



Burkina Faso

Burkina Faso Biomass Energy NAMA

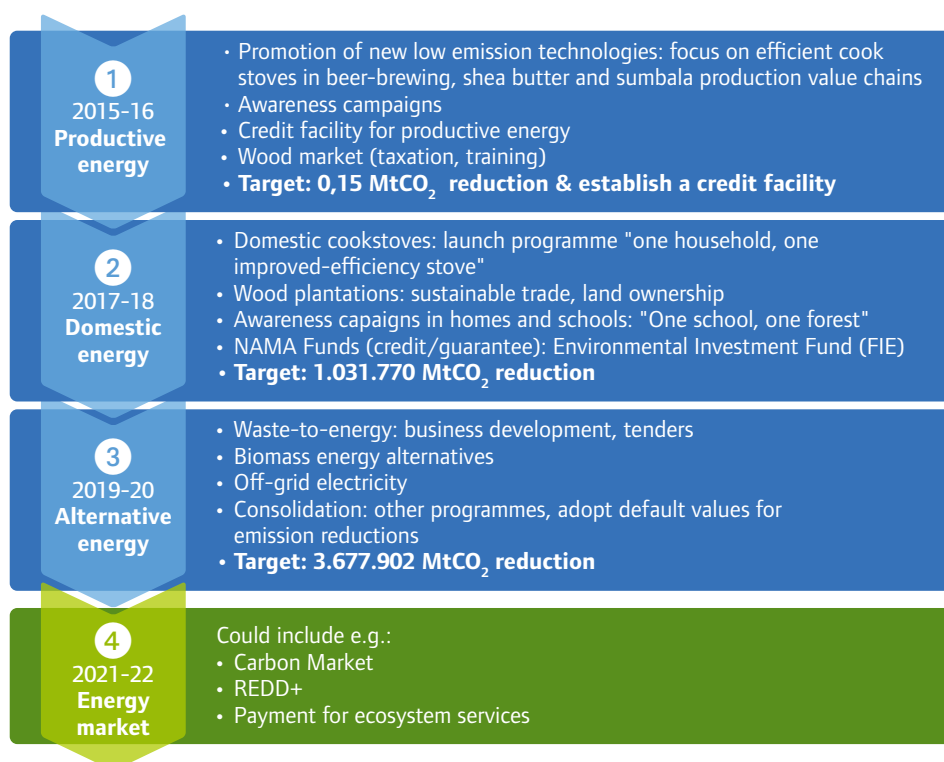
Activity	Disseminate more efficient biomass technology (especially cook stoves) and strengthen the market for more sustainable biomass use and production for energy consumption.
Country	Burkina Faso
Sector(s) involved	Commercial and residential biomass energy consumption
Time frame	2015–2020

Case summary

The NAMA aims to reduce emissions associated with biomass use and respective deforestation e.g. for thermal energy use in the commercial sector by distributing more energy efficient cook stoves for traditional beer brewing and the production of Shea butter and sumbala.¹ In three phases, the NAMA will target i) productive energy use, ii) domestic energy use, iii) alternative energy options and energy markets. The objective is to enable the biomass energy sector to become an economically viable and renewable sector in the context of sustainable low carbon development.

Good practice elements of the project design include the level of cross-organisational coordination, the active participation of stakeholders, the market-oriented concept, and the combination of technical assistance and financial components.

Phases of Activities



Activities continue in next phases, each phase adds new activities. The targeted emission reductions are cumulative.
 Source: SNV, 2015a, 2015b (author's illustration)

¹ Sumbala is a condiment used for cooking that is prepared traditionally by women by boiling, cleaning and fermenting various kinds of seeds.

