



Productive Use of Energy: Definition, Impacts and Promotion Approaches

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Content of Presentation

- Definition & Examples
- Impacts of productive use of energy (PUE)
- Promotion of PUE



Definition of Productive Use

- There are different definitions
- Productive vs. consumptive/domestic use
- Narrow definition: use of energy for income-generation / enhanced productivity
 - ⇒ Includes home businesses, non-monetary income
 - ⇒ Excludes social infrastructure etc.
- Definition for PRODUSE study: *“Agricultural, commercial and industrial activities involving energy services as a direct input to the production of goods or provision of services”*



Different Types of PUE

- Grid electricity
- Decentralised systems (mini-grids, solar systems)
- Biomass energy
- Solar dryers
- Mechanical energy



Examples from Uganda – Service Sector I



Shop lighting



Examples from Uganda – Service Sector II



Phone charging



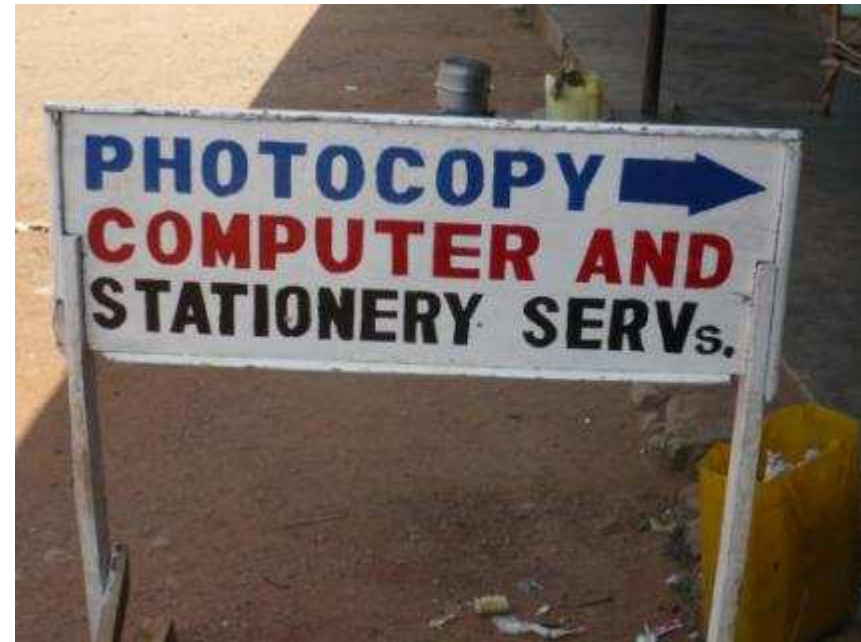
Battery charging



Examples from Uganda – Service Sector III



Hair saloon



IT services, photocopy



Examples from Uganda – Service Sector IV



Cold drinks



Tourism



Examples from Uganda – Manufacturing



Welding



Carpentry



Examples from Uganda – Agriculture



Solar-powered drip irrigation



Grain mill



Benefits of PUE

- Potential to increase impact of energy access programmes through increased income
- Improves viability of energy service provider (grid, mini-grids) and / or ability to recoup investment by the user (SHS)
- Economic benefits can occur at different levels along the value chain
- Depending on the context, there can be winners and losers



Productive Use of Electricity (PRODUSE) Vol. I

- Joint GIZ/ESMAP study
 - Rigorous evaluation of impact of electricity on microenterprises in three African countries
 - Development of M&E tool and guidelines
- ⇒ Significant positive effects on income, employment etc. cannot be taken for granted!

