossil LPG in middle-income nations such as India, Indonesia and Brazil. These transitions have been made possible with billions of dollars of government subsidy.

- Lower income tropical forest nations simply do not have the resources to undertake fossil LPG subsidy programs at scale. Moreover, the development financing partners (eg IMF) of these countries increasingly are adopting policy prescriptions against fossil fuel subsidies.

- The objective of nations is to enable the universal adoption of ISO "Tier 4" or "Tier 5" solutions, which includes electricity, bioethanol, LPG and biogas. Over decades of experience, the development industry has moved conclusively away from "improved cookstoves" that use charcoal and wood, recognizing that they do not deliver the desired health or environmental outcomes. This is reflected in programs such as the UK's Modern Energy Cooking Services (**https://mecs.org.uk/**) and NEFCO's Modern Cooking Facility for Africa (**https://www.nefco.int/financing/other-regions/modern-cooking-facility-for-africa/**)

- The development aid industry simply does not have the budget to provide the economic subsidy require to fund the energy transition to modern cooking. Low income tropical forest nations simply do not have the budget to fund these subsidies.

- The Article 6 Mechanism of the Paris Agreement creates the opportunity to unlock the carbon revenues required to fund this non-government energy subsidy, and enable large-scale adoption of modern clean energy solutions across entire nations.

- KOKO has proven this model at scale, in building the world's first carbon-financed bioethanol cooking fuel utility, which now serves over 1.1 million households across 12 urban centres in Kenya. We have delivered over $100 million in carbon value, primarily risk capital, into the wallets of Kenyan households as product discounts on modern appliances and clean fuel. The return on this investment is through carbon, the bulk of which is used to fund ongoing the ongoing fuel subsidy required by low-income consumers.

- The adoption of default values that do not represent the observed reality, or an arbitrary cap on default values in a well-meaning attempt to improve quality, threatens to actually achieve the opposite: a reduction in the overall carbon-revenue-subsidy available to fund energy transition and forest protection. Under some of the default values proposed, the only solutions that will be financeable are the low-cost and dubious-quality ICS that deliver negligible impact on the ground.

- Higher quality solutions, such as Tier 4 and Tier 5 solutions desired by governments and required to solve the woodfuel crisis, are fundamentally higher cost. They require higher volumes of carbon revenue (yield x price) to fund the consumer subsidy required (on both appliances and fuel) to make them affordable. By pursuing a policy of arbitrary yield caps (via ultra-conservative fNRB values) that do not reflect the observed reality, the Methodologies Panel runs the very real risk of entrenching poor quality in the market, rather than resolving it.

- In effect, the Panel is currently deciding on the quantum of carbon-revenue-subsidy that will be available to solve the dirty cooking crisis in low income nations, through building modern cooking energy infrastructure and fuel delivery systems. There are more sensible approaches possible to implement quality control in the market, in order to weed out the bad actors delivering primitive solutions and extracting supernormal margins.

Do not hesitate to contact me at any time on **g.murray@kokonetworks.com**

Yours sincerely

Greg Murray
Chief Executive Officer & Co-Founder

Template for comments

Date:	Document:

TABLE FOR COMMENTS

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#	Para No./ Annex / Figure / Table	Line Number	Type of comment **ge** = general **te** = technical **ed** = editorial	Comment (including justification for change)	Proposed change (including proposed text)	Assessment of comment (*to be completed by UNFCCC secretariat*)
1	Para 31	1	General	The information Note is a 67-page document with a very technical focus based on analysis of a large amount of data. This has been carried out over months of efforts by an strong and credible research team. UNFCCC should provide a sensible review time period to the stakeholders to enable a similar level of rigour to be applied in the analysis and public comments.	We propose to extend the period for consultation up to 60 days from the date of issue, i.e. 12th December 2023.	
2	Para 7	1	General	The starting sentence should be revised to highlight the key objectives of the study, in accordance with the recommendations of para 25 of EB 116	"In that context, the EB116 requested the MP to develop accurate and reliable subnational/regional values of fNRB which are consistent with the methods contained in "Tool 30: Calculation of the fraction of non-renewable biomass".	
3	NA	NA	General	It shall be noted by the EB that the decision to revise a baseline parameter taken in isolation, without reviewing all tenets of the methodology, may result in glaring omissions in the assessment.	We propose a comprehensive review of the Default Factor Tool & the associated methodology as a combined exercise.	

