



Knowledge hub - Collection of best practices

Summary of the best practice

1. Title of the best practice (e.g. name of policy, programme, project, etc.) *

Green People's Energy

2. Country or countries where the practice is implemented *

Ethiopia, Benin, Ghana, Mozambique, Namibia, Uganda, Zambia

3. Please select the **most relevant** Action Track(s) the best practice applies to *

- Action Track 1. Inclusive, equitable, safe, and healthy schools
- Action Track 2. Learning and skills for life, work, and sustainable development
- Action Track 3. Teachers, teaching and the teaching profession
- Action Track 4. Digital learning and transformation
- Action Track 5. Financing of education

4. Implementation lead/partner organization(s) *

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and KfW Development Bank on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ)

5. Key words (5-15 words): Please add key descriptive words around aims, modalities, target groups etc. *

solar technology, rural electrification, productive use of energy, awareness-raising, cooperation with private sector, practice-oriented curricula, TVET trainers and learners, women

6. What makes it a best practice? *

The project "Green People's Energy" implemented by GIZ reduces energy poverty and promotes productive use of energy in rural Africa. Technologies like solar power irrigation systems, solar cooling systems, solar dryers or mills have high potential to boost the productivity and incomes of rural enterprises. Based on local market assessments, the project aims to increase the number of rural enterprises acquiring and using such high-potential renewable energy technologies. By building the capacities of farmers, cooperatives, sales agents and technicians and giving private solar companies incentives to extend their services in rural areas, productive use of energy is promoted and brought to scale. Up-skilling professionals to design, finance, sell, install, operate and maintain systems is crucial. The project thus has a special focus on skills development. It cooperates with training institutes and vocational training centres in 7 out of 9 target countries to provide the needed training offers. While other development projects may focus only on skills or private sector development, 'Green People's Energy' pursues a holistic market development approach and with this, strives to create transformative impacts for rural communities. It is implemented in Ethiopia, Benin, Côte d'Ivoire, Ghana, Mozambique, Namibia, Zambia, Senegal, and Uganda.

Description of the best practice

7. Introduction (350-400 words)

This section should ideally provide the context of, and justification for, the practice and address the following issues:

- i) Which population was affected?
- ii) What was the problem that needed to be addressed?
- iii) Which approach was taken and what objectives were achieved? *

The nascent, growing demand for off-grid decentral renewable energy (DRE) solutions is challenged by a shortage of skilled professionals to design, finance, sell, install, operate and maintain systems.

Especially in rural areas, the lack of skilled professionals leads to:

- low knowledge about DRE systems and thus demand
- few distribution networks and business models for sales, operation and maintenance
- lack of access-to-finance for end-users
- low-quality system installations and poor sustainability.

IRENA estimates that off-grid renewables for energy access can create at least 4 million jobs by 2030.

'Green People's Energy' aims to improve skills development offers for key stakeholders in the DRE-ecosystem (e.g. technicians, sales agents, extension officers, credit institutes, teachers).

8. Implementation (350-450 words)

Please describe the implementation modalities or processes, where possible in relation to:

- i) What are the main activities carried out?
- ii) When and where the activities were carried out (including the start date and whether it is ongoing)?
- iii) Who were the key implementation actors and collaborators? (civil society organizations, private sector, foundations, coalitions, networks etc.)?
- iv) What were the resources needed (budget and sources) for the implementation?

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'Green People's Energy' (GBE) supports vocational training institutes (VTI) and technical universities to offer new/improved practical training modules for professionals.

Training modules are short courses, targeted at local professionals with experience, in some cases also students. Trainings provide practical skills to better plan, finance, implement, operate and maintain decentralised renewable energy systems. Technological focus is on productive use technologies (solar irrigation, solar cooling, solar drying, solar water heaters), solar PV systems and mini-grids.

The sustainability of the new training offers is ensured either by integrating new training modules in existing courses and national TVET structures or by cooperating with business-oriented schools, that wish to extend their training offers to professionals.

