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Press Release

Congo Epela Platform Update

Realistic and affordable solutions to accelerate electrification in the DRC identified using new data and scenarios

Kinshasa, June 12, 2026 – Resource Matters is pleased to announce the update of Congo Epela, an interactive platform that presents practical solutions with concrete scenarios for the electrification of the DRC.

This update comes in a context where electricity demand across the DRC is changing rapidly, from households and small businesses to industry and utilities. In response, Resource Matters and its partners have updated *Congo Epela*, a platform initially launched in 2022. The platform is a joint effort by Resource Matters, KTH Royal Institute of Technology, the University of Cape Town (UCT), the Reiner Lemoine Institute (RLI), and Congolese civil society organizations that are part of the Mwangaza Network, all working to promote good governance in the sector and universal access to electricity.

Congo Epela compiles and displays data on electricity demand, existing infrastructure, energy potential, and the least-cost electrification options for each region of the DRC. It aims to support better decision-making among government actors, private companies, and civil society by promoting access to fairer, cleaner, and more affordable electricity. The current update was made to reflect more realistic scenarios, taking into account shifts in demand, infrastructure conditions, and technology costs.

The main improvements include the following elements:

- New household electricity demand data provided by the Reiner Lemoine Institut
- Six electrification scenarios modeled using Open Source Spatial Electrification Tool (OnSSET), including business-as-usual, diesel price variations, and tax exemption

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- Optimal energy mix for the Eastern and Southwest regions modeled with Open Source Energy Modelling System (OSeMOSYS), with support from the University of Cape Town
- Integration of thermal production plants and wind capacity factor
- Updated solar and hydropower sites based on SHER and other relevant sources
- Updated healthcare facility demand data from GRID3 and Sustainable Energy for All

Thanks to these new features, Congo Epela reinforces its role as a critical tool for building an energy future that benefits the Congolese, by making it easier to identify where investments are most needed, compare electrification options region by region, and plan projects that are technically and economically achievable on the ground.

As an evolving platform that depends on data availability and context, Resource Matters and its partners will continue to update it to ensure optimal and appropriate results.

The next step will be to strengthen sectoral data collection and update modeling scenarios in order to produce increasingly accurate analyses that better reflect realities on the ground.

Despite these challenges, Congo Epela is already an innovative decision-support tool that enables the exploration of different electrification pathways and supports energy planning in the DRC based on objective data and analysis.

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For media inquiries or interviews, please contact:

- Christian Mbenga, Energy Sector Coordinator, Resource Matters. christian.kabongo@resourcematters.org | (+243) 813 647 771
- Ana Binuya, Researcher and Platform Manager, Resource Matters. ana.binuya@resourcematters.org | (+32) 495 14 45 22
- Jimmy Munguriek, DRC Country Director, Resource Matters jimmy.munguriek@resourcematters.org | (+243) 820875088

- **Kinshasa office:** Concession Sedec, Avenue de la Paix n°1, La Gombe, Kinshasa
- **Brussels office:** Mundo-Madou, Avenue des Arts 7-8, 1210 Brussels, Belgium
www.resourcematters.org

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Annex: Detailed platform updates - Congo Epela 2026

- **New cluster demand and population data from the RLI**

  The platform now integrates Cluster Version 4, which includes revised population figures and electricity-access data provided by the RLI. This dataset supports more accurate visualization of electricity access in the updated Congo Epela Platform. Using this updated information, we have also calculated electricity demand for key sectors such as education and health facilities, agriculture, heavy industry, and other economic activities.

- **Six electrification scenarios modeled using OnSSET, including business-as-usual, diesel price variations, and tax exemption**

  Unlike the previous platform which allowed users to select electrification conditions manually, the updated version incorporates six predefined scenarios:

  - Three business-as-usual cases (low, moderate, and high energy-demand levels)
  - Two fossil-fuel-price scenarios, reflecting low and high diesel and gas costs and incorporating diesel mini-grids and stand-alone systems
  - One tax-exemption scenario, excluding household connection costs to centralized distribution networks

  These scenarios provide a more comprehensive view of potential electrification pathways.

- **Optimal electricity mixes for the East and Southwest regions modeled with OSeMOSYS, with support from the UCT**

  The energy-mix modeling exercise conducted with the University of Cape Town continued throughout 2026. Initial results, which identify optimal configurations for the existing grids in the East and Southwest regions, have now been fully integrated into the platform. Further review is underway, and updates are expected in the coming months.

- **Integration of thermal power plants and wind capacity factor**

  A total of 41 thermal power plants were added to the platform, along with their installed capacities sourced from SNEL/ANSER and other validated sources. Wind capacity factors from the Global Wind Atlas were also incorporated.

- **Updated existing solar and hydropower sites from SHER and other relevant sources**

  Data from SHER and additional relevant partners were used to refresh the inventory of existing solar and hydro sites.

- **Updated data for health sites from GRID3 and Sustainable Energy for All**

  Thanks to a new study launched by SEforALL to estimate the energy needs of healthcare facilities, combined with an updated dataset from GRID3, we were able to improve and expand the information on health facilities. This includes updated categorization of energy needs for the facilities, as well as broader geographic coverage. The dataset now covers all 26 provinces of the DRC, compared to 22 in the previous version.