



## PCIA Webinar: “Case Studies: Gold Standard in Practice”

### *Speakers*

Nahla Sabet, The Gold Standard Foundation

Dee Lawrence, Proyecto Mirador

Jimmy Tran, Impact Carbon

### *Overall Questions and Answers*

#### General Questions for Nahla Sabet, The Gold Standard Foundation (unless otherwise noted)

**Q1: You mentioned The Gold Standard is looking at the need for the revenue to go to local community/partners. Are you considering that being a reporting requirement, or at least a voluntary one that the Gold Standard will advertise/communicate in a special place on the website?**

A1: We found that there is a lot of discussion/debate amongst project developers about different business models, with regards to sale of stoves versus giving stoves away for free, and also about how ownership of carbon credits is best transferred from the owner of the stove to the project developer. The Gold Standard does not want to force one model on the market but would like to promote best practices. We, therefore, held a workshop for project developers to discuss the pros and cons of the different approaches. We would like to continue this dialogue and ultimately prepare a best practice publication that presents the different routes in a transparent manner to assist new project developers in selecting the model that best fits the local setup of their project. We don't expect to add any specific reporting requirements but at the moment, all project developers are required to report how carbon ownership is transferred from the stove owner to the project developer and support that with documentation that is then validated by an auditor.

**Q2: Regarding monitoring: My organization implements a cook stove project in remote rural areas of Burkina Faso. Our beneficiaries are scattered throughout the countryside which makes it really hard to conduct surveys based on random sampling as only a few beneficiaries can be interviewed in a single day. What do you suggest to: a) adapt random sampling principles (especially when a selected person doesn't show up); and, b) reduce time and fuel (hence the environmental impact) of surveys? Most of our beneficiaries don't own a cell phone.**

A2:

- A) To account for a situation that selected person does not show up, you may actually select more households than that needed, during random sampling. For example if you need 100 households to carry out a Kitchen Survey then instead of selecting exactly 100 households randomly you may select 120 so that you have a buffer of 20 households.
- B) All efforts should be made to do the majority of surveys by physically visiting the households. For households that cannot be physically visited, phone surveys may be conducted.

**Q3: Does The Gold Standard consider the carbon footprint of the stove manufacturing processes?**

A3: Whenever such emissions are expected to be 5% or more of the overall emission reductions then they should be accounted.

**Q4: Are LPG stoves eligible for Gold Standard carbon credits?**

A4: Activities that shift from non-renewable biomass based inefficient stoves to LPG stoves will not be eligible for Gold Standard registration because activities shifting to fossil fuels are not eligible under the Gold Standard.

**Q5: What is the percentage of total project costs spent to meet Gold Standard requirements?**

A5: This is hard for us to say since we don't have access to information on the total costs. However, since this has been repeatedly asked to us, we are currently working on a cost-benefit analysis tool that will compare the costs of a GS project to a non-GS project. We will share this with PCIA once it becomes available so they can circulate it to their network.

**Q6: Is there a minimum size of project that is 'worth the effort' to monitor and comply?**

A6: The Gold Standard has minimum requirements for statistical sampling. Financial viability of projects is very much a function of project costs and overhead (e.g., stove subsidy, delivery costs, technical support and marketing, etc.).

**Q7: It seems that the project boundary (as described) would favor imported stoves over local production?**

A7: No, that is not correct. We consider the carbon footprint of imported stoves if those stoves lead to emissions that exceed 5%. Emissions below that threshold are considered immaterial.

**Q8: Would it be possible to have local cooks involved in the discussion on who should get the finance - perhaps village representative? Same applies - I hear the community folk being used for volunteer research, but what about supporting analysis at local institutions. Would Gold Standard accept such findings?**

A8: Any Gold Standard project applicant is required to conduct two rounds of stakeholder consultation. During the first consultation, which has to be a live meeting, a full range of stakeholders participate to discuss project design as well as the sustainable development assessment of the project. Issues pertaining to ownership of carbon credits can be discussed in this forum as part of the overall project design.

**Q9: What percentage of operating costs can you expect to be covered by carbon credits?**

A9: Operating costs are typically covered by carbon credits, although there is often delayed payment since credits are realized 1-2 years after inception of the project.

**10: What are the transactions costs (registration, testing, monitoring, etc.) on a \$/CO<sub>2</sub> ton basis?**

A10: These costs are variable depending on location and consultants hired. Auditors vary in price depending on speed, but validation and verification can range anywhere from \$50,000USD-\$100,000+ USD. Testing and monitoring also vary depending on institution – academic groups using graduate students may be less costly than private companies, and lab tests may cost less than field deployments.

**Q11: In your opinion, is there a link between the market price of CDM credits and the value of cook stoves voluntary emission reductions (VERs) or are they disconnected?**

A11: There is surely some inherent link, but VERs capture different value based on their social and environmental co-benefits.

**Q12: Is there any monitoring of indoor air pollution (IAP) within the households after several months to show that emissions within the kitchen are still low?**

A12: This is optional and not required by The Gold Standard. Ongoing monitoring, however, captures quantitatively the perceived reductions in IAP.

