

Nationally Appropriate Mitigation Action (NAMA): Rural Electrification by using Renewable Energy in Namibia

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Windhoek, 3rd of October 2014



NAMA Development Phases

3 major phases:



Conception

Development

Implementation
Operation

Conception Phase

- Information gathering
 - Existing programmes and policies
 - Barriers
 - Instruments / measures to overcome barriers
 - Baseline
 - Required resources
- Defining scope and interventions
- Identifying key stakeholders / institutions

Objectives:

- Explain the objectives and elements of NAMAs;
- Understand the current institutional setup in the Namibia in terms of roles and responsibilities for implementing renewable energy projects in rural communities;
- Solicit stakeholder feedback on the proposed interventions;
- Make a preliminary assessment of institutional capacity to carry out the tasks and responsibilities, that would be laid out in the detailed NAMA design;
- Propose an initial institutional setup for the NAMA approval and implementation process.

Rural Electrification NAMA in Namibia

Proposed Intervention A

Solar photovoltaic (PV) with battery storage system as mini-grid solutions in rural communities:

- In vicinity of schools and potential future tourism projects, such as eco-lodges;
- Households will be connected to a solar PV mini-grid, providing access to energy through renewable sources;
- Mini-grid will address daily lighting and minor audio/video needs;
- Additional capacity as a basis for income generation opportunities for entrepreneurs/community projects;
- Linkage to existing schools in order to boost the human development (children can study later in the evening, access to technology, etc.);
- Opportunity for adult education by running night schools and training courses.

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Proposed Intervention B

Solar Systems for Rural Productivity Zones:

- Similar installation, but less capacity, stand-alone solution;
- Village households will charge their batteries, on daily basis for lighting and other basic needs;
- Additional power available at energy centres for agro-processing units, ice making units etc.;
- Community will be encouraged to come up with entrepreneurial projects that can be implemented in the vicinity of the energy centre;
- Same as Intervention A, this intervention can use basic existing infrastructure available at schools.



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Sustainable Development



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Sustainable Development (SD) Indicators will be integrated in the NAMA. The 2 planned interventions will have positive effects on the following indicators:

- Air pollution/quality
- Health
- Livelihood of the poor, poverty alleviation
- Time savings/time availability
- Access to clean and sustainable energy
- Education
- Empowerment of women
- Access to sustainable technology
- Income generation
- Job creation

