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Energy and Rural Electrification Planning, the role of GIS in Ghana



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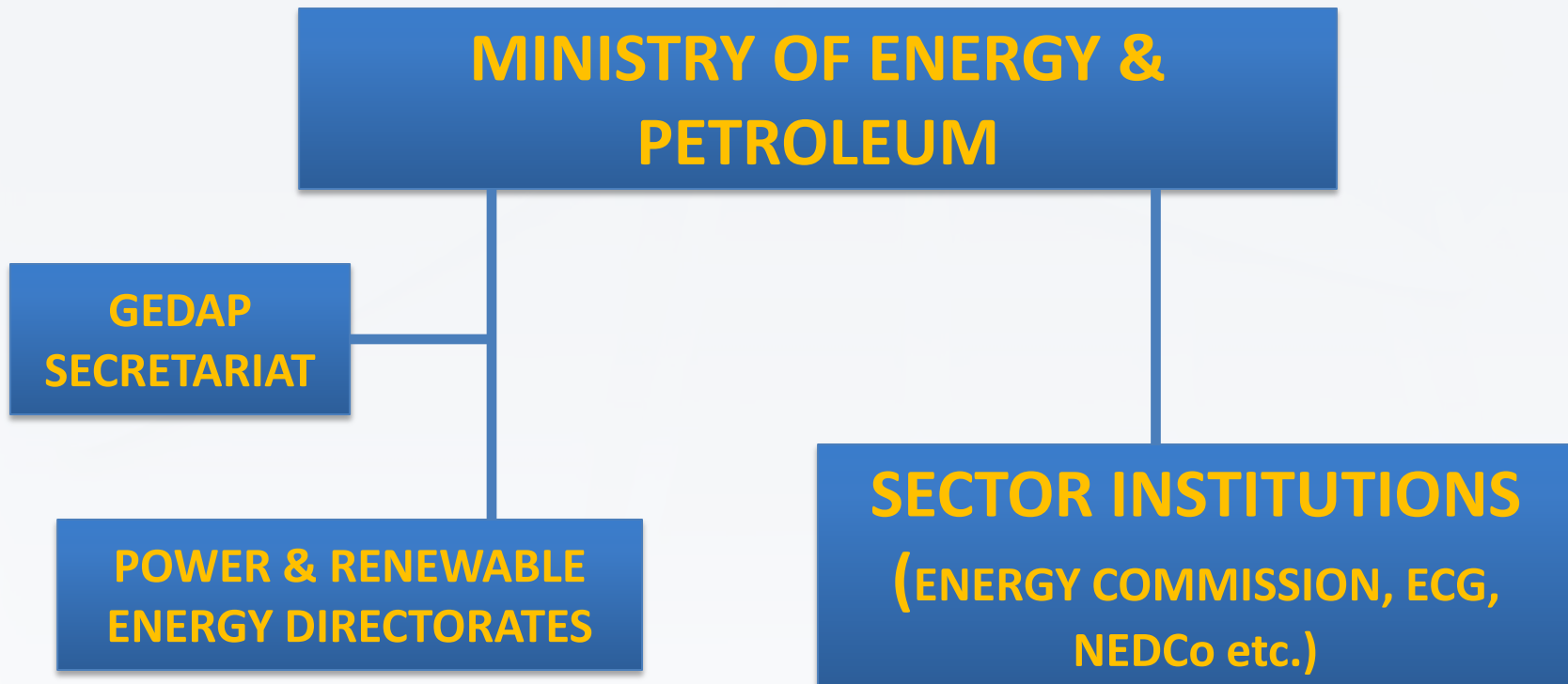


OUTLINE

- ▶ Institutions involved in Energy and Rural Electrification Planning
- ▶ Sector Goals
- ▶ Projects implemented/underway to attain goals
- ▶ The use of GIS-Based Toolkits in Energy & Rural Electrification Planning
- ▶ Contact Institution for Geographical Information/maps etc



INSTITUTIONS INVOLVED IN ENERGY & RURAL ELECTRIFICATION PLANNING





SECTOR GOALS FOR RURAL ELECTRIFICATION

- ▶ Increase electricity access from 76% presently to universal access by 2016
- ▶ Improve and modernize electricity distribution infrastructure to reduce system losses from 25% to 18% by 2015
- ▶ Increase installed generation capacity to 5,000MW in the short term (2016)
- ▶ Increase participation of IPP's in the power sector
- ▶ Develop a non-congested electricity transmission network by 2015



PROJECTS IMPLEMENTED/UNDERWAY TO ATTAIN GOALS

National Electrification Scheme (NES)

✓ Self-Help Electrification Programme (SHEP)

- Community must be within 20km of an existing 11kV/33kV network
- Community must be willing to procure and erect all the Low Voltage poles required for the works
- A minimum of one-third of houses in the community should be wired

✓ GEDAP

✓ Turnkey Projects – Communities are provided with all materials. Contractors include: Weldy Lamont, CWE, Thengashep, Hunan, MBH (Pvt) Ltd.



THE USE OF GIS-BASED TOOLKITS IN ENERGY & RURAL ELECTRIFICATION PLANNING

- ▶ Review of 2009-2010 National Electrification Masterplan using GIS-Based Energy Access Review (GEAR) Toolkit
 - ✓ Developed by The Energy Centre (KNUST)
- ▶ Ghana Energy Access (GhEA) Toolkit
 - ✓ GEAR Toolkit + Energy Commission Toolkit



CONTACT INSTITUTION FOR GEOGRAPHICAL INFORMATION/MAPS ETC.



ENERGY COMMISSION

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Thanks!

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