Burkina Faso

Burkina Faso Biomass Energy NAMA

Why is it good practice

- » **Aims to achieve significant GHG impact and co-benefits:** The NAMA targets a key source of emissions: the biomass energy sector accounts for 84% of energy consumption and is a main driver of deforestation (9,2 Mt of wood used for fuel per year) and GHG production (16,8 MtCO₂e per year).
- » **Aligned with national strategies:** The project is embedded in the national strategy to reduce emissions, deforestation and other climate-related impacts and stimulate social and economic development. By focussing on the largest energy source – biomass – the NAMA answers the FIP's call for a comprehensive nation-wide energy policy that includes options for the development of alternative energy (SNV, 2015).
- » **Broad scope and long-term change:** The project targets various elements of the energy sector with a focus on biomass, from commercial to residential energy use, mainly in agriculture and livestock management, with a possibility of expanding to further energy uses. The (results-based) phases introduce a number of activities that successively expand the scope of action from energy efficiency (productive and domestic), to emission reductions and energy supply (fuel wood plantations and alternative biomass energy). This broad, scalable approach has a transformational character that can achieve sustainable system-wide transition to cleaner energy use in the long run.
- » **Stimulating private investment:** The NAMA has a stronger commercial focus than previous biomass projects in the country by targeting commercial production chains and private sector players. Activities include raising awareness of how to access finance sources and invest profitably in efficient technologies. The objective is to create an enabling environment for an energy market that provides investment opportunities for efficient and alternative energy use, by promoting a market for efficient stove technologies and training local entrepreneurs to access finance and markets more effectively.
- » **Participatory process involving key stakeholders:** The project is built on existing organisational structures in the country such as beer-brewing associations and explicitly involves such interest groups in their activities. Support is given to foster the formation of interest groups to improve the representation of Dolotieres' interests in decision-making processes and strengthen their position in price negotiations. Supporting local stakeholders and their organisation leads to greater inclusiveness and sustainable change and also increases the effectiveness of activities by building trust.
- » **Coordination among donors built on existing structures:** The NAMA will have an advisory board of ministries and a coordinating entity that meets monthly with executing agencies. The aim is to improve and institutionalise cooperation among donor organisations with ongoing biomass projects. The result will be a clear distribution of roles and the advantage of combined expertise in differing fields across various geographic regions.

Success factors

- » **Inclusion of local markets** as well as the use and support of **existing institutional and social structures** such as beer-brewing associations facilitates sustainable structural change of value and supply chains and leverages investment.
- » Basing action on **information related to value chains** facilitates long-term change that recognises local market demand and creates ownership.
- » **Coordination of efforts across** development organisations and with ministries reduces transaction costs and redundancies and can increase the effectiveness and outreach of a project based on previous experience and existing networks.
- » Especially in a least developed country (LDC) context, it is vital to invest time into **feasibility studies** that analyse and document local market and social structures to provide information on value chains, financial instruments and barriers.

Burkina Faso

Burkina Faso Biomass Energy NAMA

Overcoming barriers/ challenges

Information

What were the main barriers/challenges to delivery?
How were these barriers/challenges overcome?

Within LDCs such as Burkina Faso, the informal character of value chains may complicate the access to information related to value chains and financial models. Expertise and experience is not well documented. In the design and development phase, it is vital to invest in “translating” informal to formal information by documenting and analysing informal sector information (e.g. on value chains) and integrating this information into NAMA development in a structured way (feasibility studies). Financial analysis is important to enable access to financial instruments and negotiate with local banks.

Local people and stakeholders were unaware of efficient technology for cook stoves, the costs and benefits involved and were sceptical of changes.

Raise awareness by reaching out to local energy end users. A method used in previous biomass projects was the presentation of a video that showed beer brewers talking about their positive experiences in a night cinema setting.

Financial

Cost of management and technical assistance can be much higher in LDCs’ less-institutionalised sectors. It is also more complicated to set up a financial scheme on a local level for female entrepreneurs who are not considered creditworthy, or who are sceptical of banks.

NAMA Facility Support Projects include both a technical and a financial component, meaning NAMA proposals must incorporate mechanisms to finance activities and goals sustainably. Using existing interest groups to organise self-help groups can leverage communal start-up investment in efficient technology too expensive for individual producers.

