Consumer Finance Opportunities for Improved Cookstoves and Clean Fuels in Guatemala

Prepared by Fast-Track Carbon for the Global Alliance for Clean Cookstoves

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Credit Landscape in Guatemala

We identified the following channels of consumer financing:

1	**Financial sector**	Commercial banks
		Cooperatives
		Microfinance Institutions (MFIs)
2	**Product retailers**	Stores and depots that offer products on credit (e.g. Curaçao, Elektra, Almacenes Japón, etc…)
3	**Employer-sponsored financing**	Individual companies that offer credit to their employees for purchases of certain products; generally by collecting installments from salaries
4	**In-house financing**	The product manufacturer or distributor offers credit to purchase product

Financial Sector - Overview

Commercial Banks	Cooperatives	MFIs
Regulated banking institutions providing services across the economy, from large-scale commercial lending to small consumer loans. • Nation-wide coverage and cross-sectoral coverage • Many offer consumer credit and sell products (e.g. cell phones, stoves)	*Financial Institution network under MICOOPE umbrella.* • Nation-wide coverage, but focus on individuals/small businesses • Similar products offerings as commercial banks (including credit cards), but with stronger focus on economic development of clients. • Require membership	*Unregulated institutions providing financial products with a development focus*. Major institutions are members of the Guatemala National Network of MFIs (REDIMIF). These are NGOs/ Foundations/Associations. • Nation-wide coverage and focus on women • Offers loans for productive activities with payback (generally very little consumer credit)

Financial Sector - Overview

Commercial Banks	Cooperatives	MFIs
• Required paperwork includes at least utility bill, identification card, proof of income, established account with institution.		• Focus on segment of population that cannot meet paperwork requirements
• No guarantor needed for many small-loan products, but paperwork requirements are stricter to approve loans		• Credit offerings require guarantors
• Client overlap with upper socioeconomic levels of firewood users		• Good client overlap with firewood users

Across the financial sector, MFIs offer the best potential for clean cooking consumer finance because of their focus on similar segments of the population.

MFIs - Potential for clean cooking consumer credit

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Advantages:

Risk reduction	• Experienced loan agents are accountable for repayments and motivate discipline among borrowers. • Established solidarity guarantees through groups and communal banks increase likelihood of repayments.
Access to priority segments	• Direct access to priority segments (income-generating women) because MFIs borrow primarily for productive activities led by women.
Flow of capital	• MFIs can provide the capital for the consumer to buy the stove from the manufacturer. Hence, stove manufacturers can get paid upfront and faster than the customers would pay, decreasing the need for investment.
Synergies with clean cooking	• Clean cooking reduces disease burden which is cited as one of the main causes for delays/delinquency in repayment of loans. • More development-focused MFIs see clean cooking as a strong necessity for the client's well being.

MFI - Potential for clean cooking consumer credit

Challenges

- MFIs interface with clients through loan agents who are heavily reliant on economies of scale to generate income. They earn a small commission for every Quetzal loaned and each often works with a clientele of several hundred individuals. Hence, fitting stove sales into their busy agendas is difficult, even if incentives are topped-up to compete with higher loan amounts.
- Each individual MFI only has a small % of the total target market population and MFIs clientele is often dispersed. Making the product available to a dispersed clientele requires significant and consistent stove sales volumes to avoid steep distribution costs.
- Clean cooking solutions still offer unpredictable savings, depending on the technology, after-sales service, and user adaptation to the technology. Proof of concept is also needed to demonstrate savings using LPG stoves, especially for the energy-intensive bean and tortilla cooking.

MFI - Potential for clean cooking consumer credit

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Some opportunities for stove manufacturers that need to be further explored to access the MFI pool of capital for clean cooking purchases are:

- Have dedicated stove marketing in communities where MFIs operate to increase volume of sales and reduce distribution costs.
- Have storage points in localities where large sales are likely to reduce transportation costs and make the product available at the time of the purchase impulse.

Some opportunities for MFIs to strengthen the clean cooking offer include:

- Reduce loan processing times with information communication technologies to capitalize on purchase impulse.
- Increase choice of clean cooking products to cater to different user preferences and potentially increase demand by reducing consumers' uncertainty about the right product choice.

Even without direct sales partnerships through MFI channels, clean cooking manufacturers and MFIs can exploit synergies:

- Reduce disease burden and hence risk of loan repayment through clean cooking.
- MFIs can help raise awareness of clean cooking through their access to large groups of firewood-using women and training programs.

