

Executive summary

This document presents the findings of the **mid-term Evaluation and Learning Exercise (ELE) of the Efficient Use of Firewood and Alternative Fuels in Indigenous and Rural Communities in Guatemala (Guatemala Sustainable Cookstoves) project**. The ELE was undertaken during the period January-May 2025. In accordance with its Terms of Reference, this ELE sought to address the following questions:

- Is the project achieving its planned results?
- Is the project starting to trigger transformational change?
- What can be learnt from the project so far?

More information about the focus of this ELE and the methodology followed can be found in Section 1.2, and Section 2, respectively. The rest of the executive summary provides the highlights of the ELE's findings and key lessons. Please refer to Sections 3 and 4 for the detailed findings and conclusions, and Section 5 for the full lessons and recommendations.

Introduction of the project

The Guatemala Sustainable Cookstoves project aims to deliver measurable greenhouse gas (GHG) emission reductions in the residential energy sector, addressing one of Guatemala's largest and most diffuse sources of emissions: unsustainable firewood use. Firewood accounts for nearly 70% of the national energy matrix and drives substantial emissions through forest degradation and inefficient combustion. The project targets a cumulative reduction of 0.9 million tCO₂e by promoting the adoption of 225,000 improved cookstoves (ICS) and enabling a broader shift to clean cooking technologies, particularly in five rural and indigenous departments.

Implemented over 2022–2027 with a budget of EUR 11 million from the Mitigation Action Facility, the project is led by the Inter-American Development Bank (IDB) and Alterna as the Implementation Organisations, and a network of partners including HELVETAS, Habitat para la Humanidad, FUNCAFE, Fundación Solar, Universidad de San Carlos, and Universidad Galileo.

The project seeks to transform the cookstove market ecosystem through three mutually reinforcing strategies: (1) stimulating demand via behavioural change and awareness campaigns; (2) strengthening supply through support to local manufacturers, technical standards, and financial access; and (3) creating an enabling institutional environment, including the development of stove certification systems, a Measurement, Report and Verification (MRV) system aligned with Guatemala's Nationally Determined Contribution (NDC), and pathways for carbon finance. Alongside emissions mitigation, the project aims to deliver significant co-benefits in terms of public health, gender equity, and forest conservation.

Highlights of the Evaluation's Findings and Lessons

The mid-term ELE found that the project has succeeded in establishing several foundational elements for a transformative shift in the clean cooking sector, but it has not yet translated these into sustained results. The project's Theory of Change remains conceptually valid and aligned with national policy priorities, and its focus on market-building, rather than donation, is widely seen as necessary to achieve durable emission reductions and behavioural change. However, mid-term evidence shows

that some underlying assumptions – particularly the pace of institutional change and the scale of behavioural shifts required to move away from donation-based models – have proven overly optimistic. As a result, many of the project’s causal pathways remain incomplete, and the current state of progress raises concerns about the feasibility of achieving the intended outcomes within the remaining timeframe.

Core enabling activities have been implemented. For instance, a national standard for ICS is under development through a participatory process; laboratory testing capacity is being strengthened with one lab operational but pending formal accreditation. However, a framework for the standard’s operationalisation and enforcement, i.e. an integrated quality assurance framework, has yet to be established. An MRV system design is progressing in coordination with national institutions but remains in the preparatory phase, with key implementation elements still pending. Financial instruments, including microcredit schemes and a voucher programme, had not delivered results by mid-term. No loans or incentives had reached users or manufacturers by mid-term, despite signed agreements with two financial institutions (MICOOPE and Fundación Génesis Empresarial); implementation of the financial products was still pending, in part due to low interest and awareness among both groups.

Meanwhile, demand-side actions, such as behavioural change campaigns and community training, were launched but remain limited in coverage and disconnected from other project components. Manufacturers report that most sales still occur through institutional or donation channels, and the project’s contribution to market expansion remains limited.

The ELE also found that strategic coherence and coordination have been uneven. Implementation has been fragmented across partners and regions. For example, the outreach campaign and training activities were carried out without coordination, with trained trainers unaware of the campaign content. These demand-side efforts were also not aligned with stove availability or the design of financing options. Similarly, stove testing was not connected to certification or quality assurance processes. As a result, opportunities for synergy, such as between outreach and finance, or between testing and certification, have not been fully leveraged.

The project’s visibility at the local level is low in many areas, and several actions have been delayed by internal governance bottlenecks or slow institutional engagement. Nonetheless, the ELE identifies early signals of institutional (national government) stakeholder buy-in, particularly around quality assurance and MRV. These signals suggest potential for system-level change, provided the project focuses its remaining efforts on coherent delivery, stronger institutional partnerships, and a tighter geographic and operational focus.

Summary of Lessons and Recommendations

The ELE identified key lessons for improving both the project’s current performance and the design of similar interventions. Coordination and sequencing are essential: the fragmented implementation of awareness, finance, and supply-side actions has reduced the project’s ability to generate demand or scale adoption. Financial mechanisms must be in place before or alongside outreach efforts, not after. Additionally, the choice of implementation roles must balance political considerations with operational readiness—delays in activating core instruments were linked to gaps in partner capacity. The ELE also highlights that the recently introduced (2024) gender equality and social inclusion

strategy should go beyond participation counts to address deeper structural barriers in access to finance, economic participation, and decision-making.

To address these challenges in the remaining project period, the ELE recommends prioritising tighter coordination across all components and partners, focusing implementation geographically to maximise impact, and accelerating the operationalisation of financial products. It also calls for stronger institutional engagement to sustain MRV and quality assurance systems, and greater involvement of local governments and community actors in outreach and long-term ownership. Certification efforts should be directly linked to market incentives and public procurement, and gender strategies should support concrete pathways to women's economic participation. For a full list of detailed recommendations, please refer to Section 5.2.