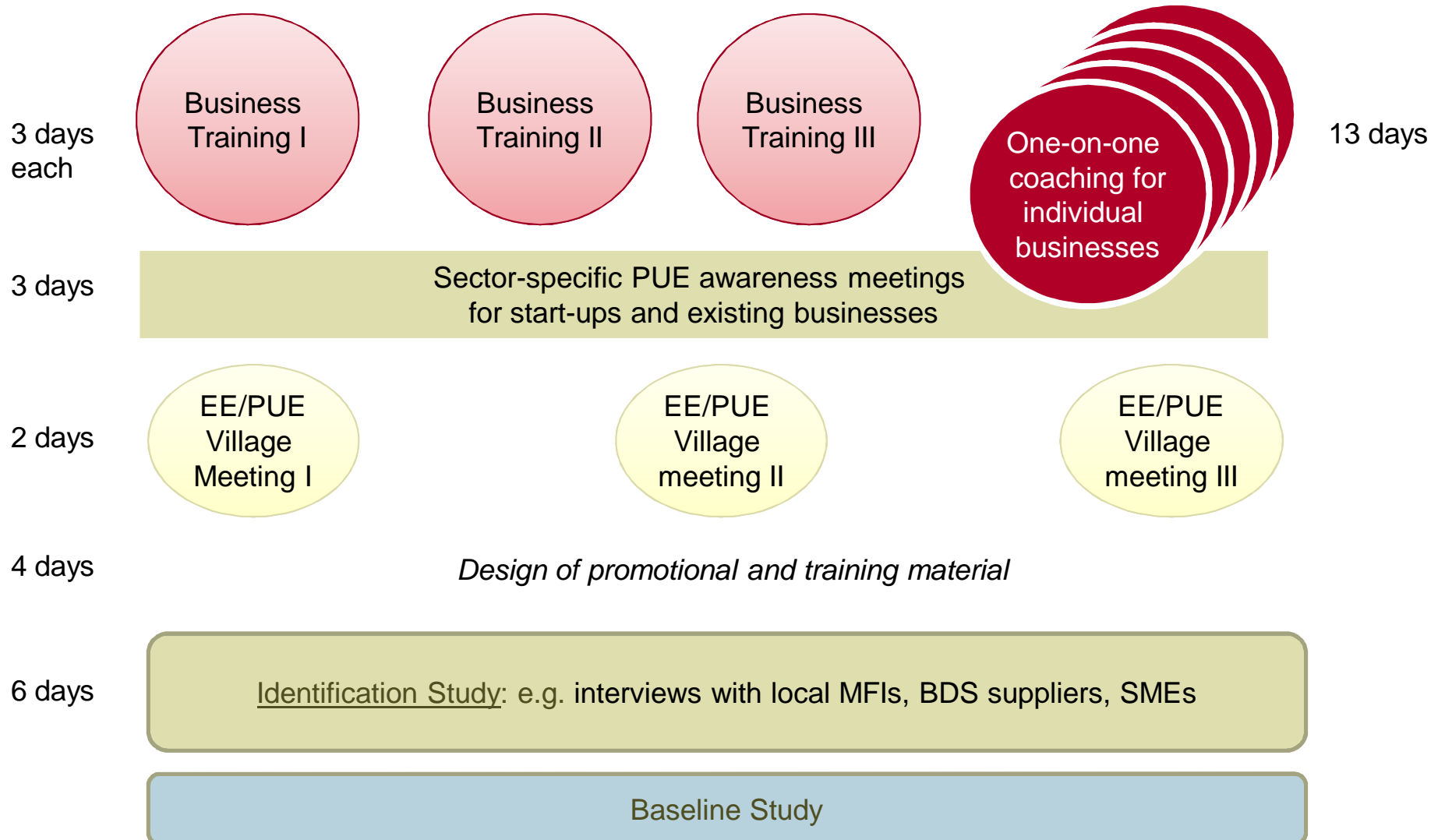


Typical features of PUE programmes

- Identification of PUE opportunities
 - ⇒ Value chain analysis etc.
- Awareness about PUE opportunities
- Access to microfinance (long-term)
- Business development services (BDS) for start-ups and established businesses
 - ⇒ Business training incl. business plan development, coaching
- Facilitate access to PUE equipment
- Impact assessment
 - ⇒ PRODUSE methodology



Example of PUE promotion component (Uganda)





Thank you for your attention!

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