



Results Based Financing: Framework for Promoting Clean Stoves

EAP CLEAN STOVE INITIATIVE KNOWLEDGE EXCHANGE SERIES

Key Messages

- Results-based financing disburses public resources against demonstrated, independently verified outputs or outcomes instead of project inputs. This distinguishing feature can mean more effective and efficient use of public funds and improved support of market interventions.
- Applying this approach to programs that promote clean stoves offers suppliers the flexibility to innovate, which is critical for market development. To succeed, they must design stoves that fit local conditions and meet certification criteria.
- The building blocks of a framework using this approach could include defined clean stoves, results-based incentives, and monitoring and verification, supported by institutional strengthening/capacity building and awareness raising campaigns. Plans are under way to pilot this framework in country programs as part of the Clean Stove Initiative.



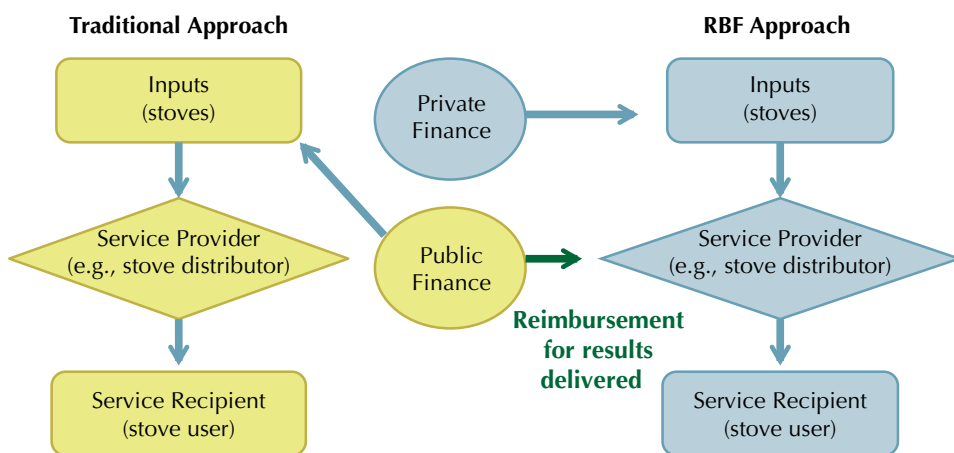
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What Is Results-Based Financing?

Results-Based Financing (RBF) is a concept comprising a range of public policy instruments, whereby incentives, rewards, or subsidies are linked to the verified delivery of pre-defined results. RBF is often used to enhance access to and delivery of basic infrastructure and social services, such as water and sanitation, energy, and health care. In most cases, the funding entity—typically a government, development agency, or other agent—deals directly with the service provider (e.g., private firm, public utility, civil society organization, or financial institution). Some of the better-known RBF approaches include output-based aid (OBA) (GPOBA 2011), conditional cash transfers, carbon finance, and advance market commitments (AMCs).

Unlike traditional public procurement, which uses public resources to purchase the inputs and contract service providers to deliver them to users, the RBF approach uses private-sector resources to finance the inputs and service delivery and public resources to reimburse the service provider upon delivery of the pre-defined results. This key difference gives RBF the potential to improve the efficiency and effectiveness of disbursing public resources and support of market-based interventions (figure 1).

Figure 1. Distinguishing RBF from Traditional Public Procurement



Source: Adapted from Brook and Petrie 2011.

Can RBF Be Used To Promote Clean Stoves?

Past stove programs have followed public procurement procedures, meaning that public entities have been responsible for making stove technical specifications and identifying eligible service providers, delivery methods, and end users to receive subsidized stoves. Payments have been made against the stoves purchased and associated delivery service. Under the RBF approach, public entities would specify the intended results, verification methods, and associated subsidies, and payments would be made to the service provider against verified delivery of the stoves and their operational performance.

