

ENERGY COMMISSION - GHANA

GIS FOR ENERGY PLANNING -
LESSONS FROM THE GHANAIAN
EXPERIENCE

PUTTING IT ALL TOGETHER

▣ LEGAL FRAMEWORK

- Energy Commission Act, 1997 (Act 541)
 - ▣ Section 2(d) of the Act requires the establishment of a national energy database for national decision-making

▣ INSTITUTIONAL FRAMEWORK

- Stakeholder Identification and Roles
 - ▣ Ministry of Energy and Petroleum (MoEP)
 - ▣ Ministry of Local Government and Rural Development
 - ▣ Energy Commission (EC)
 - ▣ National Petroleum Authority (NPA)
 - ▣ Northern Electricity Distribution Company (NEDCo)
 - ▣ Electricity Company of Ghana (ECG)
 - ▣ Ghana Statistical Service (GSS)
 - ▣ The Energy Centre (TEC)
 - ▣ Centre for Remote Sensing and Geographic Information Systems (CERSGIS)

RESOURCES

- ▣ **HUMAN**
 - Energy Experts
 - IT and Data development Experts
 - GIS Experts
 - Communicators – Parliamentarians, Heads of Institutions, Teachers/Lecturers, Journalists

- ▣ **FINANCIAL**
 - Software development
 - Equipment procurement
 - Human resource recruitment and training
 - Maintaining the Ghana Energy Access Data Task Force

- ▣ **COMMUNICATION STRATEGIES**
 - Websites of State Institutions
 - Stakeholder consultations – before, during and after project
 - Other Data Platforms
 - ▣ GODI
 - ▣ CERSGIS
 - ▣ ECOWREX
 - Energy Journalists
 - Social Media

SUMMARY OF LESSONS LEARNED

▣ TEAMWORK

- Identify shared goals
- Share results/benefits
- Shared challenges
- Saves money and time – eliminates duplication of efforts

▣ DATA SECURITY

- Ensure no protocols are breached as regards various datasets – flexibly classify

▣ PROJECT SUSTAINABILITY

- Role of the Ghana Energy Data Task Force
- Funding

LESSONS LEARNED (CONT)

- ▣ **BENEFITS OF GIS FOR ENERGY PLANNING**
 - **Government**
 - ▣ A comprehensive, one-stop database enhances policy formulation and decision-making
 - ▣ Facilitates monitoring and evaluation of energy access; value for money assessment opportunity
 - **Business**
 - ▣ Ease of access to data for business and investment planning
 - ▣ Availability of relevant, timely and reliable data
 - ▣ Facilitates investments in the energy sub-sector
 - **Academia**
 - ▣ Reduced cost of research
 - ▣ Enhanced quality of research
 - ▣ Motivation for further research
 - ▣ Enhanced teaching and learning activities
 - ▣ Bridges some of the gap between academia and industry

LESSONS LEARNED (CONT)

▣ CHALLENGES

- Lack of awareness of GIS
- Apathy towards information development, management
- Unwillingness of data owners to share data
- Funding
- Poor infrastructure – poor town and country planning

MERCI!