

SOLAR NANO-GRID (SONG) PROJECT CONSULTATION  
WORKSHOP

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**AFRICAN SOLAR DESIGNS EXPERIENCE IN  
MINI-GRID SPACE**

*7<sup>TH</sup> MARCH 2014*

*Prepared by*



# Agenda

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1. Company introduction
2. Projects undertaken
3. Mini-grid Maasai Mara
4. A-B-C concept
5. Conclusion



# 1. Company Intro

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- African Solar Designs, Ltd. (ASD) is a 3 year old Kenyan-based renewable and rural energy company that provides a wide range of technical services and capacity building assistance in the energy sector.

# Company Intro (cont..)

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- Technical services includes
  - Energy Audit
  - RE Systems design
  - Tendering and Procurement
  - System installation and supervision
  - System maintenance and performance follow up
- Consulting
  - RE market analysis
  - Policy development
  - RE capacity building
  - RE Training



# Projects Undertaken

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## Technical Services

|   | Project name                         |
|---|--------------------------------------|
| 1 | 60 kW grid connect system Mombasa    |
| 2 | 11.5 kW Mini – grid Maasai Mara      |
| 3 | 10 kW solar school project           |
| 4 | 10 kW solar Car Park System          |
| 5 | 30 kW grid connect system Djibouti   |
| 6 | Hotels and Flower farm Energy Audits |

# Projects Undertaken (cont..)

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SOS Children's Village 60 kW, on-grid



# Projects Undertaken (cont..)

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## Consulting Services

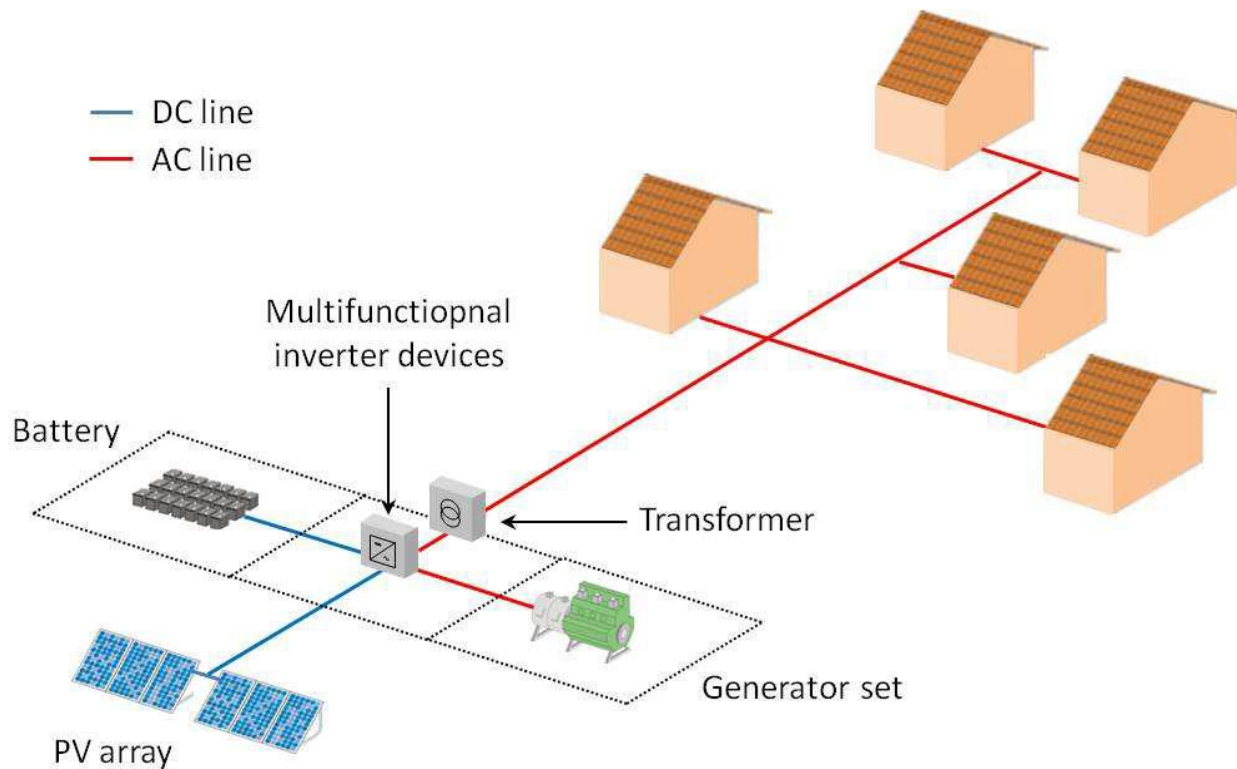
|   | Project name  |
|---|---|
| 1 | Assessment of East African Renewable Energy Value Chains        |
| 2 | Use of Telecom Sector in Rural Electrification Tanzania & Kenya |
| 3 | Renewable Energy Market Studies East Africa( AFD)               |
| 4 | Sustainability Assessment of Biogas Project                     |
| 5 | Rwanda Solar PV Market Development and Training                 |