Development Phase

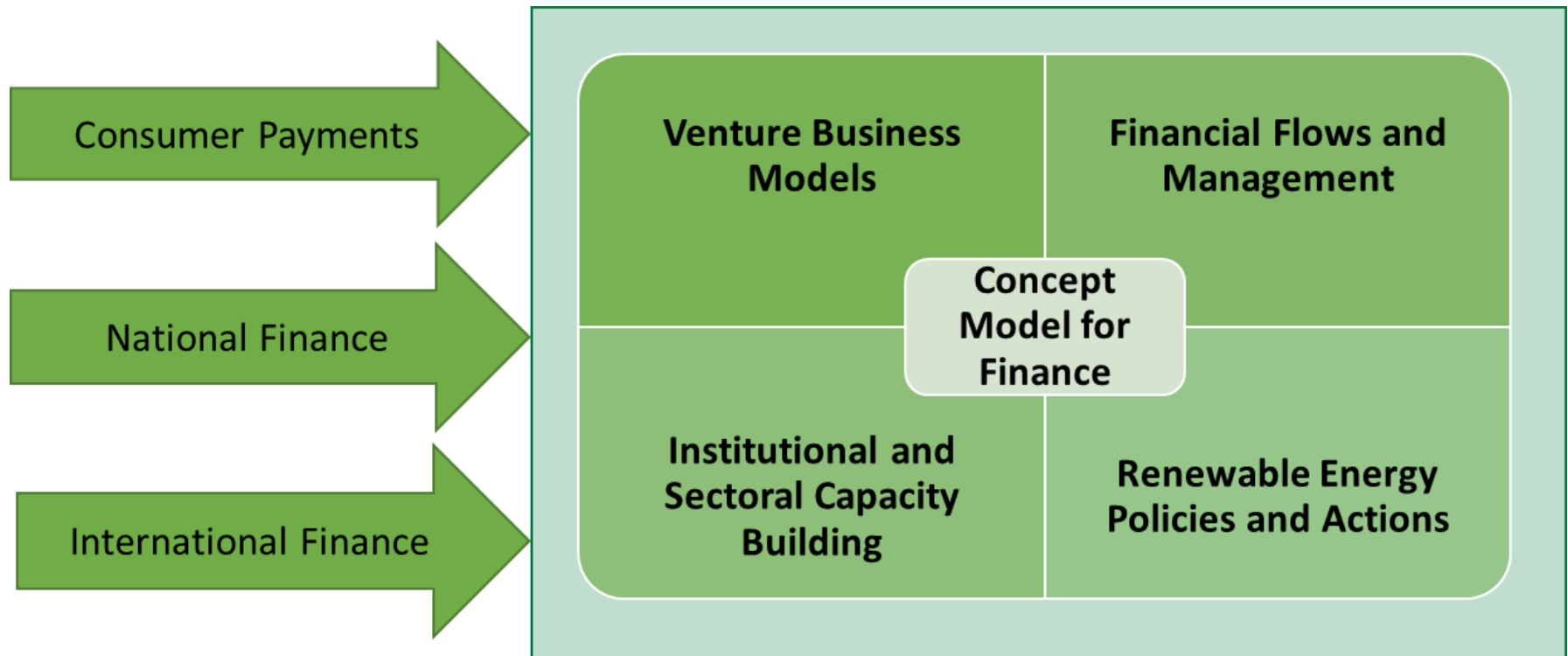
- Revision and Elaborating Details
 - Emission reductions
 - Implementation plan
 - Financing requirements
 - Financing plan
 - MRV plan, responsibilities,
- Strong stakeholder involvement
- Start of discussions with donors
- Final decision making
- Submission to UNFCCC registry for visibility and possible matching

Implementation Phase

- Donor Negotiations and Agreement
- Adaption to specific Donor Needs
- Launch and Operation
- MRV
- Evaluation (Adaptation)

Rural Electrification NAMA in Namibia

Concept Model for Financing





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Concept Model for Financing (CMF)



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Built upon 4 cornerstones as follows:

- Venture Business Models,
- Financing Flows and Management,
- Renewable Energy Policies and Actions,
- Institutional and Sectorial Capacity Building;

Those cornerstones are interlinked, leading to a sustainable model for financing rural electrification interventions which mitigate GHG Emission Reductions and ultimately lead to a sustainable development path.

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Concept Model for Financing (CMF)

- Funds are targeting individuals who lack financial means to pay full cost of electricity;
- Where public and private sectors cannot bare the cost of change;
- Funds facilitate establishment and operation of the NAMA and individual interventions;
- CMF received funds, which cover the entire lifecycle of the NAMA;
- Funds originate from lower consumer service payments, national government measures or programs, and from donor country and multilateral institution programs;
- Thus creating 2 primary tracks of NAMA finance, specifically national and international finance as shown in the diagram;

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Concept Model for Financing (CMF)

- Financing a NAMA is not only directly financing the implementation and operation of individual ventures, but also financing the actions needed for change, and the cost of operating the NAMA;
- The two primary tracks of finance will need to fund several parallel bodies, actions, and incentives in order to ensure long term sustainability of the NAMA:
 - (i) NAMA Approval Committee;
 - (ii) NAMA Coordinating Authority;
 - (iii) NAMA Intervention Approval Expert Group;
 - (iv) Institutional and sectorial capacity development;
 - (v) Grant and subsidy schemes;
 - (vi) Cost reduction schemes; and/or loan schemes;



Rural Electrification NAMA in Namibia Timelines



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- *September 2014-February 2015 – design of the NAMA, consultations,*
- *February 2015 – presentation of the draft NAMA,*
- *February–April 2015 – finalization of the NAMA design*
- *April 2015 – public presentation of NAMA*



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THANK YOU



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