Product retailer potential

Several companies offer consumer credit at the points of product sales. Some brand names include: Elektra, FFACSA, Curaçao, el Gallo más Gallo. These stores/ depots already offer a variety of LPG stoves.

Relevant elements to consider for introducing ICS among product retailers:

- The channel is proper for stoves of easy transportation, assembly and operation. Because chimneys require assembly which varies based on the conditions of the installation site, this is something that would likely fall in the responsibility of the user because these stores/ depots probably cannot take the risk of faulty installation and managing the installer network and chimney installation inventory.
- There is a risk that current LPG users revert to firewood as ICS become widely available through these channels and compete on lifetime costs with LPG stoves.
- Large-scale deployment of ICS in this channel (after successful experimentation) requires significant sums of capital. Stove manufacturers should expect payments months after stoves are put on sale.
- The appetite of these stores for ICS is yet to be tested. These stores currently offer many LPG stove models for sale.
- Final price of stove with chimney should be as transparent as possible to increase consumer confidence. Options to install chimneys should be made available and explained properly to end users to increase confidence in the purchase.

Employer-sponsored financing

Clean cooking can draw the interest of private companies as a means to prevent disease and absenteeism among firewood-using employees. Clean cooking may also line up with corporate social responsibility goals as well as employee engagement and retention strategies.

- As with product retailers, there is a risk that LPG users revert to wood usage.
- Offering a variety of products will likely make employees more confident that they made the right decision among a set of products.
- Ideally, stove cost should be paid to the stove manufacturers upfront to avoid repayment risk; however, in cases where this is not possible, stove manufacturers should assess credit-worthiness of client (employer) to decide the level of upfront payment to satisfactorily mitigate risk.

In-house financing

In-house financing means that stove manufacturers/distributors offer credit directly to their consumers for the purchase of the product.

This approach has been implemented with success in Guatemala for similar products (see Ecofiltro example in this presentation), but is a costly undertaking as it requires absorbing the consumer crediting operations, among other elements.

The next slides provide a list of key considerations for in-house financing and how it compares to the outsourced consumer credit operations discussed earlier (MFI, employer-sponsored financing, product retailers).

In-house financing - Comparison to outsourced financing

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	In-house financing	Outsourced financing
Sales potential	• Potential to access a larger pool of customers • Flexibility to engage in different sales offerings (e.g. rent-to-own, trial periods)	Restrained to current customer/employee base of entity through which credit is outsourced.
Risk management	• Consumer risk vetting process needs to be developed and refined. • Group guarantees require multiple people organizing to purchase stove at the same time, which has lower probabilities of happening. • Need to develop experience collecting payments • Stove can be used as credit collateral more easily.	MFIs: • Experience managing repayment risk. • Group guarantees reduce repayment risk All outsourcing entities: • Stove use as collateral is harder because stove distributor has little incentive to collect stove after being paid for it in full. Engaging in collection of item requires special operations.
Costs	• Manufacturers should avoid fixed overheads for money collection because of difficulty to achieve economies of scale (stoves are purchased every few years by the same consumer). • Higher collection costs (than MFIs or others) need to be transferred to price of stoves or paid through carbon credits.	• Collection costs can be low because of economies of scale (already established loan market, MFI member meetings offer opportunities to reduce collection costs, payment is made directly by employer)
Operational complexity	• Need to absorb sales and credit repayment operations	• Generally, the outsourcing entities do not specialize in stove sales, so manufacturers may have to remain directly involved.
Flow of capital	• Need to have larger pool of capital to finance operations between the time the product is sold and paid in full	• Capital generally provided upfront by MFI; can be negotiated with other outsourcing entities.

In-house financing - Other considerations

- Repossessing stoves due to missed payments can be more expensive than recuperating final stove payments. However, not recuperating final payments can lead consumers to think that last payments can be forgiven, potentially setting a precedent for similar market players. If capital is provided to stove manufacturers to offer credit, this should be tied to a commitment to recuperate payments in full.
- MFI and in-house financing may not be mutually exclusive if agreements can be established to prevent credit competition (a certain level of coordination may be needed). Manufacturers may benefit from reduced repayment risk (by not loaning to someone who already has other loans) and reduction of investment needs if stoves are paid upfront by the MFI to the stove manufacturer.
- Need to have stove models that can easily be refurbished so these can be sold again if a consumer defaults in payment obligations and the stove is recuperated from the consumer.
- Community resources should be leveraged to reduce collection risks (see Ecofiltro model in next slide)

In-house financing - Ecofiltro model

Ecofiltro is a successful Guatemalan social venture that sells water filters to low-income markets. Filters help reduce intestinal infections and eliminate bottled water and firewood expenditures (otherwise used to boiling water).

