



WORLD
RESOURCES
INSTITUTE



FOR ELECTRIFICATION PLANNERS

What is Energy Access Explorer?

Energy Access Explorer is a web platform that leverages the power of satellite imagery combined with local data to visualize global energy supply and demand at 1 km² resolution. Using data to link energy supply with growing demand is essential to gain a better picture of energy access around the world and expand electricity services to those who do not have access.

The tool compiles current, location-specific data on energy resource availability (including wind, solar, small-scale hydropower, etc.) and infrastructure data (including road and grid networks, mini-grids and power plants) to represent where energy supply exists. Similarly, Energy Access Explorer compiles data on demographics (including population density, poverty rate and mobile phone ownership) and social/productive uses (including schools, health clinics and agricultural activities) to visualize energy demand.

How can Energy Access Explorer help electrification planners?

Energy Access Explorer identifies areas where electrification and socio-economic development can be linked to meet the needs of the poor. Energy Access Explorer can complement the cost optimization planning tools that electrification planners already use, providing a bottom-up representation of electricity affordability and demand.

In its next phase of development, Energy Access Explorer will give planners an overview of the costs associated with expanding electrification using different technologies, including grid expansion and mini-grid development.

Using the tool, planning agencies and energy ministries can identify areas where there are households, schools, health clinics and other facilities, but no connection to the grid. Supplying electricity to these areas is essential to socio-economic development, improving quality of life, upgrading basic health and education services and boosting gender equality.

VISIT [ENERGYACCESSEXPLORER.ORG](https://energyaccessexplorer.org) TO LEARN MORE.

CONTACT: **Dimitrios Mentis**, Energy Access Mapping Manager, dimitrios.mentis@wri.org