

Opportunities for Renewable Energy Services in Rural Areas

REToolKit

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REToolKit

A Renewable Energy Operational Guide for Electricity & Electric Services



The World Bank

www.worldbank.org/esmap



Opportunities for Renewable Energy Services in Rural Areas

- Rural Electrification
- Social Services:
 - education, health, drinking water, telecommunications, etc.
- Income generation:
 - Water pumping for irrigation, crop and meat drying and freezing, agro-industry processing, cottage industry, etc.
- Cooking and heating

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Lessons Learned from Projects on Productive Uses of Renewable Energy

1. Designed as development projects, and guided by non-energy sector authorities
2. Start with demand, remain technology neutral
3. Beyond electricity
4. Micro-credit can play a major role
5. Entrepreneurship a key element
6. Government support essential
7. Local service infrastructure a key to sustainability
8. Sustainability and replication a challenge

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REToolKit

- **Objectives:**
 - Assist Bank task managers and in-country counterparts in improving the design and implementation of renewable energy projects
 - Reduce project preparation cost and time
- **Audience:** WBG Task Managers and in-country counterparts
- **Scope:** RE for electric services
- **Phased Approach**

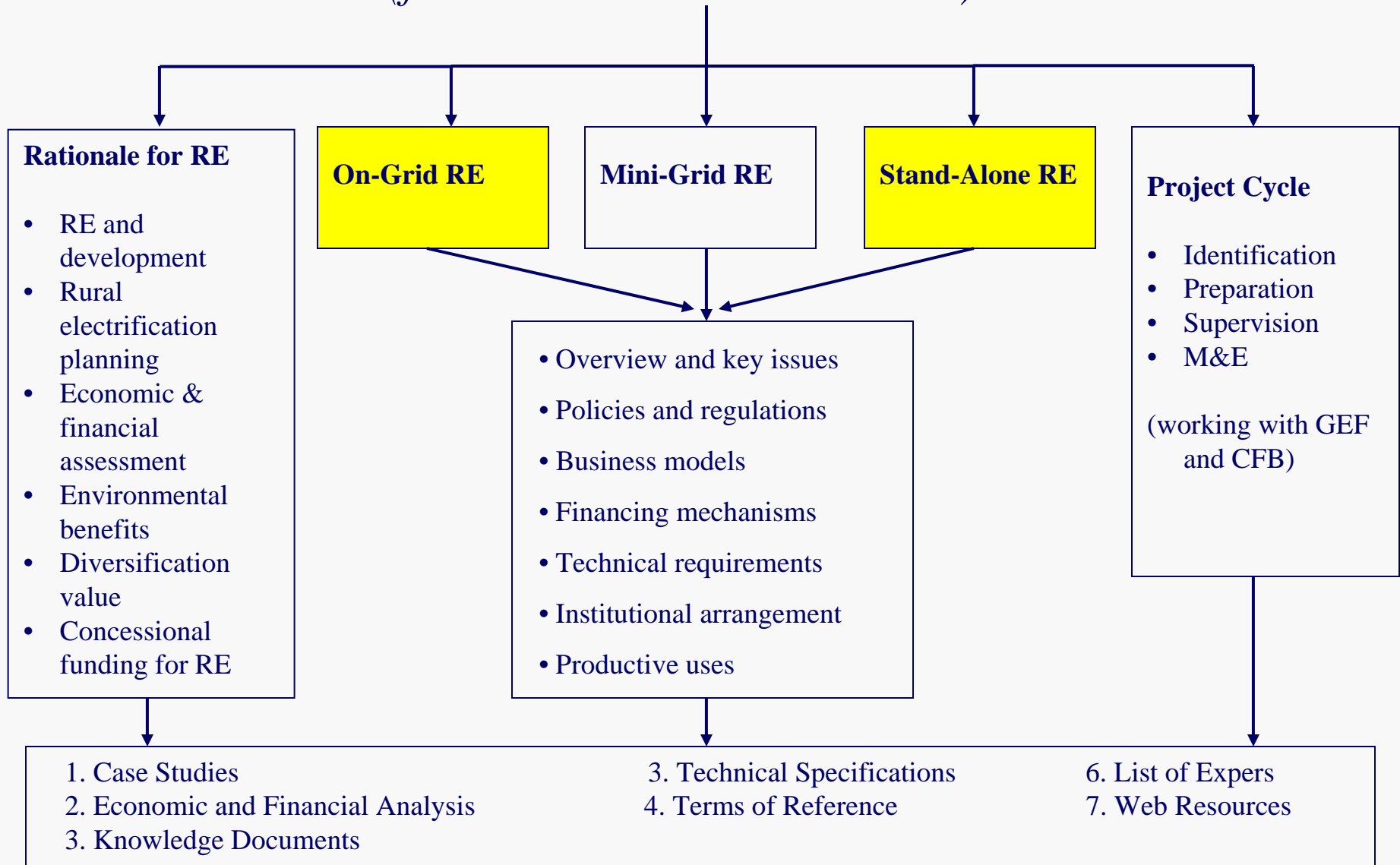
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REToolKit [Click here to see](#)

A Renewable Energy Operational Guide for Electric Services

(five modules and seven tools)



REToolKit

A Renewable Energy Operational Guide for Electricity & Electric Services

SEARCH

HOME CONTACT PRINT

SEARCH

TOOLS

- PROJECT TOOLS**
- CASE STUDIES
 - ECONOMIC AND FINANCIAL ANALYSIS
 - KNOWLEDGE DOCUMENTS
 - LIST OF EXPERTS
 - TECHNICAL SPECIFICATIONS
 - TERMS OF REFERENCES
 - WEB RESOURCES

REToolKit provides necessary tools to assist Bank task managers and country counterparts to improve the design and implementation of renewable energy projects, incorporates best practices and lessons learned that have emerged from RE projects supported by the WBG and others, and is operationally oriented to address needs at each stage in the project cycle.

REToolKit will help you to identify feasible RE projects, determine appropriate promotional policies, identify sustainable business models and financing mechanisms, and utilize the best available technical standards and supporting documents. [more...](#)

MODULES

GRID-CONNECTED RE

Wind, small hydro, biomass and geothermal power plants selling power to the grid

MINI-GRID RE

Mini-hydro, biomass and hybrid power plants selling power to an isolated community

STAND-ALONE RE

Solar, pico-hydro, and micro-wind systems providing electricity for households and cottage industry

RE RATIONALE

Materials to convince decision-makers of the importance of renewable energy, such as economic viability and cost-effectiveness

WB PROJECT CYCLE

Issues to address and tools to apply at each stage of the project cycle, such as working with GEF and carbon finance