Yearly filter sales to low-income households (2015) ~ 75, 000

Ecofiltro's in-house financing

Ecofiltro uses in-house financing and sells filters in 4 equal installments plus a down payment. Each filter sells for Q300 to low-income consumers.

The company uses a network of *community leaders* to collect payments. These leaders are selected by the community. Ecofiltro tried hiring payment collectors without community consultation, but delinquency rates were high.

Community leaders *are not sales people*, but earn a commission based on successful money collection. Sales are carefully executed by field representatives who use schools and churches as demonstration hubs to promote filter sales to families.

Community leaders help determine with the Ecofiltros sales people which end users are reliable and can be extended credit (i.e. who will pay back).

Money is collected by the community leaders on a monthly basis

Discussion and conclusions

- MFIs and others have tested selling ICS in Guatemala, one model at a time. Although this approach potentially reduces the transaction costs of coordinating with multiple stove manufacturers, it also increases the difficulty to assess whether the specific model or something else in the marketing mix is failing. Many of these entities have found low ICS sales volumes.
- Sales are more difficult to implement through financial institutions, product retailers, or employers because these require a separate and dedicated sales infrastructure which is often not the focus of these institutions.
- Outsourced financing should be a complementary (rather than a primary) sales channel, used to reduce capital needs. Their constrained pool of customers misses large swaths of potential ICS consumers.
- Careful negotiation is required for simultaneous in-house and outsourced credit to coexist and reduce unnecessary competition and repayment risk.
- Synergy areas should be actively pursued: MFIs and employers have interest in adoption of clean cooking systems to reduce disease burden. MFIs already actively educate customers about a variety of topics and clean cooking can be incorporated into these educational agendas.

Potential areas of intervention for the Alliance and other stakeholders

Reduce transaction costs to access outsourced credit	• Promote a variety of clean cooking products to MFIs, employers and others to reduce overall transaction costs in coordinating sales and to increase consumer choice and confidence in the purchase. • Mediate stove manufacturer and credit outsourcing entity agreements and transactions, including grounds of non-competition (e.g. not offer in-house financing to clients of partner MFIs) • Aggregate evidence of benefits, lessons, and consumer product choices to further business development efforts.
Create agenda to exploit synergies with credit outsourcing entities	• Work with MFIs and employers to raise problem and product awareness, using messages already tested for effectiveness.
Assess feasibility of transitioning donation funds into capital for production and sales	• Work with stove donations to redirect funding for direct stove donations into funds to grow and expand consumer credit lines. • Alliance and other stakeholders could facilitate and mediate donor-manufacturer transactions.

If capital is provided/facilitated:

- Coordinate with capital provider agreements on mechanisms to ensure collateral/money recuperation commitments are established with clean cookstove manufacturers/distributors to avoid compromising future ability to recuperate money from consumers.
- Establish risk benchmarks of in-house financing to help determine levels of investment.

Annex 1. Consumer Credit Purchase Characteristics

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Low credit penetration for the purchase of durable goods highlights a credit offering need among the target population. A general feeling is *"They don't give credit to people like me"*

Market Segment	Proportion of Credit Purchases	Average Amount of Credit Purchase	Item(s) Most Often Purchased with Credit[1]
Higher-Income LPG Users (n=52)	27%	Q2400	TV, Cupboards
Lower-Income LPG Users (n=48)	29%	Q2500	TV, Cupboards
Mature Income-Generating Women (n=29)	24%	Q4800	TV
Mature Traditionalist Women(n=21)	14%	Q4250	TV
Young Income-Generating Women (n=29)	21%	Q3800	TV
Young Traditionalist Women (n=57)	14%	Q2800	TV
Low and Unstable Income Households (n=72)	33%	Q3200	TV

[1] Items assessed included TVs, cupboards, and cell phones

Source: Team Analysis; quantitative surveys