



SUSTAINABLE ENERGY FOR ALL

TECHNICAL ASSISTANCE PROGRAM



ESMAP

The global Sustainable Energy for All ([SEforAll](#)) initiative—launched in 2011 by UN Secretary General Ban Ki-moon and co-chaired by the President of the World Bank—seeks to achieve three overarching goals by 2030: universal access to modern energy services, doubling the share of renewable energy in the global energy mix, and doubling the rate of improvement of energy efficiency.

As part of the World Bank Group's commitment to SEforAll, the Energy Sector Management Assistance Program ([ESMAP](#)) has launched the [SEforAll Technical Assistance Program](#) to help countries achieve the goal of universal energy access. The scale of the challenge is enormous: there are still 1.1 billion people living without access to electricity, and 2.9 billion people without access to modern household fuels (Global Tracking Framework data). Achieving universal access by 2030, therefore, will require a step change in the rate of new connections and in levels of investment, particularly in low access countries.

The technical assistance program works with selected countries that have joined the SEforAll initiative, helping them to develop the policy frameworks, improve planning processes, strengthen the institutions, and mobilize the financing necessary to expand and accelerate their national energy access programs. The initial US\$15 million phase of the program, which began in 2013, supported 10 countries: Burundi, Guatemala, Guinea, Honduras, Liberia, Mozambique, Myanmar, Nepal, Nicaragua, Nigeria, and Senegal, as well as technical and financing studies to help strengthen regional power pools in Sub-Saharan Africa. The program is now being extended to additional 5 to 7 countries, with the main focus

on low access countries, starting with Kenya and the Democratic Republic of Congo. The first phase countries included support for both electricity and clean cooking plans/roadmaps. The second phase focuses only on the electricity sector, as support for the clean cooking sector is now covered under ESMAP's Efficient, Clean Cooking and Heating Program.

SUPPORTING SECTOR-WIDE APPROACHES

Typically, the country activities include development of a least-cost geospatial development plan, which optimizes the grid roll-out and allows for an effective integration of grid, mini-grid, and off-grid solutions. The plan is then used to develop a country-based investment prospectus. This involves planning out the interventions needed to substantially scale up energy access over a 3 to 5 year time frame, estimate the investment funding requirements for each of these interventions, and identify appropriate financing sources. This is a collaborative process between the country governments and development partners, providing a platform to align public, private, bilateral, and multilateral funds toward common goals set by the government.

The least-cost expansion plan and the investment prospectus are key enablers of the sector-wide approach (SWAp). SWAp is a country-led, results-oriented approach that provides a framework for coordination between development partners and country stakeholders to develop a coherent strategy for sector development. According to a recent evaluation of the World Bank's Independent Evaluation Group, SWAps in the electricity sector have been found to deliver better results than can be achieved using a project-by-project approach.



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The Energy Sector Management Assistance Program (ESMAP) is a global knowledge and technical assistance program administered by The World Bank. It provides analytical and advisory services to low- and middle-income countries to increase their know-how and institutional capacity to achieve environmentally sustainable energy solutions for poverty reduction and economic growth. ESMAP is funded by Australia, Austria, Denmark, the European Commission, Finland, France, Germany, Iceland, Japan, Lithuania, the Netherlands, Norway, Sweden, Switzerland, and the United Kingdom, as well as The World Bank.

IMPROVING AND UPDATING GEOSPATIAL PLANNING TOOLS

Since this technical assistance program was created, there has been a significant improvement in data availability and the quality and costs of the geospatial planning tools. The program will carry out a review of the existing technologies and will develop a global platform, which will: (i) facilitate the use of geospatial planning tools by individual countries, and (ii) make publically available data

and least-cost electrification plans to increase access to information for both governmental and non-governmental actors.

In addition, while a number of governments already have geospatial least-cost electrification plans and even investment prospectuses, these documents are often outdated, have low data resolution, or are incomplete (e.g., do not adequately

ly address mini-grid and off-grid opportunities). Considering the significant improvement of geospatial planning technology and costs in recent years, there is now an opportunity to complement and improve the existing geospatial plans, and to provide technical assistance for improving the content and usability of existing geospatial planning tools.

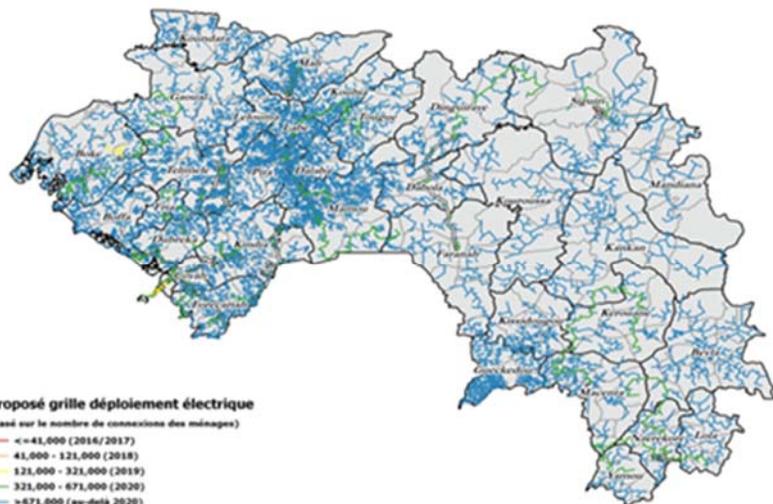
FOSTERING AN ENABLING ENVIRONMENT

For many countries, investment is unlikely to materialize at scale in the absence of robust policy and institutional frameworks. The ESMAP technical assistance program also supports activities to create a strong enabling environment

and investment climate for universal energy access. These include: preparation of national electrification strategies; developing the capacity of agencies responsible for planning and executing electrification programs, including for

the usage of geospatial planning tools; improving cost-effectiveness of electrification programs; and technical assistance for integrating off-grid solutions into the national electrification strategies and programs.

LEAST-COST GEOSPATIAL ELECTRIFICATION PLAN FOR GUINEA



Proposé grille déploiement électrique
(basé sur le nombre de connexions des ménages)
 <=41,000 (2016/2017)
 41,000 - 121,000 (2018)
 121,000 - 321,000 (2019)
 321,000 - 671,000 (2020)
 >671,000 (au-delà 2020)

Data Source: Catala. Map Created by Earth Institute, Columbia University, November 30, 2015