



2. A step-by-step guide to promoting productive use of electricity

Module 1:

Decide whether to engage in productive use promotion

In brief

The decision whether or not to engage in efforts to promote productive uses in the context of an electrification programme should be based on two key determinants:

- 1) Will productive use of electricity be instrumental to the success of the electrification programme, or can it help to achieve other key development objectives set out for the selected area?
- 2) Is there a clear indication that productive use of electricity would not otherwise (fully) unfold in the absence of external support?

Productive use should in general be promoted if 1) and 2) can be answered with *yes*. However it may be necessary to do some background research beforehand.

Practical tasks

Task 1.1

Develop a concept note that defines a vision for and the benefits of productive use promotion

Promoting productive use of electricity within electricity access programmes can make sense for a variety of reasons:

- ▶ In certain cases it can enhance the financial viability of electricity infrastructure and services.
- ▶ It can enhance the economic impact of the energy access programme.
- ▶ It can be instrumental in achieving broader social and economic development objectives.

Hence, the very first step towards promoting productive use of electricity is to draft a brief concept note that spells out why it is deemed desirable or essential that productive use of electricity be taken up within the context of the given energy programme. This concept note shall then provide the basis for all subsequent steps, including communication with stakeholders, definition of objectives, and managing programme documentation, etc.

Table 2 in *Module 2* may provide an initial reference point for drafting such initial concept notes.

Task 1.2

Determine if there is a case for productive use promotion

Investing in active productive use promotion makes sense only if electricity access alone is not sufficient to induce uptake of electricity-based productive activities on the expected scale. The assumption that key actors (entrepreneurs, financial institutions, electrical equipment suppliers, etc.) need support to take full advantage of the economic opportunities provided through modern energy access needs to be well established. The following can serve as relevant reference points to make a case for productive use promotion:



- ▶ Evidence that essential preconditions are not met for the target population to take up productive uses, e.g. no access to technical know-how of purchasing and running electrical machinery, limited availability of electrical equipment, or extremely limited access to financing (formal and informal), etc.
- ▶ Robust analysis of economic impacts of electrification in comparable contexts, demonstrating that effects on MSME performance are limited in the absence of productive use promotion (for further information please also see Module 3).⁷
- ▶ Systematic observations (e.g. in the context of an economic development programme) indicating widespread reluctance among MSME or farmers to adopt technical innovations that are proven to make economic sense.

A sound evidence base demonstrating that *productive use does not happen by itself*, will also be vital later to mobilise funding and stakeholder support for the programme.

Task 1.3

Convene stakeholders to discuss the rationale and need for productive use promotion

The decision to engage in productive use promotion should be backed and shared by a circle of stakeholders that goes beyond those partners directly involved in the electricity access programme. To account for the cross-sectoral nature of productive use of electricity, decision-makers from all sectors concerned with potentially targeted productive electricity users (rural enterprises, farmers, etc.) should be equally involved right from the very start.

Depending on the scope of the programme, the following institutions should be considered as stakeholders in any country:

- ▶ national ministry of energy and departments of energy at sub-national level
- ▶ rural electrification agencies or authorities, and rural electrification funds
- ▶ national utility or energy service providers
- ▶ national ministries and/or departments of agriculture and irrigation
- ▶ national ministry and/or departments of rural development
- ▶ national ministry of trade & industry, industrialisation and/or small enterprise development, etc.
- ▶ civil society or private sector associations working in the area of MSME development.

One viable option may be to **organise a half-day or one-day stakeholder workshop** to a) present the initial concept note and evidence on the need for productive use promotion (see [Tasks 1 and 2](#)), b) discuss how productive use would fit within overarching development strategies, plans and programmes, and c) facilitate a joint conclusion on whether productive use promotion would make sense in the given context. If there is broad-based support for the productive use promotion proposal, this stakeholder workshop could serve as a kick-off forum for **longer-term dialogue between**

7) The 2011 GIZ-ESMAP study Productive Use of Electricity (PRODUSE) – Impact of Electrification on Small Businesses in Sub-Saharan Africa, for example, has explored MSME income in electricity access areas as compared to non-access areas in Benin, Ghana and Uganda.



decision-makers across all sectors concerned. At the same time, it provides an opportunity for exploring **potential roles of various institutions in the further planning and implementation process.**

Task 1.4

Avoid duplication of efforts: Map ongoing programmes for MSME promotion and rural economic development, etc.

Another essential question to be clarified at this point is **what ongoing programmes and projects for local economic development, MSME development and agricultural development, etc.**, could serve as ready entry points for promoting productive electricity use.

The following table contains example programmes and projects that could potentially have a large overlap with typical elements of a productive use promotion programme:

Table 2 Programmes and projects that may have a large overlap with typical productive use promotion activities.

Example programme / project	Area of potential synergies with productive use promotion
Local economic development, sustainable economic development, and economic diversification programmes	Analysis of local economic context to determine what productive use ideas are most viable
Entrepreneurship training	Training of MSME business owners to support uptake of electricity use and enhance business management skills
Micro-finance programmes	Improving access to financing for MSME to invest in electrical equipment
Agricultural extension	Promotion of irrigation and on-farm agro-processing equipment
Education programmes	Integration of syllabus components relevant to productive use of electricity (e.g. related to electrical equipment) into the curricula of vocational schools and training programmes

Task 1.5

Based on Tasks 1.1 to 1.4 above, decide whether productive use promotion is needed to achieving defined objectives

The decision to engage in productive use promotion should be taken:

- a) if evidence indicates that active promotion is necessary to ensure significant uptake of productive uses
- b) if there is broad stakeholder support for productive use promotion and
- c) if no ongoing economic development programmes are designed, or could be supplemented (with minor effort), to effectively promote productive electricity use.



TOOLS AND INSTRUMENTS

Readily usable tools and instruments

RWI (2011): Impact Evaluation of Productive Use – An Implementation Guideline for Electrification Projects. Ruhr Economic Paper No. 279.

This hands-on guide for designing evaluations of the impacts of productive electricity usage was developed by RWI in the framework of the GIZ/ESMAP study Productive Use of Electricity (PRODUSE) – VOLUME I – Measuring Impacts of Electrification on Small and Micro Businesses in Sub-Saharan Africa. It comprises three modules based on enterprise surveys and on anecdotal case studies. For each module, the implementation is described on a step-by-step basis including conceptual issues as well as logistics and methodological questions.

The ex-ante impact assessment methodology introduced in this guide can help to analyse whether and on which scale electricity access leads to PU up-take by MSME in absence of PU promotion measures, and how MSME benefit from PU. While it may be too costly to commission an extra study following such a methodology results from such studies conducted in similar contexts can be invoked for justifying PU promotion.

<http://www.rwi-essen.de/publikationen/ruhr-economic-papers/396/>

Outcomes of Module 1

- ▶ Concept note defining the rationale for productive use promotion to serve as a basis for formulating concrete objectives
- ▶ evidence on the need for active productive use promotion to serve as a basis for mobilising institutional and financial support
- ▶ mapping of stakeholders and potential partners
- ▶ mapping of relevant ongoing programmes and projects
- ▶ an initial, general idea of priority areas and target groups (based on stakeholder consultation).