IFC International Finance Corporation World Bank Group

GSMA Green Power for Mobile

In partnership with Netherlands

GPM Feasibility Study: Approach

Green Power for Mobile
Francophone Regional Working Group

Dakar, 07-08 Nov 2013

GPM Feasibility Study Overview

GPM Feasibility Study Approach

Outcome

Sample Feasibility Study Output

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Objectives

- The primary objective is to ensure that MNO gets full understanding on green power feasibility for its network and maximizes Return on Investment (ROI) of Green power deployment.
- To understand and analyse network of base station sites for feasibility of Green Power solutions and Educate MNO with the methodology for selecting and specifying appropriate green power solutions for a wide variety of base station sites. Accounting for site specific changes in topography, meteorology, accessibility and installed base station equipment
- Demonstrate to MNO technical and commercial feasibility of renewable alternatives to off-grid and unreliable grid powering scenarios and Provide recommended alternative energy technology, equipment sizes, forecast CAPEX, forecast ROI etc.
- Provide MNO with clear next steps for scaling the use of green power solutions and to assist with vendor identification RFP preparations and RFP interpretations
- To support establishment of a Centre of Excellence in MNO through the provision of training materials and a training curriculum from GSMA Green Power for Mobile
- To provide MNO with a global platform from which to publicise it's environmental initiatives, through GSMA publicity materials/communication channels

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How it is done…

- ✓ Relevant data for complete network is collected and validated for the analysis
- ✓ Site survey is carried out for selected sample of sites to get field level understanding of the network
- ✓ Overall characteristics of the network taken into consideration for the analysis including,
  - ✓ power infrastructure
  - ✓ Geography
  - ✓ Accessibility infrastructure
  - ✓ Environment and
  - ✓ Logistics and operational parameters
- ✓ All the possible options are considered and evaluated
  - ✓ Grid extension
  - ✓ Network upgrade
  - ✓ Energy optimization
  - ✓ Renewable alternatives incl. Solar, Wind etc.

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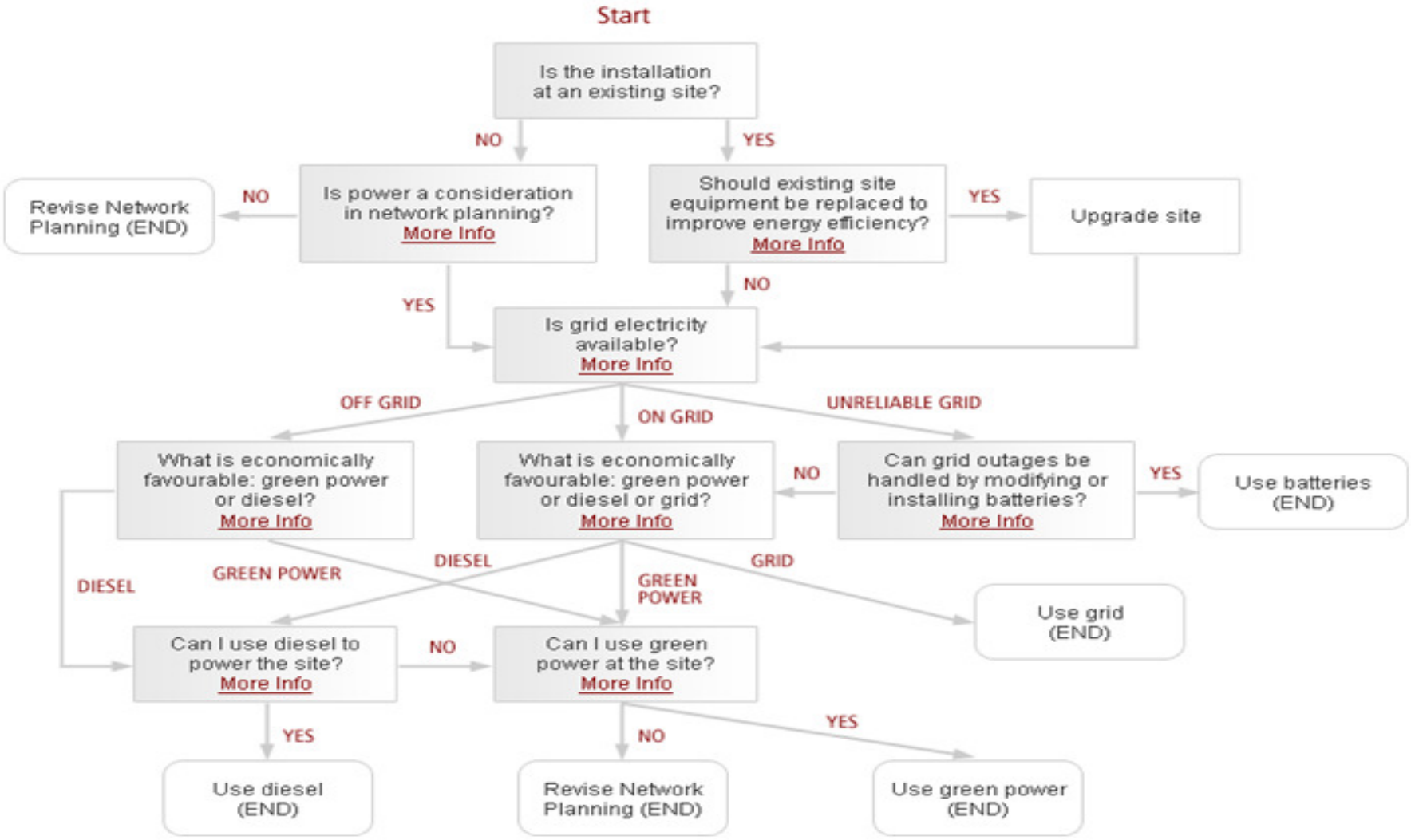
Feasibility study engagements so far…