Socio-cultural

In Burkina Faso, Dolo beer-brewing is a tradition. Some producers were sceptical of technological change and feared changes in taste.

Identify and address socio-cultural issues from the beginning to overcome resistance. Raise awareness for benefits face-to-face within communities with the help of existing associations and demonstrate cook stove technology. Key for successful adoption of new technology is its demonstration. In previous cook stove projects, beer-brewers who saw the benefits of cleaner, more profitable cook stoves that produced less smoke and thus enhanced the taste of beer, more readily accepted new technology.

Institutional

Lack of institutional structures to build on and high bureaucratic hurdles.

Include support to set up respective institutional components (e.g. for MRV framework) and invest time in building relations and developing projects.

Lessons learned

- » It is vital to invest adequate time in a **feasibility analysis** of financial and economic structures at the local sector level when developing a NAMA. Challenges of design of NAMA include properly understanding the financial situation and perspective of entrepreneurs involved and their potential interest to invest in new technology and sustainable biomass sources. A proper feasibility analysis and financial analysis are vital to accessing finance and transforming objectives into practice on the ground.
- » **Ensuring sustainability** by involving all **local stakeholders** as well as ministries is key in all NAMA phases from development to implementation and monitoring.
- » **Coordinating efforts** across donor organisations active in the sector can reduce costs, pool expertise and expand the reach of a project.

How to replicate this practice

- » **Allocate time to an extensive feasibility and financial analysis** during the NAMA development phase to enable access to various finance channels and the design of sustainable activities.
- » **Build on existing structures and experiences** of donor organisations with stakeholders, involve the latter in NAMA development and project activities to understand the local market context and facilitate long-term change through ownership.

Burkina Faso

Burkina Faso Biomass Energy NAMA

- » Increase ownership and facilitate continued action by increasing staff within respective ministries to work part-time for the project and part-time in the ministry, thereby increasing the capacity of government agencies.
- » Take a market-based approach and target entrepreneurs, reach out to local investors and influence value chains based on country and sector-specific market structures.

Institutions involved

- » **Government agencies:** Ministry of Environment and Sustainable Development (MEDD), Permanent Secretariat of the National Council for the Environment and Sustainable Development (SP-CONEDD);
- » **International partners:** SNV Netherlands; Kreditanstalt fuer Wiederaufbau (KfW) via FIE (Environmental Investment Fund) supported by Luxemburg and Sweden; United Nations Industrial Development Organisation (UNIDO); Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ);
- » **National financial institution:** La Société Financière de Garantie Interbancaire du Burkina (SOFIGIB).

Cooperation with

Local NGOs, research institutions and associations of beer-brewers, for instance: Institut de Recherche en Sciences Appliquées et Technologies (IRSAT).

Finance

- » The NAMA received implementation support from the NAMA Facility in the second bidding round for NAMA support projects in 2014, a joint fund of the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB), the Department of Energy and Climate Change (DECC) of the United Kingdom (UK), the Danish Ministry of Climate, Energy and Building (MCEB) and the European Commission. The proposed budget is EUR 13.5m over five years.
- » The detailed financing scheme is currently being defined. The aim is to leverage finance through NAMA Facility and existing donor finance channels in the country (such as the Environmental Investment Fund (FIE) supported by Luxemburg – LuxDev – and Sweden – SIDA) to unlock investments into biomass production for energy use. NAMA implementation uses a results-based financing mechanism with distinct phases and milestones to trigger new funding rounds and private investment, e.g. from local breweries and investors in biomass energy for alternative fuels.

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Organisers

The Global Good Practice Analysis and accompanying case studies are a joint initiative by the International Partnership on Mitigation and MRV and the UNDP Low Emission Capacity Building Programme in an effort to document and share examples of good practice in the design and implementation of INDCs, LEDS, NAMA and MRV systems. For an extensive version of this factsheet and more information, including the criteria applied, please visit www.mitigationpartnership.net/gpa



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