

Financing sustainable energy through remittance flows in Tajikistan and Kyrgyzstan



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Market assessment: Phase II

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Executive summary

This report concludes the second phase of a market assessment in Tajikistan and Kyrgyzstan for an approach to financing sustainable energy through remittance flows. The approach aims to develop a self-sustaining business model that enables migrants to finance sustainable energy products for their families. Phase II of the market assessment conducted field research to test remittance receiver and sender appetite for sustainable energy. It also proposes business models that enable households to direct part of their regular remittances towards sustainable energy.

The main goal of this project is to establish commercially viable business models that facilitate poor families' access to renewable energy and energy efficiency. Using the results of the market research, the report proposes business models that use existing networks to sell sustainable energy products to remittance receivers in Tajikistan and Kyrgyzstan and remittance senders in Russia.

Remittance receivers were interviewed in Tajikistan and Kyrgyzstan, and remittance senders in Moscow. The market research highlighted the extreme importance of remittances: remittances accounted for around three quarters of the receiving households' incomes. The average households in Tajikistan and Kyrgyzstan spent over 20 per cent of their income on energy, with large spikes in costs over winter. Their main energy needs were for electricity replacement during blackouts (currently they used candles, portable lamps, kerosene and petrol generators) and increased warmth in winter.

The focus groups tested sustainable energy products that are currently on the market in Tajikistan and Kyrgyzstan. Both remittance receivers and senders demonstrated appetite for sustainable energy products. Particularly popular were: solar electricity generation devices to replace candles, kerosene, portable lamps and generators during blackouts; and efficient stoves for increasing indoor air temperature.

Based on these findings, we propose business models for using remittances to finance sustainable energy, with recommendations on products, pricing and financing, partners, distribution channels, and after-sales service. We recommend targeting the business models at both remittance receivers and senders, and enabling either receivers (in Tajikistan/Kyrgyzstan) or senders (in Moscow) to purchase sustainable energy products.

In the initial phases of the business models, we recommend selecting products that are popular and easy to commercialise: for both Tajikistan and Kyrgyzstan, solar electricity products were evaluated as the most suitable products. After the business models have been established, it would be possible to extend them to include other products such as energy efficient stoves. Potential partners for sales, distribution, promotion, and financing have been identified; they have expressed interest in participating in a potential implementation phase.

Warranty and after-sales service was identified as a characteristic that strongly influences the purchase decision-making process: focus group participants indicated a general lack of trust in existing products' quality, lifetime and warranty service. Based on these findings the business model is proposing mechanisms that are directed towards building trust and gaining confidence of potential clients.

The business model is based on existing networks, and several current initiatives in Tajikistan and Kyrgyzstan with which potential synergies can be created have been identified, including other initiatives supported by the Swiss government.

Risks and risk mitigation measures that should be taken into account when implementing the business models have been assessed. The models for the Russia-Tajikistan and Russia-Kyrgyzstan remittance corridors could be implemented together or separately. Activities, budget and a timeline are included as part of the recommendations for implementation.

The potential market size, energy cost savings and CO₂ emissions reductions have been calculated for project implementation in the Russia-Tajikistan and Russia-Kyrgyzstan remittance corridors. It is estimated that in Tajikistan sales of around USD 1.3 million could be reached within the first three years of the model's operation, benefiting around 14,000 households, reducing their energy costs by USD 7.1 million, and decreasing CO₂ emissions by around 7,300 tonnes. For Kyrgyzstan, the potential sales are estimated to be around USD 1.8 million within the first three years of the model's operation, benefiting around 11,440 households, reducing their energy costs by USD 4 million, and decreasing CO₂ emissions by around 6,900 tonnes.