



Foundations of Off-Grid Solar in Haiti



Course Goals and Overview

Goal

- The overall goal of the course is to provide a primer of key information and concepts for off-grid solar in Haiti to help build shared understanding and catalyze interest in off-grid solar for rural electrification in Haiti.

Expectations

- The course is meant to be a high-level overview of key concepts for off-grid solar and its applications in Haiti. It is not meant to be fully comprehensive for any one subject area but rather provide foundational knowledge and resources for additional learning and training.

Key Topics

- The course covers a variety of topics across the off-grid space including energy access in Haiti, off-grid solar products, market potential in Haiti, supply and demand side considerations, system design, installation and maintenance, off-grid solar business models, financial modeling, gender and energy access, productive use of energy, and climate adaptation.

Who is this course for?

- Anyone with an interest in learning about off-grid solar in Haiti including university students, government partners, NGOs, funders, development partners, professionals, etc. No prior knowledge of off-grid solar or Haiti is required.

Course Structure

- The course has 11 total modules, totaling 10-20 hours of content.
- Downloadable pdfs of the slides are available in French and English.
- All materials are available [here].
- Participants are invited to go through the course at their own pace.

Each slide has links to
sources for more detailed
information

Source: [Link to Source](#)



Overview



Foundations of Off-Grid Solar in Haiti



1. Basics of Electricity, Energy Access, and Off-grid Solar



2. Key Products and Quality Assurance for Off-grid Solar



3. Market Potential for Off-grid Solar in Haiti



4. Understanding Off-Grid Solar Customers



5. Designing and Modeling Off-Grid Solar Systems



6. Installation, Operations, and Maintenance of Off-Grid Solar Systems



7. Elements of Business Models for Off-Grid Solar



8. Financial Modeling for Off-grid Solar



9. Gender and Off-Grid Solar



10. Productive Use of Energy



11. Climate Adaptation and Resilience

Table of Contents

Module #	Module Name	Content
1	Basics of electricity, energy access, and off-grid solar	<ul style="list-style-type: none">• Definitions and units for power and energy• Introduction to Solar PV and how to estimate solar potential and solar production in Haiti• Energy access challenge globally and in Haiti• Components and role of off-grid solar• How to measure and evaluate energy access
2	Key Products and Quality Assurance for Off-grid Solar	<ul style="list-style-type: none">• VeraSol quality assurance framework for off-grid solar• Exploration of key off-grid solar products and price points• Overview of off-grid solar suppliers and products in Haiti
3	Market Potential for Off-grid Solar in Haiti	<ul style="list-style-type: none">• Market potential for off-grid solar in Haiti• Regulatory and policy framework for off-grid solar in Haiti
4	Understanding Off-Grid Solar Customers (Demand and Supply Side Considerations)	<ul style="list-style-type: none">• Key characteristics and considerations driving the demand for off-grid solar products• Energy needs assessments for off-grid solar customers• Development of load profiles from off-grid solar surveys
5	Designing and Modeling Off-Grid Solar Systems	<ul style="list-style-type: none">• Introduction to the Renewable Energy Optimization (REopt tool) for designing, modeling and evaluating off-grid solar projects
6	Installation, Operations, and Maintenance of Off-Grid Solar Systems	<ul style="list-style-type: none">• Configuration of off-grid solar systems• Overview of key concepts for installation of off-grid solar systems• Operations and maintenance considerations for off-grid solar systems

Table of Contents

Module #	Module Name	Content
7	Elements of Business Models for Off-Grid Solar	<ul style="list-style-type: none">• Business models for off-grid solar• Overview of off-grid solar investment and financing pathways• Credit risk management for off-grid solar• Customer protection for off-grid solar• Off-grid solar KPIs• End-of-life management of off-grid solar products
8	Financial Modeling for Off-grid Solar	<ul style="list-style-type: none">• Key metrics and parameters for financial modeling• Deep-dive into project and portfolio financial models for off-grid solar• Templates for financial models
9	Gender and Off-Grid Solar	<ul style="list-style-type: none">• Key definitions for gender mainstreaming, gender equity• Impact of energy access on gender equality• Business case for integrating gender into off-grid solar• Investment due diligence for gender in off-grid solar
10	Productive Use of Energy	<ul style="list-style-type: none">• Overview of productive use of energy• Business models and appliances for productive use of energy• Examples of productive use applications in Haiti• Challenges for productive use in Haiti
11	Climate Adaptation and Resilience	<ul style="list-style-type: none">• Definitions of climate adaptation and resilience• Climate risk and vulnerability in Haiti• Energy access impacts on resilience• Developing a climate narrative

Organizational Overview

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Other Partners



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Contact information

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Thank you



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