

#### 10th Annual Meeting and General Assembly



### Access to energy for all in rural areas in Africa

Progress and perspectives within the CLUB-ER:

#### The Experience of TANZANIA

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### PRESENTATION OUTLINE

- **BRIEF INTRODUCTION**
- RURAL ENERGY AGENCY
- **ELECTRIFICATION ACCESS IN TANZANIA**
- DEVELOPMENT OF GREEN ENERGY SOURCES
- IMMINENT CHALLENGES
- INTERVENTIONS BY THE AGENCY



### **BRIEF INTRODUCTION**

- MAINLAND TANZANIA HAS AN AREA OF 945,203 KM2 AND POPULATION OF 43.6 MILLION (2012 CENSUS) WHERE 80% OF THE POPULATION LIVE IN RURAL AREAS
- THE NATIONAL GRID COVEREAGE IS LIMITED
- EXPANSION OF THE GRID IS VERY COSTLY AND WILL TAKE LONG TIME TO REACH ALL REGIONS, DISTRICTS AND DEVELOPMENT CENTRES ACROSS THE COUNTRY



### RURAL ENERGY AGENCY

- RURAL ENERGY AGENCY ESTABLISHED BY RURAL ENERGY ACT OF 2005
- THE AGENCY BECAME OPERATIONAL IN 2007
- RESPONSIBLE FOR THE PROMOTION OF AND FACILITATION OF THE PROVISION OF MODERN ENERGY SERVICES IN RURAL AREAS OF MAINLAND TANZANIA
- THE RURAL ENERGY BOARD GOVERNS THE RURAL ENERGY AGENCY
- THE RURAL ENERGY FUND PROVIDES GRANTS TO QUALIFIED DEVELOPERS OF PROJECTS INCLUDING RESEARCH AND DEVELOPMENT



## ELECTRIFICATION ACCESS IN TANZANIA

- THE BENEFITS OF ACCESS ARE JUSTIFIED NOT ONLY ON SOCIAL AND ECONOMIC GROUNDS BUT ALSO ON GROUNDS OF EQUITY OBJECTIVES
- TANZANIA DEVELOPMENT VISION (TDV) 2025 ACCESS TO MODERN ENERGY SERVICES PROMOTES ECONOMIC DEVELOPMENT BY ENHANCING THE PRODUCTIVITY OF LABOUR AND CAPITAL
- NATIONAL ELECTRIFICATION PLAN IS PART OF A BROADER NATIONAL DEVELOPMENT PLAN
- THE INSTITUTIONAL, LEGAL, AND REGULATORY FRAMEWORKS TO SUPPORT ACCESS EXISTS

- VERY LOW ELECTRIFICATION RATES. THE GOT IS PURSUING MULTIPLE STRATEGIES TO IMPROVE ACCESS RATES. TARGET IS TO REACH ACCESS RATE OF 30% BY 2015 AND 75% BY 2033
- RURAL ACCESS RATIO: 2.5% IN 2007, 6.6% IN 2012, PROJECTED TO REACH 16.6% IN 2015 AND 36.6% IN 2022
- URBAN ACCESS RATIO: 36.6% IN 2012, PROJECTED TO REACH 47.6% IN 2015 AND 75.7% IN 2022
- COUNTRY ACCESS: 16.3% IN 2012, PROJECTED TO REACH 30% IN 2017 AND 48% IN 2022. GOT TARGET IS TO REACH ACCESS OF 75% BY 2033 (PSMP 2012)



## ELECTRIFICATION ACCESS BY 2015

- EXTENSION INITIATIVES (TURN-KEY PROJECT PHASE I FUNDED BY REA AND SUPPORT FROM Sida, TANESCO PROJECTS FUNDED BY REA, MCC/MCA-T FUNDED PROJECTS, TEDAP/WB FUNDED PROJECTS)
- UP-COMING ON-GRID EXTENSION PROJECTS
  (TURN-KEY PHASE II PROJECT TO BE FUNDED
  BY REA AND NORAD, MCC/MCA-T PHASE II,
  ELECTRICITY V PROJECT TO BE FUNDED BY
  AfDB, RURAL ELECTRIFICATION ALONG THE
  BACKBONE TRANSMISSION INVESTMENT
  PROJECT TO BE FUNDED BY NORAD, RURAL
  N. COMPONENT ALONG THE