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4	Para 9	1	Technical	It is assumed, while considering a baseline fNRB value, that the all the project interventions would result in the same reduction of the non-renewable biomass equivalent to the quantum of biomass replaced in the households. However, this assumption does not pay consideration to the fact that many project interventions which are based on marginal efficiency gains (Improved Cookstoves) in a localized area will not impact the supply of non-renewable biomass and the demand would remain unchanged through a new price equilibrium. In summary, different cooking technologies will result in different impacts on the reduction in non-renewable biomass consumption. The capability to achieve emission reduction by a cooking project is dependent on the technology's ability to replace/reduce demand and disrupt supply of non-renewable biomass at the same time.	The simplified concept of fNRB should be evolved into an impact potential factor of a technology on replacement/reduction of biomass from the local/regional/national fuel-mix. Apart from localized demand-supply scenario of wood, the fNRB tool should also incorporate other project specific factors which may impact its ability to displace the non-renewable wood. For instance, small size intervention has a high risk of leakage due to unchanged supply structure in the region. The methodology applying fNRB values should also develop a tool to assess the project's ability in displacement of non-renewable biomass within the project area. The projects, which are not able to objectively justify impact on the supply of non-renewable woody biomass, shall not be allowed to apply new fNRB values.	
5	Para 9	1	Technical	Paragraph 9 of the document states that both WISDOM and MoFuSS models are based on the same basic concepts but with several key differences. However, there is extremely poor correlation between the results obtained from the two models (Fig 22). The reason for poor correlation between the two models is not discussed in the report. The use of updated values should not result in significant deviations unless there is a drastic landscape change in Sub-Saharan Africa during last few years.	We propose that the external experts should further research on the reasons and the appropriateness of such deviations and their impact on reliability & consistency of the new model.	

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6	NA	NA	Technical	1. There are many sub-regional fNRB values which do not correlate to the ground observations of those localities. This issue is notably exemplified in the case of key charcoal-consuming neighborhoods in Nairobi, including Kibera, Mathare, Embakasi, Makadara and Ruaraka, where sub-regional fNRB values range at around 0-5%. Complementarily, in urban areas such as Embakasi Central, Embakasi North, Embakasi West, and Embakasi South, where supply dynamics are different from traditional rural areas, fNRB values should be more reflective of the urban supply context. Moreover, in regions like Kibra and Starehe, allocating near-zero fNRB values (0-5%) does not align with the actual dynamics of fuel procurement and consumption. Such inconsistencies necessitate an in-depth reassessment and adjustment of fNRB values to better correspond with actual scenarios. In contrast, the Westlands neighborhood, characterized by a dominance of LPG fuel usage, is allocated a much higher fNRB value of 44%. Notably, an overarching supply scenario prevails, with 100% of fuelwood and charcoal consumed in Nairobi procured from other provinces, notably Kitui, Kwale, Baringo, Narok and Kajiado. Consequently, the supply scenario for all Nairobi neighborhoods is fundamentally the same, emphasizing the importance of congruence in fNRB values across these areas. In addition to these concerns, similar anomalies emerge at both national and sub-regional levels in other countries, underscoring the need for a comprehensive reassessment of fNRB values. For instance, in areas with high production of charcoal in Kenya such as Kwale, variations in fNRB values between 15% and 31% are observed. Furthermore, regions like Narok which is also a high charcoal production zone exhibit fluctuating values, with fNRB ranging from 16% to 45%. In Baringo, fNRB values vary from 36% to 44% which is quite low given the level of charcoal production in the region. These variations are indicative of the critical importance of harmonizing fNRB values with the local supply scenarios and actual observations on the ground. Similar issues at both national and sub-regional levels are observed in other countries.		
7	Para 16	1	Technical	The methodology used for the projection of demand (as described in paragraph 16) lacks the same rigor as applied for supply projections. It applies a very simplistic approach of primary user multiplied by the average consumption which does not take into account many factors like the secondary fuel consumption which is prevalent in African countries.	We request the research team to improve the demand projection methodology using the ground-level data in the next phase.	