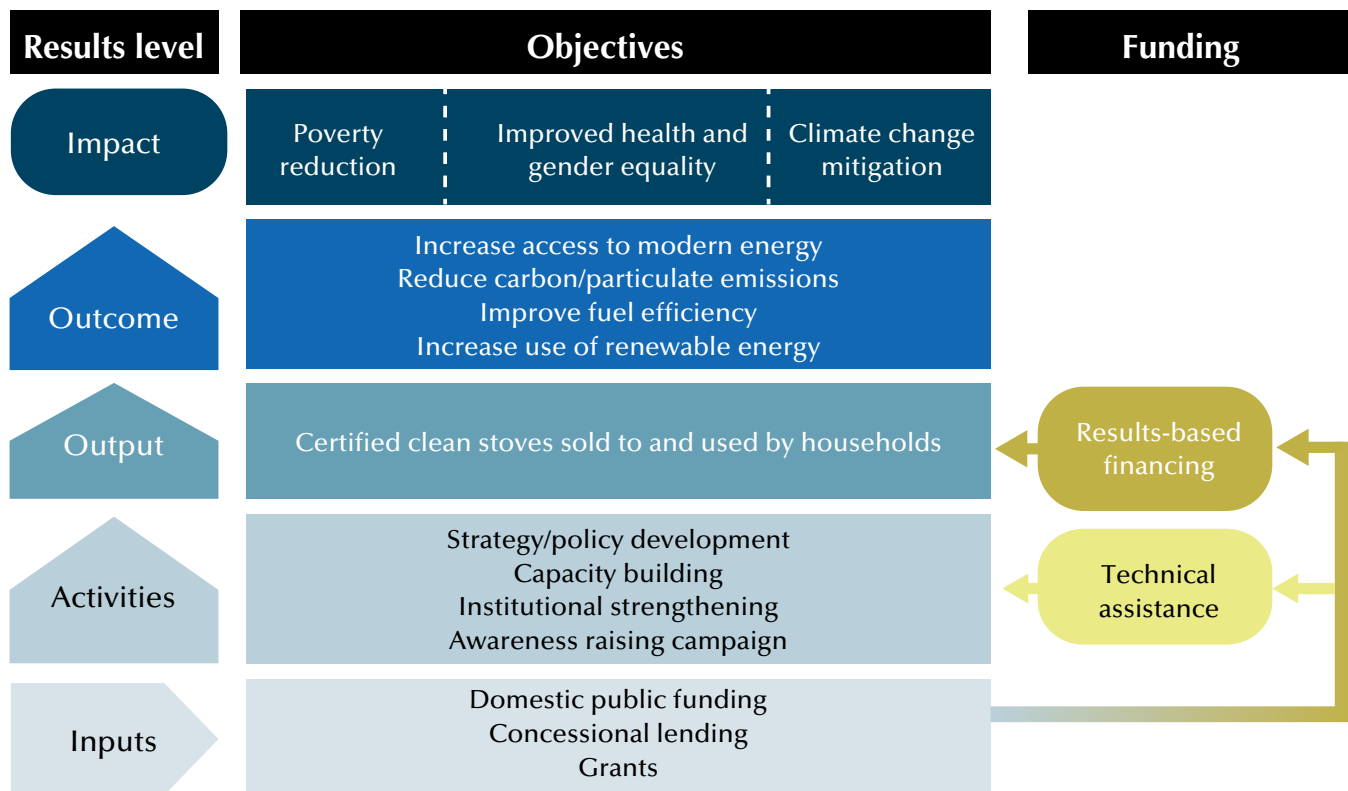
The RBF approach focuses on results that the public sector cares about and rewards the private-sector suppliers who can deliver them. Investment and performance risks shift from the public to the private sector. In turn, private-sector suppliers have the flexibility to innovate in designing, producing, and selling defined clean stoves that are eligible for targeted incentives. This flexibility is vital to stoves market development since stoves must fit local conditions, including customary cooking practices, affordability, and availability of local resources and after-sales service. The success of stove suppliers depends on understanding such local conditions.

What Is the Chain of Results?

Promoting clean stoves can contribute to the broader development objectives of reducing poverty, improving health and gender equality, and mitigating climate change (figure 2). Replacing fuel-inefficient, polluting stoves with those that have better energy-combustion properties can help poor households climb out of poverty by reducing their fuel expenses. The health of family members who spend long hours in the household cooking environment—primarily women and their young children—benefit from reduced indoor air pollution. Women’s freed-up time from walking to collect fuelwood and preparing meals with traditional cookstoves can be spent on more productive activities. The local ecosystem and global environment also benefit from fewer particulate and carbon emissions and less black carbon due to the burning of solid fuels.

