

Comments of atmosfair and Germanwatch on the LifeStraw project, 2nd verification

The below comments and questions are put forward jointly by the Gold Standard NGO supporters atmosfair and Germanwatch. The European Business Council for Sustainable Energy e5 as NGO supporter also supports the general concerns raised and questions put forward in the paper.

Thank you for the possibility to address our concerns regarding the Life Straw project. Apart from specific points further below (see section II), we would like to raise two general concerns about the lifestraw project. We are aware that such general concerns should have been addressed at an earlier stage. However, there is critical new information in the monitoring report (MR), stating a reduction of fuelwood consumption of only 1.3% due to the use of lifestraw. This information puts the project in a new perspective. Since it was not available in the past, we could not raise the following concerns earlier.

I. General concerns

General concern 1: Suppressed demand and plausibility of the claimed emission reductions

Emissions reductions of the life straw project depend nearly exclusively on a suppressed demand scenario. While we support the approach of suppressed demand as a possibility to foster sustainable development beyond conventional development paths, we think that emission reductions should always be based on *realistic and plausible baseline scenarios*, based on a credible assessment of options to provide the service that is provided in the project scenario. For example, in a project where electrification based on renewable energy is provided to a poor village off- grid, it is highly plausible from many real world cases that diesel generators may be the baseline alternative if the necessary financial resources became available.

We believe that the use of firewood to boil some 80% of the water that is claimed to be purified by lifestraw filters does *not* represent a plausible baseline scenario, for the following reasons:

1. During monitoring, users were asked “*If...time, money, and resources were limitless, how would you choose to make your water safe?*” (see MR MP2 page 4). This question does not refer to a plausible baseline scenario. The PDD itself shows that there is a scarcity of fuel wood. Hence, it is an implausible baseline scenario that more wood would be used for boiling water in the absence of the project. However, the bulk of the claimed emissions reductions stems from this implausible assumption. Furthermore, asking users about a dream world with such things as limitless time and wood provokes implausible answers and is per se methodologically questionable.
2. It is also not credible that users with unlimited availability of resources would prefer boiling water on traditional fireplaces. Alternatives seem to be more attractive from their perspective, for example systems that provide purified water near their homes (e.g. a new well in a village), or ensuring that water from public infrastructure is safe (according to the baseline survey, water from public water taps is already the most common source of water for the households, see PDD page 17). We think that a plausible future development path for clean water in the case of assumed availability of finance goes rather towards centralized systems, including purification at the source, instead of massive application of boiling water on traditional fireplaces. This option is, according to our experience, a backward and uncomfortable solution already at present.
3. Our practical experience from many African countries, including Kenya, confirms what becomes evident from the insignificant reduction of fuel consumption found in the LifeStraw project: Boiling raw water for purification is *not* common practice (with the exception of baby care). It is however common to prepare beverages based on boiling water, such as tea, hibiscus lemonade, traditional beers, etc.

The baseline scenario does therefore not represent a plausible development path.

General concern 2: Comprehensive options assessment

We see a danger that this type of carbon funding may support technologies that are not the most desirable and least cost option. From the user's perspective, it may be preferable to resolve the problem of water purification at the source. Centralized systems providing pure water near the user's homes (e.g. a well for a village) would have considerable advantages over portable filters, saving time for filtering and possibly also time for fetching water; they may even be cheaper considering their long lifetime.

Therefore, in order to justify such a project, a comprehensive options assessment would need to demonstrate for example that in the mid-term, the distribution of portable filters to end users is cheaper than providing centralized solutions for pure water supply.

Conclusions and general questions

We do not doubt that the project is beneficial for users of lifestraw filters, but we question that it plausibly reduces CO₂ emissions, even under a suppressed demand scenario. The claimed emission reductions of over 2 million tons of CO₂ are highly hypothetical.

This is supported by the observation that according to the MR one of the main benefits hoped for at time of project design – a reduction of indoor air pollution- has not materialised since users did not reduce the amount of firewood burned and thus the positive sustainable development indicator for Air Quality had to be changed to neutral. Hence, real CO₂ emissions did not change due to the project.