29 Feasibility studies across 27 countries

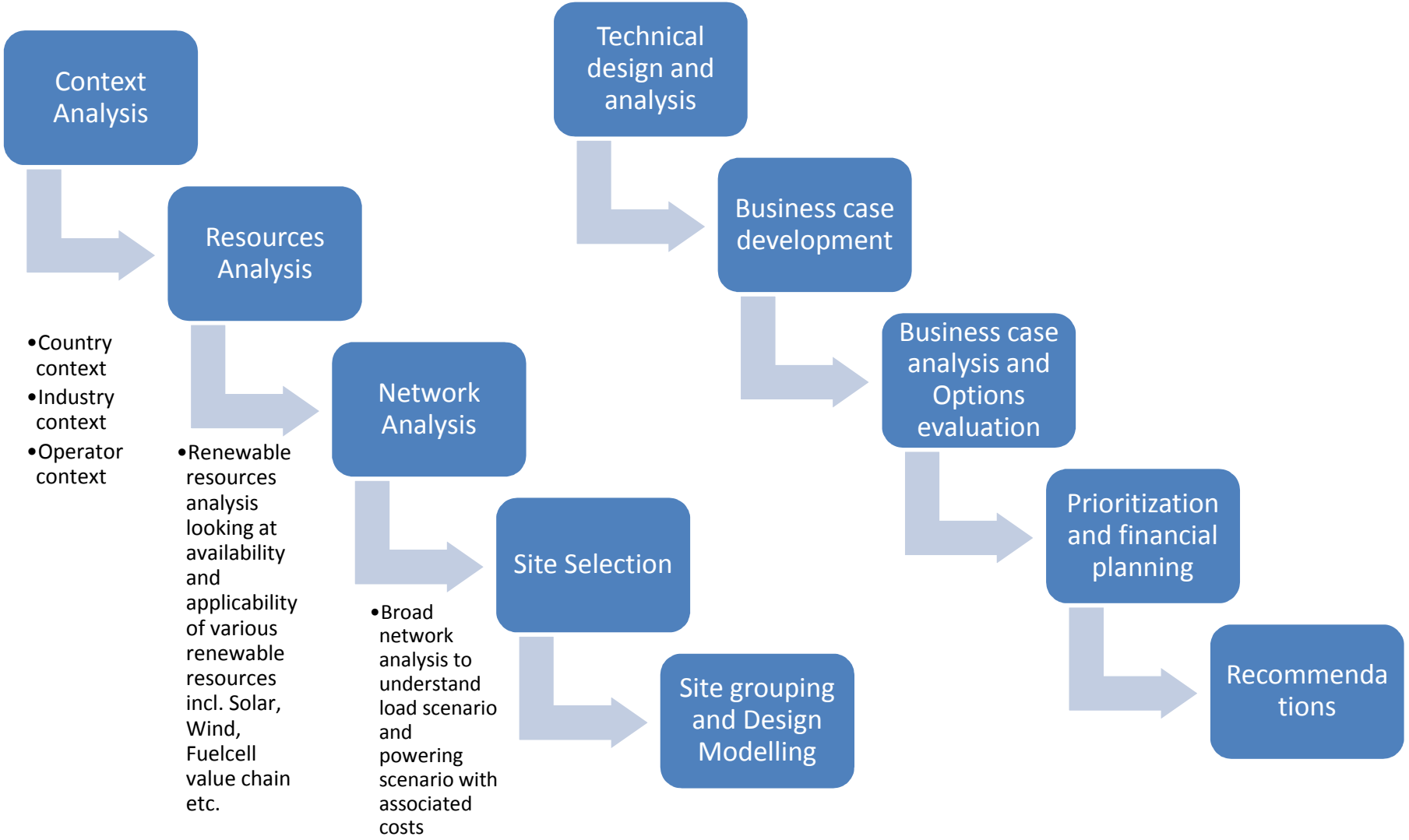
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Operator Decision Tree



