LEDS Analysis & Benefits Assessments

EDWARD AWAFO

Research Associate, The Energy Center, KNUST, **Ghana;**

Coordinator, Africa LEDS Partnership Secretariat

Email: awafoe@hotmail.com

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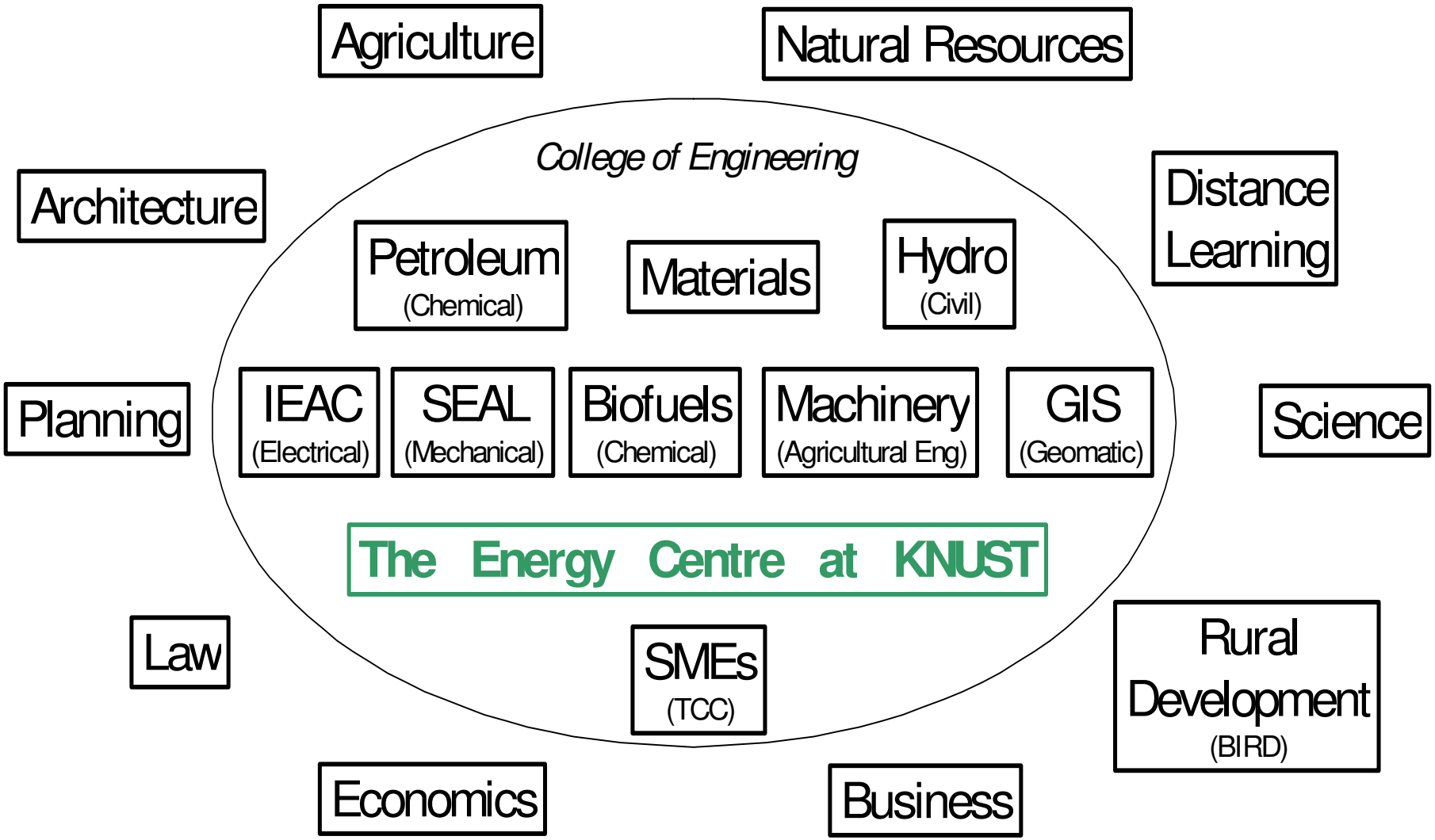


Who we are Africa LEDS Partnership

- Regional platform of LEDS GP
- A hub for peer-to-peer exchange and learning, training, and coordination of programs
- Provides assistance on climate resilient development in Africa

Over 180 members (individuals and organizations)

Governance: 20 African Governments, Regional and International organizations

Secretariat

- KNUST- Ghana
- Nangui Abrogoua University

101 of LEDS

- **Low-Emission Development Strategies (LEDS)** are national long-term strategies for reducing emissions while promoting sustainable development.