**Q13: How do you measure the quantity of fuel reduced?**

A13: If you follow the directions for the Kitchen Performance Test (KPT) and data calculation sheets (<http://www.pciaonline.org/testing>), this should not be difficult. You are trying to understand fuel consumption at the per person meal level for a traditional type of stove versus the new model you wish to implement. The difference in fuel consumption is your fuel reduction. If you know the amount of carbon released from burning wood then you can calculate emission reductions. *(Dee Lawrence)*

**Q14: How did you ensure that users were not using their traditional stoves with the new stoves?**

A14: An incentive mechanism is first put into place to remove the traditional stove. Then, this is tracked through ongoing monitoring. Environmental integrity is maintained by crediting only the fraction of the baseline that is displaced. *(Jimmy Tran)*

For Proyecto Mirador stoves, we do not install stoves in homes that have not removed their traditional stove. Unfortunately, traditional stoves are pretty easy to make out of mud so we always ask about the presence of another stove in the home during our follow up visits. Our stove is so good that nearly all users only use ours. *(Dee Lawrence)*

**Q15: Is there any study or database available for the results of all projects kitchen performance tests?**

A15: You can download proceedings from two previous PCIA webinars, “Impacts of Household Fuel Consumption for Biomass Stove Programs” and “Monitoring Fuel Use with the Kitchen Performance Test”

at [www.pciaonline/proceedings](http://www.pciaonline/proceedings). These webinars share results from KPT studies in India, Nepal, Peru, Uganda and China. Also, carbon projects have publicly available documentation (Project Design Documents (PDD)).

**Q16: Can you describe how leakage can affect the carbon financing application?**

A16: Projects are required to assess leakage – guidance is provided in the Gold Standard methodology. Leakage is subtracted from project emission reductions.

**Q17: What are the main variables that determine the difference in CO<sub>2</sub> emissions reduction from household to household? (i.e., # meals/people fed, type of wood, etc.)**

A17: The primary variables that effect emissions (of any sort) are: stove type, fuel type and quality and user skills.

**Q18: Is there a term for subsidizing a product and in so doing, destroying a developing country's potential to engage carbon financing as a method for that country's own sustainable energy development? If there is a term, is that term market contamination?**

A18: The social and market impacts of projects are evaluated during the local stakeholder consultation (LSC), as well as during multiple public stakeholder feedback rounds. This is a clear example of why it is important that all perspectives are heard. (*Jimmy Tran*)

In addition, the whole basis for the Gold Standard program is the concept of additionality (i.e., would the intervention happen in the absence of the project and the use of carbon finance). If you can't pass that hurdle, you will never get your project past the first stage of Gold Standard review. Carbon finance is just not that easy in creating, verifying, certifying ER's and then negotiating your way through the market and brokers to sell them. Even companies in the U.S. or Europe would find this an arduous task. Most of the countries we work in have their hands full trying to build infrastructure like roads and electricity. Without a sure market for sale of their credits it is a risk they cannot afford. (*Dee Lawrence*)

**Specific Questions for Dee Lawrence, Proyecto Mirador**

**Q19: Did Proyecto Mirador work directly with The Gold Standard or did you recruit a project developer?**

A19: Proyecto Mirador worked directly with The Gold Standard. We hired a local carbon consultant to help us with the calculations and clarify some of the documentation related to the calculations and the Yale School of Forestry and Environmental Studies conducted studies for us and helped further with understanding all the concepts.

**Q20: Can you elaborate more on the issue of non-renewability that you mentioned at the end of your presentation?**

A20: Non-renewable biomass (NRB) encompasses the idea that the wood being cut for fuel wood is either being re-grown for more fuel wood or it isn't. Thus, NRB has an impact on the number of credits

you claim. The higher the non-renewability number you calculate for your project the less you must reduce the quantity of carbon emission offsets you produce. For example, if your non-renewability number is 99% then you can claim 99% of the emission reductions. This implies that in the area where you work nobody is planting trees in a renewable manner. If you claim a non-renewability number of 75% then you can claim only 75% of the emission reductions. Calculating it is complicated, and many project developers use FAO numbers to calculate their NRB in the absence of other studies or data for their area. V3 of the Gold Standard methodology changes the way NRB is calculated.

**Q21: How is the monitoring data collected in the field, manually or electronically?**

A21: Historically, we have gathered all our data manually on paper and compiled it in Excel. We are currently field-testing a means to gather data electronically via handheld devices and computers and will be able to manage all the data via a central database.

**Q22: You said that you are developing a platform for tracking your stoves electronically. Is it a platform to track your sales data and also the corresponding monitoring data?**

A22: Yes, it will be for both.

**Q23: Who performs the kitchen surveys and kitchen tests? The “Ejecutores” with their staff or do you outsource this activity?**

A23: Proyecto Mirador has staff trained to conduct the field collection of KPT data. The KPT is designed, analyzed and reported by Yale School of Forestry and Environmental Studies.