Main activities implemented in Ethiopia, Benin, Ghana, Mozambique, Namibia, Zambia, and Uganda (2019 - 2023):

- Training needs analysis and selection of partner training institutes
- Private sector-led development of curricula and training handbooks
- Supply of demo systems, training stands and materials for partner schools
- Training of trainer (ToT) - programmes
- Roll-out of short-course training modules in cooperation with trained trainers
- Facilitation of practical placements for trained professionals

Where relevant, cooperation with German and European educational institutions, e.g. Grant with Bildungswerke der bayrischen Wirtschaft (bbw) to implement ToT for PV I and II in selected countries.

Key implementation actors and collaborations:

Vocational training institutes, technical universities, agricultural colleges, national TVET authorities, solar associations, solar companies, ministries of energy, NGOs and consulting companies

Country example 1: Introducing new curricula for professionals in Zambia

2 curricula for national Skills Award level developed and approved (one-month courses)

Objective: learn to size, assemble, install, commission, operate and maintain different solar energy applications incl. customer care in the solar industry and business skills.

Target group: professionals that already have a degree in electrics or a related field

Focus:

o Installation of solar energy applications: pumps, water heaters, street lighting, cooling systems, home and office lighting as well as other appliances.

o Installation of solar energy agricultural applications: water pumps for irrigation, cooling systems, driers, water heaters, lighting and domestic appliances.

Trainings will be introduced in 4 vocational training institutions (VTIs) in Southern and Lusaka Province.

Internship placements for interested trainers and professionals, in collaboration with the private sector (through SIAZ)

Country example 2: Green Banking: Developing a new training offer for banking professionals to assess RE investment projects in Benin

In Benin the project launched a 12-week online training for banking and microfinance professionals that already have knowledge of finance with RENAC. The learning objective is to understand the concepts necessary for the analysis and evaluation of investment projects in the field of renewable energy.

Focus: SME financing for small-scale green energy projects, international climate financing, national policies and characteristics of green energy markets, business models for decentralized renewable energy technologies and business plans for green energy investments.

A Training of Trainers (ToT) will be implemented (5-days course) with the aim of introducing the training in at least one training center in the south of Benin.

9. Results – outputs and outcomes (250-350 words)

To the extent possible, please reply to the questions below:

- i) How was the practice identified as transformative? (e.g., impact on policies, impact on management processes, impact on delivery arrangements or education monitoring, impact on teachers, learners and beneficiary communities etc.);
- ii) What were the concrete results achieved with regard to outputs and outcomes?
- iii) Has an assessment of the practice been carried out? If yes, what were the results? *

Trainings are aimed to have an impact on key actors in the sector: technicians, sales agents, credit officers of financial institutions, etc. This has potential to improve the framework conditions for investments in renewable energy technologies in rural areas.

Through other core activity areas, the project directly incentivizes the private sector to extend their business models to rural areas and supports investments in off-grid renewable energy. This holistic approach of supporting different market actors is expected to promote transformative change in the sector.

Outcomes will be assessed and analysed based on country case studies and a knowledge product in 2023.

10. Lessons learnt (300 words)

To the extent possible, please reply to the following questions:

- i) What were the key triggers for transformation?
- ii) What worked really well – what facilitated this?
- iii) What did not work – why did it not work? *

Will be assessed in 2023 through impact analysis, case studies and a dedicated a knowledge product.

11. Conclusions (250 words)

Please describe why may this intervention be considered a “best practice”. What recommendations can be made for those intending to adopt the documented “best practice” or how can it help people working on the same issue(s)? *

See response to question 6.

Recommendations will be derived in the knowledge product to be published in 2023. Training modules developed can be shared, where GIZ has the rights to curricula and training material.

12. Further reading

Please provide a list and URLs of key reference documents for additional information on the “best practice” for those who may be interested in knowing how the results benefited the beneficiary group/s. *

<https://gruene-buergerenergie.org/en/>