- **LEDS Characteristics:** national, high-level, comprehensive, long-term strategy

  - **Designing LEDS:** In developing LEDS, they don't need to be new but can integrate and mainstream already existing Climate- Compatible Development Plans/Strategies.

Goals of LEDS: GHG reductions and Sustainable Development

LEDS efforts around the world

Identifying and framing benefits

Evaluate a range of economic, environmental and social benefits and address their **inter-dependency** and links to current **development goals** and plans.

Seek to **maximize synergies** (especially via resource efficiency, full valuation of environmental goods and services, innovation and technology adoption, and overcoming lock-in, and poverty reduction) between development outcomes while **managing costs, trade-offs, and uncertainties**

Balance the value of addressing a broad set of benefits with the pragmatic value of focusing on a **key sub-set of priority benefits.**

Examples

Ethiopia: Focused on synergies between agriculture, water and energy sectors to increase economic output, jobs, and food production and enhance climate resiliency

UK: Synergistic benefits of 1) low-carbon and low pollution growth, 2) natural resource efficiency, 3) resilient growth, and 4) use of comparative advance

Korea: Capturing synergies between: 1) climate change response and energy security, 2) engines for future growth, and 3) contribution to global action on climate change

Analyzing & Priority Options

- **Establish baseline scenarios -** Estimate the future evolution of GHG emissions consistent with the national long-term development objectives and business-as-usual development.

- **Identify and quantify low emission options -** Use mitigation and sequestration options consistent with development objectives.

- **Assess the associated costs and benefits of low emission options –** Use applicable rates of return, cost benefit analysis, development impact analysis, and other analytical tools.

- **Build low emission development scenario(s) –** Designed to achieve long-term national development objectives.

- **Prioritization of various LEDS options** should be based on common criteria reflecting development goals in a transparent and inclusive manner

Key lessons on analyzing benefits

- Translate the high-level vision on green growth into a concrete set of **analyzable variables** on benefits and a robust benefits analysis framework.

- Utilize a **broad**, though not necessarily complex, **analytic framework** that integrates a number of complementary approaches.

Examples

Ethiopia: A set of macro analyses were used to generate interest in green growth and demonstrate potential loss of GDP from climate change. Then evaluated economic cost-benefit ratios and conducted qualitative analysis of poverty reduction, biodiversity, and other factors