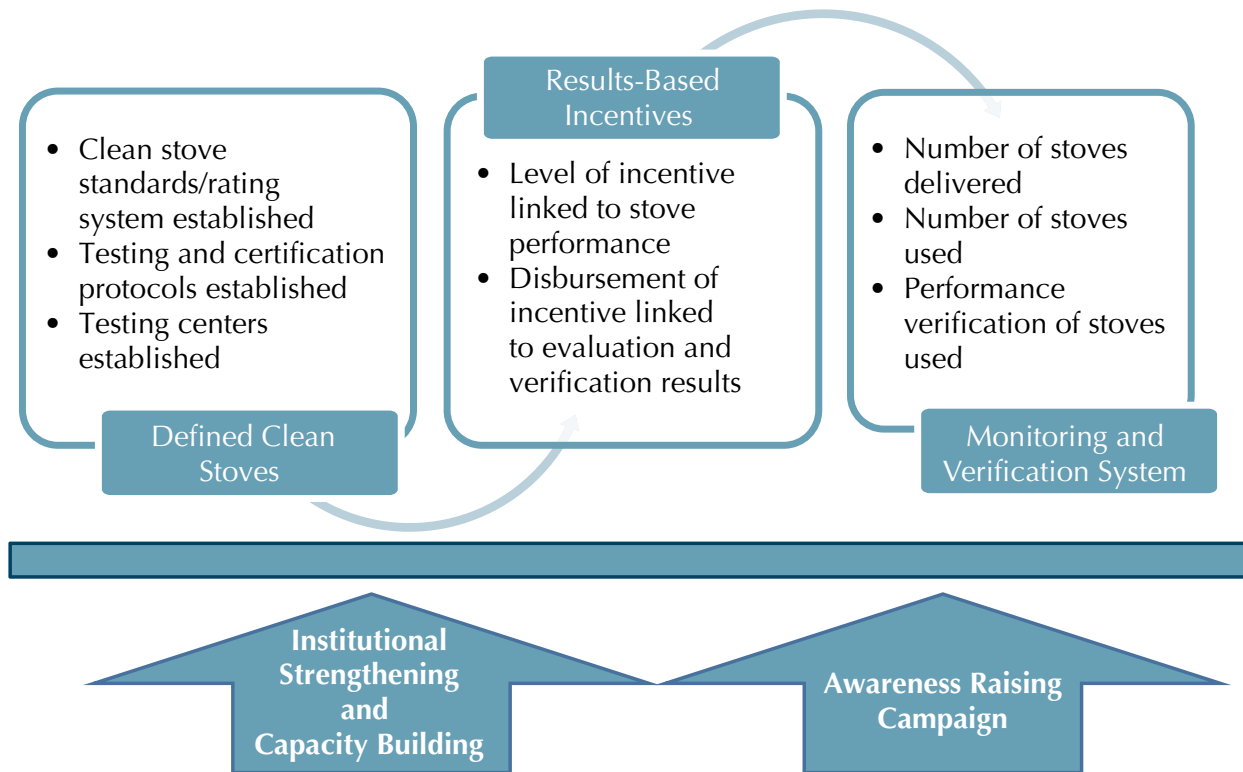
To achieve these impacts, the RBF incentive would be linked to the verifiable output: certified clean stoves sold to and used by households. Also critical to success would be technical assistance activities for strategy and policy development, capacity building, institutional strengthening, and awareness raising campaigns (figure 2).

Figure 2. Sample Results Chain for Clean Stoves Promotion Program



Source: Authors.

Figure 3. RBF Framework with Three Building Blocks and Two Supporting Pillars



Source: Authors.

RBF Framework for Promoting Clean Stoves

The conceptual framework for using RBF in programs to promote clean stoves could include three key building blocks—defined clean stoves, results-based incentives, and a monitoring and verification (M&V) system—supported by the pillars of institutional strengthening/capacity building and awareness raising campaigns (figure 3).

Building Blocks

Defined clean stoves. *Defining a clean stove requires establishing a standards/rating system, testing and certification protocols, and testing centers.* The standards/rating system should be compatible with the rating framework provided by the International Workshop Agreement, which includes four performance indicators (efficiency, indoor emissions, emissions, and safety) and five tiers (0–4). Laboratory and field testing might be included, and the certification process should be transparent and fair. A research center or university with multiple functions (e.g., testing, education, research and development, and advisory service for design development) could host the testing centers to ensure their sustainability. Competitions could also be organized to identify top-performance stoves.

Results-based incentives. *The level of incentive should be linked to stove performance and its disbursement to evaluation and verification of results.* Eligibility criteria should be clearly outlined and the amount adjusted according to the level of stove performance and geographic preferences. Those who apply for incentives (the market aggregators) are those willing to take investment and performance risks. These may include producers, wholesalers, retailers, and project sponsors. To receive payment, they must produce stoves that can be certified as “clean,” design according to customer preferences, and convince customers to buy and use the stoves.

Design of an incentive payment system requires a thorough understanding of the cost structure and profit margin (supply side) and consumers’ willingness to pay (demand side), as well as the economic benefits of the incentive provided. Advance disbursements could be designed to help finance stove suppliers. The incentives could be implemented through a financial institution to leverage the existing network and traditional financing instruments.