**Q24: Concerning the VERs ownership, how do you ensure it? With individual statements signed by each beneficiary or collectively at the community level?**

A24: As you may know, this is a Gold Standard requirement. Our approval is basically at the community level. We say that we will use carbon to finance the project when we introduce the stove to a village group at the same time we discuss their requirements for materials. People can decide to participate in the project or not. If they participate, consent is implied as we can't build their stoves without carbon finance. After installation, we post a Proyecto Mirador Training Brochure on the wall that includes a written statement of Proyecto Mirador's ownership of carbon credits. The translation of the relevant clause is as follows:

"By accepting a new stove from Proyecto Mirador, you agree that any reductions in CO<sub>2</sub> emissions created by the stove are the property of PM."

**Q25: How much would you estimate the kitchen performance test costs you (in both CO<sub>2</sub> emissions and money)?**

A25: As the KPT is performed by measuring fuel wood consumption in households where cooking activity is conducted normally, and such activity would be conducted regardless of the KPT, CO<sub>2</sub> emissions are unaffected other than transportation to and from the test households. In dollar terms the KPT probably costs 5 days of data collection labor for 2 or 3 people and 20 hours of time for compilation

and analysis. We hope that we can speed up the process with the handheld system so compilation and some of the calculations are completed by computer.

**Q26: Many have mentioned "high prices" for cook stove VERs? Anecdotally, what are the ranges you have heard/experienced?**

A26: I agree with the Gold Standard that \$9-10 per ton is pretty average. However, if the volume is small and the project great then prices can go to \$15 or more per ton. This is the real problem with carbon finance, you cannot depend on a floor price, and thus it is hard to judge how far you can expand your project on the back of carbon.

The other issue is capitalization. You must have the capitalization to see the Gold Standard process through and then handle the one to two year time lag before you are verified and certified. If you are trying to ramp production, it is even more difficult because your carbon from year one will not be sufficient to get you through bigger year 2 numbers.

We have asked the Global Alliance and many other organizations to see if they could work to create some kind of a floor price for carbon so project developers would have the confidence to invest in their projects knowing they could achieve a return. Without forward sales at a heavily discounted price to the developer, long term equity capital is required.

**Q27: What methodology do you use and what were the challenges with it? What sort of stove construction quality requirements did you put in place? How did you prove your stove lasts for X years?**

A27: We used the "Methodology for Improved Cook-stoves and Kitchen Regimes V.01." The challenges are really the back and forth nature of the approval process between The Gold Standard, the project and the DOE and our misunderstanding of what was needed in some areas of the PDD. The approval process seemed endless and it is very important to keep excellent records of the documentation, questions asked and questions answered.

The Gold Standard Version 3 has come a long way from what we were using. As the first certified stove project in Latin America we were creating documentation and agreeing on the interpretation of the rules as we went along. It is much easier to see what has passed the Gold Standard and duplicate some of the processes used by others.

Our technicians undergo training for a month to learn how to build our stove. We verify a large percentage of the stoves we build with home visits to insure that the stoves are operating well and that the families are maintaining them. We have been building stoves for 9 years and have the ability to go back into the field to see what happens to them. As a result of looking at our earliest stoves, we upgraded the quality of the chimney aluminum, we reinforced the plancha (griddle) in all directions, we reinforced the front of the stove and we changed some of the dimensions of the stove.

**Q28: Is the Kitchen Performance Test measuring the efficiency of the stoves?**

A28: Yes, the KPT measures fuel wood consumption in the project scenario as compared to baseline fuel wood consumption and thus measures the efficiency of the stoves.

**Q29: No cash changes hands - but when this stove finally dies, how will the households afford to replace it?**

A29: Proyecto Mirador will return to replace stoves after their life cycle has ended. Again, the family beneficiary will have to contribute time and materials (adobe block, brick, cement, nails, a few boards, mud) toward the construction. Provided that the voluntary carbon market protocols remain in place we are hopeful that carbon finance will continue to provide the funding to replace stoves as we continue to build new ones.

**Q30: How much does it cost to build a Justa Stove?**

A30: Our stove, the Estufa Dos por Tres costs about \$70 inclusive of all costs and labor with beneficiaries contributing time and materials equivalent to about \$17.

### **Specific Questions for Jimmy Tran, Impact Carbon**

**Q31: Does the local stakeholder consultation (LSC) need to deal with how the proceeds of carbon credits will be used? What is your experience with this? Can it be a source of conflict/opposition to the project?**

A31: The local stakeholder consultation should describe the purpose of carbon credits in a non-technical manner. Our experience is to explain that the proceeds are a mechanism for continued sales and dissemination of improved stoves. The proceeds also support the set-up of the mechanism (e.g., audits, applications, technology support).

**Q32: How is funding acquired for the stove projects and do you think this is a sustainable development model?**

A32: Funding comes in various forms. As a non-profit organization, Impact Carbon typically seeks funds from social investors, grants, philanthropists, and research opportunities. For-profit groups may seek out private loans or other types of higher risk capital. The hope is that carbon markets are a sustainable model for growth, with expectation that commercial distribution can scale long-term.

**Q33: How do you choose your target communities? How do you identify an effective local facilitator?**

A33: Local manufacturers and partners help to identify the most appropriate target community. We do not provide stoves for free, thus, households are self-selecting as they choose on their own accord whether or not to purchase a stove.