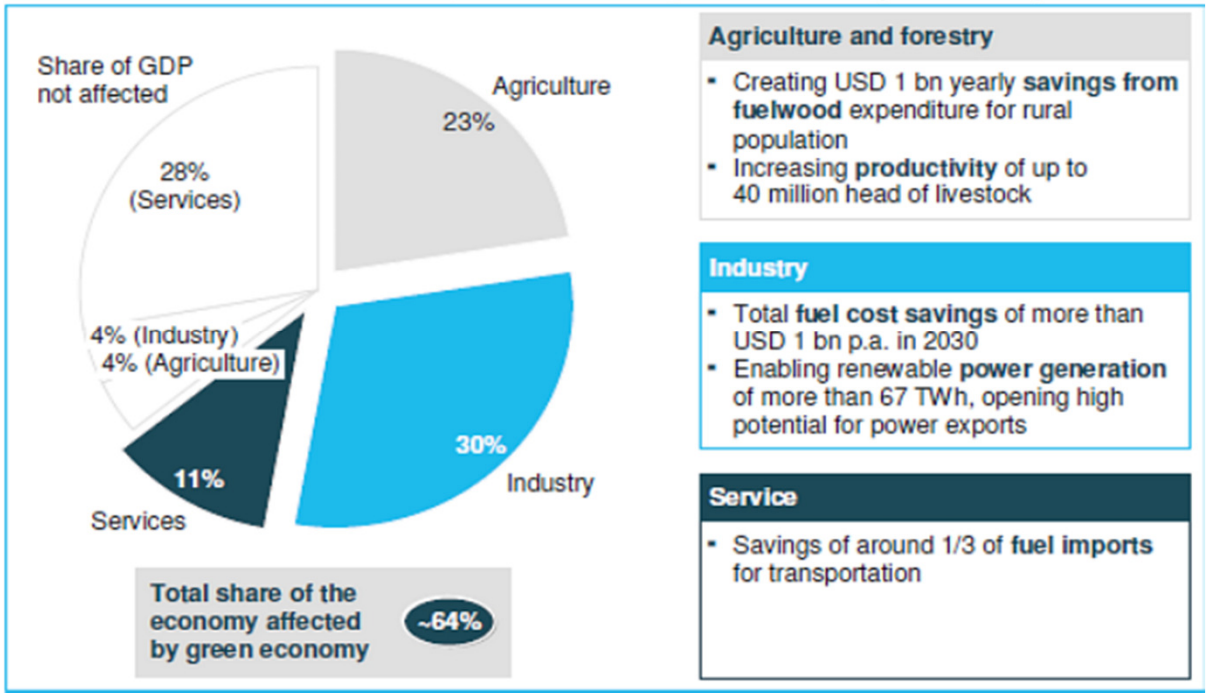
UK: Used a sophisticated, multi-layered analytical framework to analyze green growth benefits across all levels, such as the 'Stern Review' for macro-economic assessment and sectoral analysis based on specialized tools (e.g. MARKAL and ESME for energy sector).

Analysis of some LEDS Plans and Opportunities

(A) Ethiopia

Ethiopia has committed to a Climate Resilient Green Economy (CRGE) that aims to achieve middle-income status by 2025 by building climate resilient growth with no net increase in GHG emissions relative to 2010 - **unlock economic growth, create jobs, and deliver wider socio-economic benefits**

Share of GDP affected (2030) and examples of economic impact/benefits from green economy



(B) South Africa

Over 106,000 new renewable energy jobs can be created by 2030 under an ambitious "energy revolution scenario" (compared to only 7,500 in BAU scenario); total energy employment (including coal export jobs) would be 56% higher than in the BAU scenario

Communicating Benefits…

- Use **tailored and robust benefits messages** to address the variety of audiences affected by green growth, while adapting messages to different "value groups" who will have different entrenched interests.

Examples

EU: Highlighted financial benefits to motorists of reduced fuel spending when announcing limits on new car emission

Denmark: Provided empirical data to skeptics that green programs are reducing energy intensity and retaining GDP growth

- Engage **credible and trusted messengers** in presenting robust, tailored, and balanced messages to offer evidence based argument for deviating from business as usual.

Examples

India: Rural Energy Program was promoted via a number of different formats, including street theatre in local dialects

Korea: Communicated how individuals would improve daily lives with presidential speeches, celebrity endorsements, and educational campaigns

Example: Option Analysis for Kenya's Low Carbon Climate Resilience Plan

In Kenya, combining simple spread sheet tools with an economy wide CGE model allowed for comparison and calibration, and resulted in more robust and comprehensive information for decision-makers.

•**Simple spread sheet tools** used to record and assess the key characteristics and potentials of different low-carbon options. This approach:

- ✓ Enabled transparency and reparability, and allowed subsequent updating
- ✓ Worked easily and used data and assumption that often started from educated guesswork, validated by stakeholders
- ✓ All data and spreadsheet were transferred to the government to build in-country capacity and to ensure updating of the analysis

•An **economy wide CGE model** was used to project the macro economic effects of low carbon development through 2030

Conclusion

...the implementation of LEDS may come with significant extra costs, but the medium to long term benefits present the best opportunities for sustainable development….

The opportunities in LEDS for the continent are enormous, but require

- ✓ high/sustained political commitment and public awareness
- ✓Favourable institutional and regulatory frameworks
- ✓Private sector involvement
- ✓Increased investment in cleaner technologies