



Funded By the European Union



REGIONAL TRAINING WORKSHOP ON GEOGRAPHICAL INFORMATION SYSTEM FOR ENERGY PLANNING

PARTNERS



Introduction

The ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE), in collaboration with the University of Geneva, the Energy Centre KNUST, the Ministry of Energy Cabo Verde, and Noveltis S. A. S., are jointly organizing a Regional Training Workshop on Geographical Information System for Energy planning, from 11th to 12th of August 2014, in Dakar, Senegal. The workshop is executed under the project **"Promoting Sustainable Energy Access through the use of geospatial technologies in West Africa" (ECOWREX2)** which is funded by the European Union, under the ACP-EU Science and Technology programme (**ACP S&T II, GRANT FED/2013/330-248**). The workshop is focused on training member states on data and metadata collection according to international standards, in the framework of Geographical Information system (GIS), for supporting Energy Access.

Background

The generally poor-quality of data and information about energy systems, the lack of standards, the low level of awareness and poor technological development in terms of geospatial resource management is a major challenge that needs to be addressed, to underpin development in the energy sector in West Africa. Different systems and maps exist with various models and data sources, data collection strategy and formats which hinders proper planning.

In response, ECREEE in collaboration with United Nations Industrial Development Organization (UNIDO) launched the ECOWAS Observatory for Renewable Energy and Energy Efficiency (ECOWREX) in October 2012. ECOWREX is a web-based information platform, which integrates the use of a Geographic Information System (GIS) to help assess the energy resources in combination with other human activities, and plan where and when specific energy technologies can be deployed.

For efficient data access and sharing, and in recognition of standardization by member states as an important means for improved data management for effective planning, it has become necessary to restructure the ECOWREX GIS, by improving its web services and creating new datasets. One major important improvement is the development of a complete Spatial Data Infrastructure (SDI), fully compliant with the Open Geospatial Consortium (OGC) standards, relevant for data interoperability, effective data processing, information sharing and knowledge transfer. This also includes the standardization of metadata collection, which helps to improve the data quality and resolving inconsistencies in data sources.

ECREEE and its partners in 2013 submitted a proposal in response to the call for proposals for ACP-EU Science and technology Programme II (ACP S&T II) and were awarded a grant of EUR 927,204.47. The Project, which is for a period of two (2) years starting from the 1st of March 2014, generally aims at improving the ECOWREX GIS. It also seeks to increase the technical knowledge of experts from member states on data and metadata collection. As such, this regional training workshop contributes to this project by providing the opportunity for key specialists in energy planning, statistics and data collection departments in the various National

Ministries, to share best practices on improving their spatial data and metadata collection practice.

OBJECTIVES OF THE WORKSHOP

The main objective of this workshop is to strengthen capacity within the member States, on how to collect data and the relevant metadata in the context of GIS, for supporting energy access.

The specific objectives of the workshop will be to:

- Introduce participants to the guidelines for data and meta-data collection
- Assist participants with defined data formats and metadata and clear guidelines regarding acceptable standards and metadata content according to the ISO 19115 and ISO19139.
- Facilitate the knowledge and benefits of data and metadata harmonization
- Raise awareness on spatial data management and how it can help to improve energy access through effective planning

EXPECTED RESULTS

1. Participants will gain an understanding of the approaches and methodologies for data and metadata collection, according to the acceptable format and standards.
2. Participants will share experiences on GIS implementation in their respective member states.
3. Increased knowledge of participants on supporting energy access through the use of Geospatial technology.

PARTICIPANTS

The target audience is a combination of experts involved in planning and data collection. Typical participants are technical experts from the Rural Electrification Agencies, the departments of energy planning, statistics and data collection, in the ECOWAS Region

DRAFT AGENDA

Day 1	
9:00 – 9:30	Arrival and Registration of Participants
9:30 – 10:00	Opening Remarks - Executive Director of ECREEE Background and Introduction to the objectives of the Workshops - ECREEE
10:00 – 10:20	Tea/Coffee break and Group Photo
10:20 – 11:00	Introduction by each Partners (5 Minutes each) Introduction by the facilitators of the Workshop; Topics to be covered. (20 minutes)
11:00 – 11:30	Role and Opportunities of ECOWREX GIS in Energy planning - ECREEE
11:30 – 12:00	The role of GIS for Energy planning: Moroccan Energy Atlas as case study - Noveltis
12:00 – 12:30	The role of GIS in Energy Access: Case study “GEAR Toolkit” - KNUST
12:30 - 13:00	Session for GIZ, ASER or JRC
13:00 - 14:30	Lunch
14:30 – 15:00	Presentation of ECOWREX2 data collection requirements. Data and Metadata in the context of GIS - ECREEE, UNIGE, KNUST
15:00 – 16:00	Discussions and conclusions
Day 2	
	Introduction to the Tutorial - UNIGE
10:00 – 10:30	Data and metadata collection guidelines - UNIGE
10:30– 11:00	Capturing, collecting, storing and sharing data/metadata (with practical example) - UNIGE
11:00 – 11:20	Tea/Coffee break

11:20 – 12:30	Capturing, collecting, storing and sharing data/metadata (with practical example) (cont'd) - UNIGE
12:30 – 14:30	Lunch break
14:30 – 15:30	Introduction to SDIs (Spatial Data Infrastructure) - UNIGE
15:30 – 16:00	Workshop survey and close