## ACHIEVING 30 PERCENT ELECTRIFICATION ACCESS BY 2015

- COMPLETED GRID EXTENSION INITIATIVES (TURN-KEY PROJECT PHASE I FUNDED BY REA AND SUPPORT FROM Sida, TANESCO PROJECTS FUNDED BY REA/REF, MCC/MCA-T FUNDED PROJECTS, TEDAP/WB FUNDED PROJECTS)
- UP-COMING GRID EXTENSION PROJECTS (TURN-KEY PHASE II PROJECT TO BE FUNDED BY REF, Sida AND NORAD, MCC/MCA-T PHASE II, ELECTRICITY V PROJECT TO BE FUNDED BY AfDB, RURAL ELECTRIFICATION ALONG THE BACKBONE TRANSMISSION INVESTMENT PROJECT TO BE FUNDED BY Sida & NORAD, RURAL ELECTRIFICATION COMPONENT ALONG THE MAKAMBAKO-SONGEA TL PROJECT CORRIDOR TO BE FUNDED BY Sida OF SWEDEN)

- COMPLETED OFF-GRID ELECTRIFICATION PROJECTS
   FACILITATED BY REA (SSHP PROJECTS AND
   ASSOCIATED MINI-GRIDS); SHSs FUNDED BY
   MCC/MCA-T AND TEDAP/SSMPI
- UPCOMING SSHP PROJECTS AND ASSOCIATED MINI-GRIDS TO BE FACILITATED BY REA & IMPLEMENTED BY PRIVATE DEVELOPERS/SPONSORS
- UPCOMING SSMPII TO BE FUNDED UNDER TEDAP
- UPCOMING OFF-GRID ELECTRIFICATION PROJECTS TO BE FUNDED UNDER ORIO/ DUTCH GOVERNMENT

### DEVELOPMENT OF GREEN ENERGY SOURCES TO ENHANCE ELECTRICITY ACCESS TO RURAL AREAS

- PREVIOUS AND CURRENT STUDIES INDICATES THAT OPPORTUNITIES FOR DEVELOPMENT OF SSHP SITES ARE NUMEROUS AND WIDESPREAD ACROSS THE COUNTRY
- THERE IS ALSO SIGNIFICANT POTENTIAL FOR WIND FARM PROJECTS AND SOLAR BASED MINI-GRIDS
- DEVELOPMENT OF THESE SITES COULD EXPAND
   ACCESS TO ELECTRICITY IN RURAL AREAS LOCATED
   FAR AWAY FROM THE MAIN GRID IN A SHORT
   PERIOD AT LEAST COST

- GREEN MINI-GRID SYSTEMS ARE A CENTRAL PART OF THE SOLUTION IN PROVIDING ELECTRICITY TO THE RURAL PEOPLE
- IN THE QUEST FOR SCALING-UP ELECTRIFICATION
   ACCESS (TO REACH 30% BY 2015) THE GOVERNMENT
   HAS INTRODUCED SIGNIFICANT SUBSIDIES TO
   LOWER CONNECTION CHARGES
- RURAL CUSTOMERS ARE PAYING 49% OF THE REAL CONNECTION CHARGE AND URBAN CUSTOMERS 65% OF THE REAL COST

- PROCUREMENT OF CONSULTANCY SERVICES
   TO UNDERTAKE STUDIES FOR SSHP PROJECTS
   AND MINI-GRIDS FOR PROMISING SITES IN
   ORDER TO ESTABLISH READY-TO-BUILD
   PROJECTS PIPELINE FOR DEVELOPERS
- PUBLIC TENDERS FOR THE IMPLEMENTATION
   OF SOLAR BASED MINI-GRIDS TO BE
   IMPLEMENTED BY DEVELOPERS USING REA'S
   FACILITATION WILL SOON BE ADVERTISED