# Maasai Mara- Mini grid 11.5kWP



## What is a Mini-Grid?





# Maasai Mara Mini grid 11.5kWp

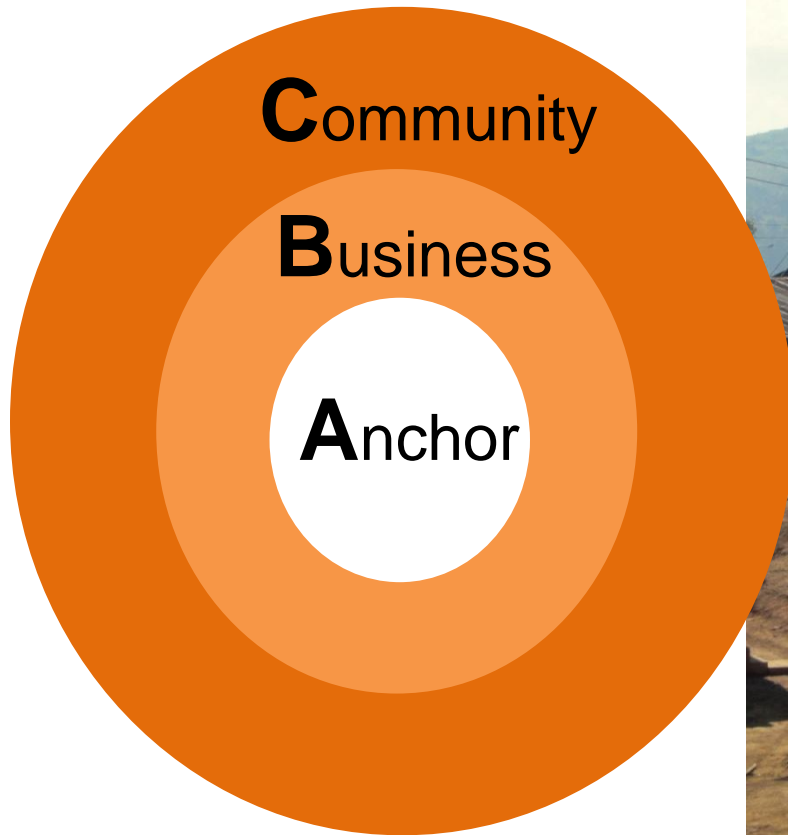
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# 1. 11.5 Maasai Mara Mini grid