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Feasibility Study Approach



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Outcomes…

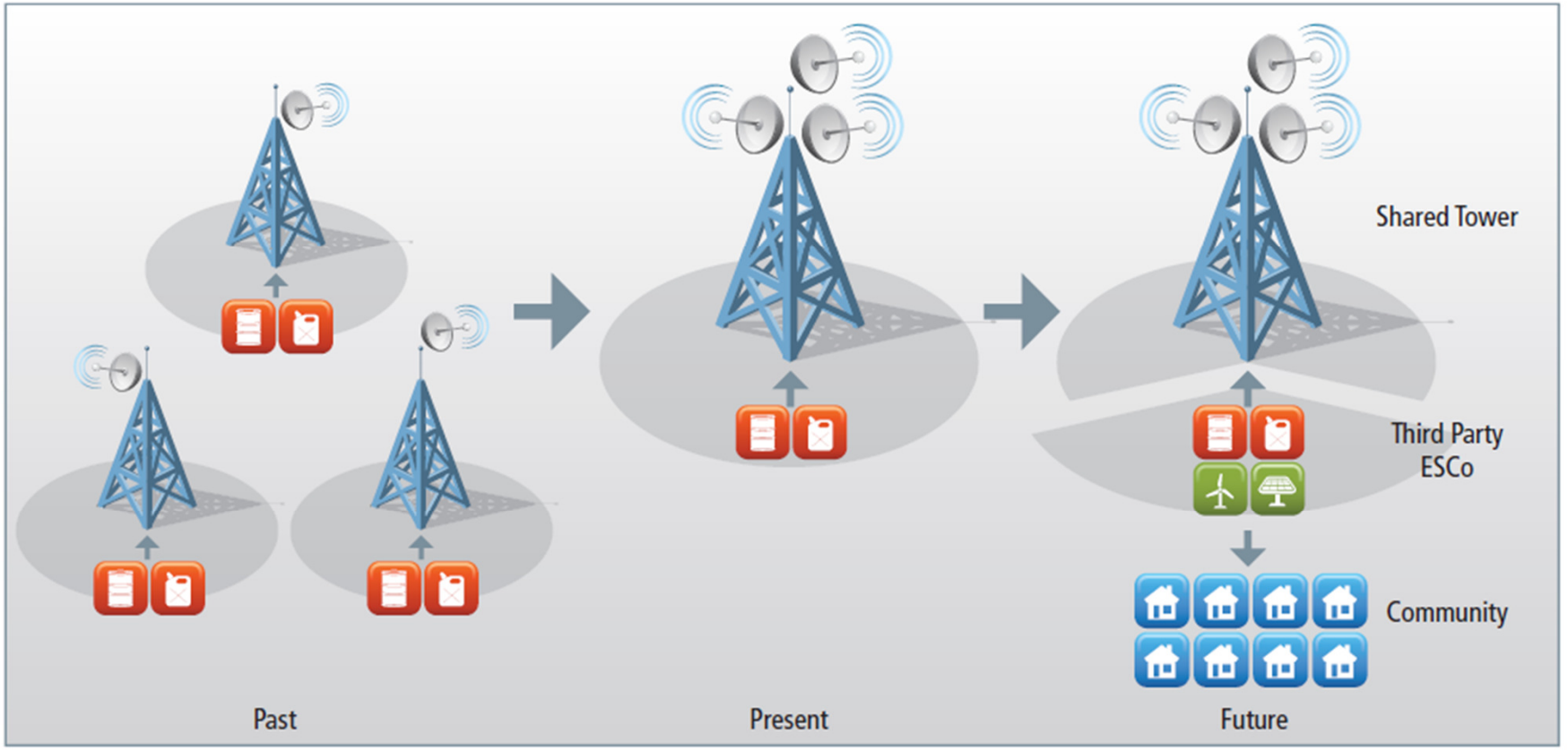
- ✓ A list of sites with most feasible alternative power solution
- ✓ An optimum power solution including the technical dimensions and business case
- ✓ A prioritized list of sites with phase-wise development plan and investment metrics
- ✓ Forecasted impact on OPEX budget and Environment
- ✓ A step-by-step approach to implementation

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Thank You!

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Transformation of Business Models



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