

RENEWABLE  
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POLYTECHNIC OF NAMIBIA

# BACKGROUND OF THE PREFEASIBILITY STUDY ON CSP

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25 July 2012

# BACKGROUND

1. REEEI is a national energy institute at Polytechnic of Namibia established by the Ministry of Mines and Energy (MME) to promote renewable energy and energy efficiency.
2. In 2010 REEEI muted the idea of establishing a pilot CSP power plant for R&D but at the same time feeding power into the grid
3. The Concentrating Solar Power Technology Transfer for Electricity Generation in Namibia (CSP TT NAM) projected was set up with support from Global Environment Fund (GEF) and UNDP with 4 components:
  - a. Establishment of CSP technology industry through smart partnerships with technology providers.
  - b. Creation of a Market Policy Framework for CSP technology through formulation of appropriate policies.
  - c. Creation of a Business Model and Financing Framework for CSP projects.
  - d. Establishment of at least a 5MW CSP pre-commercial demonstration, technical capacity building plant and provide a working model for a CSP roadmap.

\*Assumption was that a site for the plant had already been identified



# SCOPE OF PRE-FEASIBILITY STUDY

- REEEI then approached MME & the Energy & Environment Partnership for Southern & East Africa (EEP S&EA) for funding to do a pre-feasibility study:
  1. Nation-wide solar resource assessment
  2. Site selection and environmental analysis
  3. High level technology review, including hybrid generation and business model
  4. Best practice on solar ground measurements
  5. Technology Transfer Program
- Assessment on a 5-50MW plant (different firing options will be considered, e.g. solar + biomass)
- A consortium led by GESTO Energia from Portugal was appointed to do the study. We expect to have a second & final workshop in July 2012



# NEXT STEPS

- Conduct ground based measurements of DNI & other parameters on 2 or more of the selected sites (**starting in August 2012**)
- Formulate a project document for submission to GEF for partial funding for the development of the CSP power plant (**work in progress**)
- Conduct a detailed feasibility study (**as soon as GEF funding is secured**)



# THE END

○ THANK YOU



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