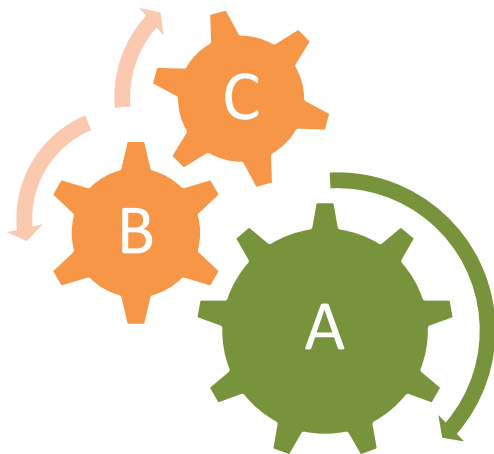
# A-B-C CONCEPT MODEL



# 1. A-B-C CONCEPT MODEL

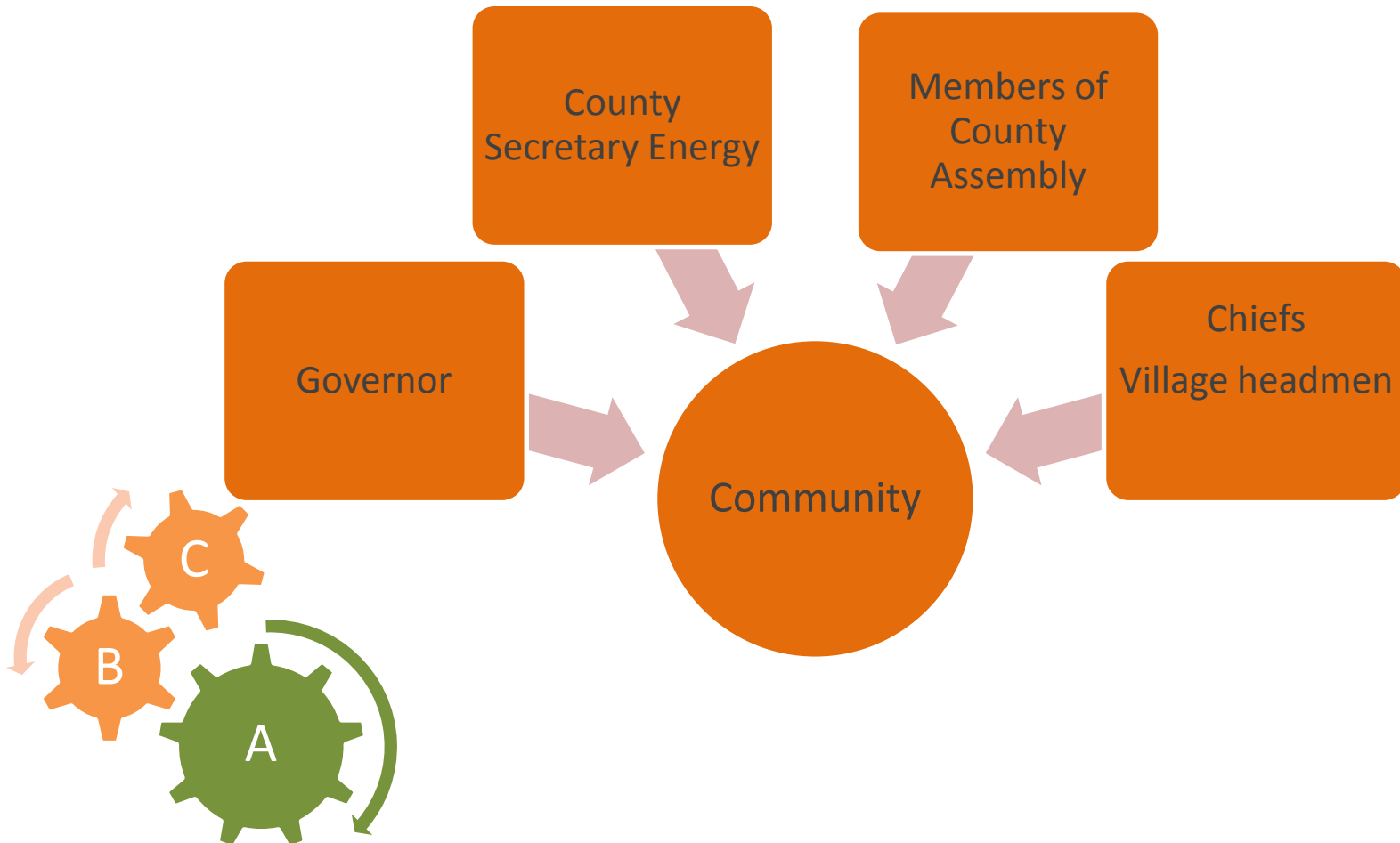
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| ANCHOR       | BUSINESS           | COMMUNITY |
|--------------|--------------------|-----------|
| BTS          | SHOPS              | RESIDENTS |
| INSTITUTIONS | POSHO MILLS        |           |
|              | BARBERSHOPS/SALONS |           |
|              | PHONE CHARGING     |           |



# A-B-C CONCEPT MODEL (cont.)

## Community Consultations



# KENYA

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| KENYA                                   |                   |
|---|-------------------|
| Population                              | 44 Million people |
| GDP Growth Rate (2013)                  | 4.6%              |
| Power Installed Capacity                | 1,693MW           |
| <b>Electrification Rate</b>             | <b>30%</b>        |
| Electricity retail prices               | USDc 20/kWh       |
| Connected households                    | 2.5 Million       |
| Yearly growth in power demand (average) | 8%                |



# THANK YOU

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## Contact Us

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