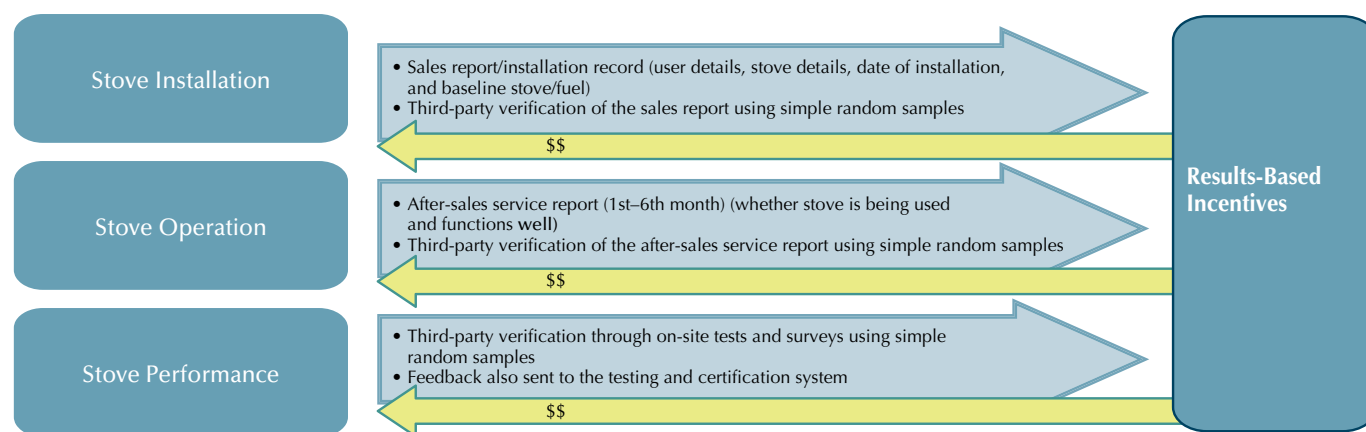
Monitoring and verification system. *A critical part of the RBF design is monitoring and verification (M&V), which triggers payments.* The M&V system could combine self-reporting and third-party verification, using sampling methods to balance the trade-offs between accuracy and costs. To incentivize efforts to achieve sustainable clean cooking, results-based incentives

EAP Clean Stove Initiative

The East Asia and Pacific (EAP) Clean Stove Initiative is a follow-up regional program to the Flagship Energy Report, *One Goal, Two Paths: Achieving Universal Access to Modern Energy in East Asia and the Pacific* (1G2P). The EAP CSI focuses on achieving access to modern cooking and heating solutions in the EAP region, particularly through scaled-up access to advanced cooking and heating stoves for poor, primarily rural households, who are likely to continue using solid fuels to meet their cooking and heating needs beyond 2030.

The EAP CSI is a multicountry, multiphase program, with funding support provided by the Australian Agency for International Development (AusAID). The initiative includes four country-specific programs (China, Indonesia, Mongolia, and Laos) and a regional forum to promote collaboration, learning, and knowledge-sharing on access to modern energy at the household level. A three-pronged approach is used, focusing on (i) strengthening institutional capacity and creating an enabling policy and regulatory environment for scaling up access to clean stoves, (ii) supporting supply-side market and business development, and (iii) stimulating demand for clean and efficient stoves.

Figure 4. Example of Linking Results-Based Incentives to Monitoring and Verification Stages



Source: Authors.

could be linked to specific stages of M&V results, including stove installation, operation, and performance (figure 4).

Supporting Pillars

Institutional strengthening and capacity building. Institutionalizing clean stoves would be an important step toward providing an enabling environment. Key elements could include an institutional champion; a cross-sector coordination mechanism; and a platform for communication, learning, and cooperation. Technical assistance in capacity building is also needed to improve the performance of all market players, ranging from designers and producers to market aggregators, financiers/investors, testing professionals, and monitoring and verification specialists.

Awareness raising campaigns. To motivate both supply and demand, awareness raising campaigns should be conducted at all relevant levels. Campaigns could focus on informing the public about the program and the availability of results-based subsidies and other associated program benefits and raising awareness about the negative health impacts of indoor air

pollution linked to biomass cooking smoke. Using a celebrity ambassador could be an effective way to raise such public awareness.

Next Steps

In the summer of 2012, the conceptual framework described in this note was presented and discussed at national consultation workshops held in China and Indonesia, as part of the East Asia and Pacific (EAP) Clean Stove Initiative (CSI). In both countries, the public and private sectors expressed great interest in the framework and agreed to pilot it. The next step is to plan the design of these pilot programs in more detail to operationalize the approach.

References

- Brook, Penelope J., and Murray Petrie. 2001. "Output-Based Aid: Precedents, Promises, and Challenges." In *Contracting for Public Services: Output-Based Aid and Its Applications*, eds. Penelope J. Brook and Suzanne M. Smith, 3–11. Washington, DC: World Bank.
- GPOBA (Global Partnership on Output-Based Aid). 2011. "Output-Based Aid in the Results-Based Financing Universe." <http://www.gpoba.org>.