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8	Para 17	1	Technical	Paragraph 17 suggests that the study excluded the demand from non-residential sectors. This seems to be a significant deviation from the methods identified in Tool 30 and the appropriateness of the same should be carefully considered by the Meth Panel/Executive Board. The issue arises from the selective focus of the model on residential woodfuel demand, disregarding the demand emanating from non-residential sectors, including formal and cottage industries and commercial establishments. Tool 30, which serves as a foundational framework for calculating the fraction of non-renewable biomass (fNRB), emphasizes a comprehensive approach that accounts for the diverse sources of woodfuel consumption, encompassing both residential and non-residential sectors. This approach aligns with the need for a holistic understanding of fNRB to ensure the accurate assessment of emissions and the sustainability of woodfuel consumption. The rationale provided for exclusion of non-residential demand is the low contribution of industrial roundwood production to the overall wood harvest in many sub-Saharan African countries. However, this rationale should not serve as a basis for exclusion, as Tool 30 encourages a bottom-up approach that is adaptable to diverse regional and national contexts. The proportion of non-residential wood-fuel use can vary significantly by region, making it essential to account for these variations in fNRB calculations.	To address this deviation, it is advisable that the Meth Panel and Executive Board assess the appropriateness of the proposed methodology in light of the comprehensive approach outlined in Tool 30.	
9			Technical	Most of the literature reports highest charcoal consumption in the countries like Cameroon, Nigeria, Ethiopia, Republic of Congo and Ghana. The data related to deforestation also support high consumption of charcoal in these countries. However, the new fNRB values for these countries is not consistent with the ground observations. These values of fNRB may derail the process of technology transfer and clean cooking access in these most vulnerable countries of Africa. Infact, 63% of sub-saharan Africa, representing 27 poorest nations of the world will become infeasible for hosting clean cooking projects due to inability to recover the high capital investment required for modern clean cooking technology. Based on our internal economic assessment, we perceive following outcomes of the new fNRB values: ● Countries where the fNRB value is below 30%, implementation of any modern clean cooking solution would not be economically viable. ● Countries where the fNRB value is below 10%, neither clean cooking solution nor ICS will be economically viable for implementation.	fNRB value, apart from enabling precise measurement of emission reductions, is also instrumental in driving the policy initiatives and secure climate financing for a country. An fNRB value purely based on the demand & supply of woody biomass can create perverse incentives for the Government to promote deforestation and inflate demand for fuelwood as it would drive higher fNRB value for the country.	

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10	NA	NA		The current methodology for fNRB assumes that the achievement of emission reduction is only dependent on the demand supply gap of renewable woody biomass. However, it ignores many other factors, like potential of the cooking technology to substitute the non-renewable woody biomass, which can still impact the projects ability to achieve the expected emission reductions. The proposed fNRB values will discourage investment in modern Tier 4 and Tier 5 clean cooking solutions and effectively preference very low cost Tier 1-3 ICS solutions.	The EB should recognize that the carbon market mechanism is a tool to channelize climate funds to those countries and technologies which have the potential & are putting best efforts to make significant contributions to climate action. We propose to develop a comprehensive assessment tool to incorporate all factors which may impact the ability of the project to achieve expected emission reductions and arrive at quantitative values for different scenarios based on geography, project type, target baseline appliance, etc.	

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