### **IMMINENT CHALLENGES**

- SIGNIFICANT DIFFICULTIES IN MEETING ENERGY DEMAND AND SECURITY BOTH IN THE GRID AND OFF-GRID SYSTEMS
- THE CURRENT NATIONAL ENERGY POLICY DOES NOT SPECIFY THE CONTRIBUTION OF RENEWABLE ENERGY TARGETS IN THE COUNTRY'S ENERGY BALANCE
- TRANSFORMING LOCAL ENTERPRENEURS TO BECOME ELECTRICITY ENTERPRENEURS

- FINANCIAL INSTABILITY IN TANESCO MAKES
   FITS TARIFFS UNDER THE SPPA
   ARRANGEMENTS UNATTRACTIVE TO
   DEVELOPERS/INVESTORS
- LINGERING DOUBTS BY DEVELOPERS ON THE STABILITY OF THE SUBSIDY SCHEME
- THE NATIONAL ELECTRIFICATION MASTER PLAN IS MISSING MAKING PRIORITIZATION OF PROJECTS TO BE INFUENCED BY POLITICS

### INTERVENTIONS BY RURAL ENERGY AGENCY TO SCALE-UP ELECTRIFICATION ACCESS

- PREPERATION OF THE NATIONAL RURAL ELECTRIFICATION MASTER PLAN — THE PROSPECTUS WAS FINALISED BY THE CONSULTANT IN JULY 2013. THE MASTER PLAN WILL PROVIDE UPFRONT BASE LINE INFORMATION TO DEVELOPERS /INVESTORS.
- ALLOCATION OF ADEQUATE FUNDS IN THE REF TO ASSIST KEY MARKET PLAYERS (INVESTORS AND DEVELOPERS) TO DEVELOP THEIR CAPACITIES IN PREPARING PRE-INVESTMENT STUDIES AND INNOVATIVE FINANCIAL MODELS/BUSINESS PLANS TO ASSIST THE DEVELOPERS TO BRING THE PROJECTS TO THE MARKET ON TIME

- STRENGTHENING THE INSTITUTIONAL FRAMEWORK TO SUPPORT GREEN MINI-GRIDS INVESTMENTS
- STRATEGIC ENGAGEMENT WITH LOCAL BANKS TO SUPPORT RENEWABLE ENERGY INVESTMENTS
- WORKING CLOSELY WITH THE SECTORAL MINISTRY AND REGULATOR TO STRENGHTEN EXISTING POLICY, LEGAL AND REGULATORY FRAMEWORKS TO ENHANCE THE CONFIDENCE OF DEVELOPERS/INVESTORS
- TANESCO TO BE RESTRUCTURED UNDER THE SUPERVISION OF MEM TO STRENGTHEN ITS COMMERCIAL STABILITY AND CONSOLIDATION OF ITS OPERATIONS

- STRENGHTENING THE AGENCY'S COMMUNICATION STRATEGY
  TO REACH OUT TO LOCAL DEVELOPERS AND LOCAL BANKS TO
  APPRECIATE THE TECHNICAL FEASIBILITY AND COMMERCIAL
  VIABILITY OF RENEWABLE ENERGY PROJECTS
- IN SO DOING PROMOTING BUSINESS DEVELOPMENT TRANSFORMATION THROGH THE SCALING-UP OF ELECTRIFICATION ACCESS
- SECURING SUFFICIENT FUNDS IN REF IN SUCCESSIVE GOVERNMENT BUDGETS TO SUSTAIN THE SUBSIDY STRATEGY FOR SUPPORTING THE DEVELOPMENT OF GREEN RENEWABLE ENERGY PROJECTS INCLUDING MINI-GRIDS





# Thank you for your attention

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