It is further supported by the fact that the verifying DOE found that improvements in regard to livelihood of the poor are not a result of a reduction of firewood and charcoal consumption for boiling water - which would have resulted in a reduction of money and time expenditures for fuel wood procurement - but primarily due to a reduction of medical expenses as a result of clean water (see VR MP2 p47). The positive effects of the project are therefore independent from cooking practices, fuelwood use and thus CO₂ emissions.

In conclusion the project may even lead to a net increase of global CO₂ emissions, since the non-real CO₂ reductions claimed by the project may be emitted on the other end by buyers of the voluntary market using the VERs for offsetting their increased or at least not avoided CO₂ emitting activities.

The Gold Standard claims rightly on its website that an offset programme is only as strong as its weakest tonne. The project may therefore – in spite of all its benefits on health - conflict with environmental integrity.

We therefore ask for the following clarifications from the DOE and the Gold Standard:

1. Why did the DOE suggest assuming unlimited availability of resources, including firewood and time, in the question asking for baseline practices of water purification, given that this may not lead to a plausible baseline scenario? (e.g. VR MP2 page 11)
2. Which are the considerations of the Gold Standard to allow for a suppressed demand scenario in cases where, apart from poverty, also other factual barriers such as fuel scarcity and limited time prevent a specific baseline scenario?
3. Does the Gold Standard consider the following statement of the GS Deputy Technical Director quoted in the registered PDD still valid, after taking into consideration the above points: *“The PP can potentially use BWBT [Baseline Water Boiling Test] from households that drink boiled water in pre-project scenario and apply it to households that drink untreated water. [...] This merging does not lead to conservative emission reductions but given the suppressed demand aspect this deviation can be accepted.”* However, the MR only finds an insignificant reduction of fuel consumption. This shows that in the pre-project scenario, virtually no households were drinking boiled water. This renders the claimed emissions reduction not only “not conservative”, but even spurious and should therefore not be acceptable to the Gold Standard.

4. We would like to know if the Gold Standard considers a comprehensive options assessment (see above) necessary for the approval of projects applying suppressed demand baselines, i.e. comparing technological alternatives for a project activity under different aspects, e.g. sustainability, costs, availability of resources etc.?
5. We see the shown defaults of the chosen baseline scenario in conflict with the overall principle of conservativeness. Given this principle, how will the DOE factor the findings of only 1.3% reduction of fuel consumption into the CO₂-emission reduction calculations?

II. Specific observations on the 2nd verification

It is difficult to comment on the verification since important documents are not available for GS NGO observers. So we don't know the full sets of questions asked in surveys, survey reports from Vestergaard Frandsen and EXP Momentum, spreadsheets with survey results as well as the VER calculation spreadsheet. Therefore, we ask for disclosure of these critical documents.

After reviewing the Verification Report (VR), Monitoring Report (MR), Passports and revised PDD we would also like to know:

1. How were answers of users indicating partial use (e.g. every two weeks) reflected in the calculation of emission reductions (see VR MP2 page 31)?
2. Which values were obtained for the accuracy of sampled data (e.g. standard error, acceptance number etc.)?
3. How were outliers considered in the calculation of emission reductions? It is not clear whether the percentage of outliers observed during the survey was extrapolated to the total population of water filter users. (See VR MP2 page 59)
4. How did the DOE come to a conclusion on water filter usage after it has found that it is *“inherently difficult to understand during interviews or surveys whether household responses about their uses of filtered water are honest: “[...] interviewees were often jumping ahead of providing information on the uses of water before they were even asked the question.”* (see VR MP2, page: 11) Why did the DOE not apply additional auditing practices to cross check users responses? For example the DOE could have asked users to demonstrate the backwashing function of the filter as it was requested during the surveys by Vestegaard Fransen.
5. Why were the sustainability indicators 7 (livelihood of the poor: decrease in firewood and charcoal consumption for cooking (boiling water)) and 8 (access to affordable and clean energy services) not changed to neutral, since the monitoring of indicator 1 (air quality) has revealed that there is virtually no reduction in wood or charcoal consumption due to a decrease in boiling water for water sanitation?