



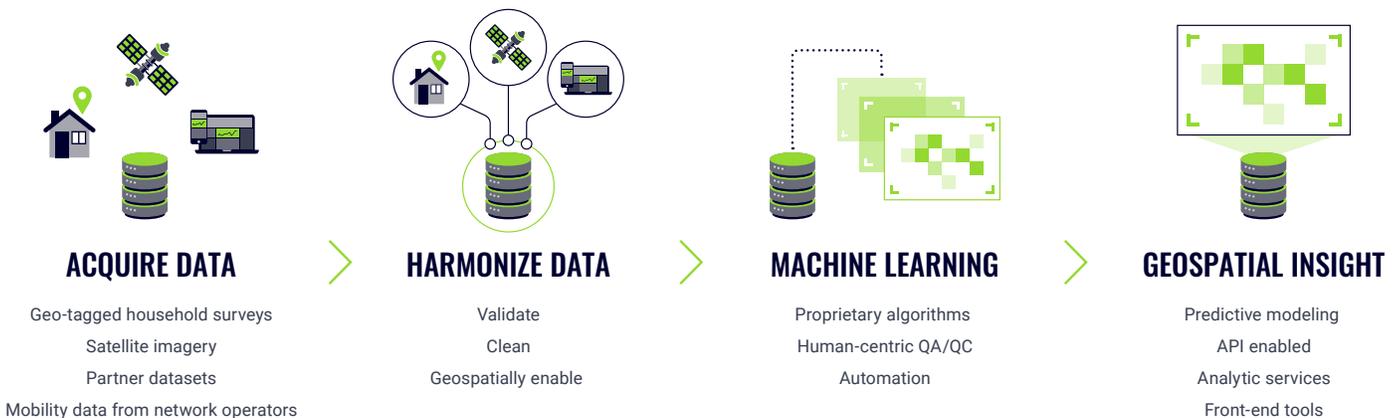
Fraym for Energy

We use advanced machine learning (ML) algorithms to produce local population data for hard to reach places. Fraym's cutting-edge data improves planning, refines targeting, and accelerates impact.

Fraym is a U.S. Certified Small Business, created to meet demand for accurate, comprehensive, geospatial data in Africa, Asia, and Latin America. Historically, local-level data has been unavailable in the global south—Fraym was built to fill this gap. Backed by scientific research and peer review, our methodologies produce insights on population dynamics, which are critical for making decisions in complex scenarios. Fraym data covers a wide range of indicators spanning economic, social, and demographic characteristics. Our innovative spatial data and analysis can be delivered quickly to inform project planning and adaptive management strategies—even in remote areas.

What do we do?

Our innovative approach gives project and proposal teams insights into areas with limited information. To achieve this, we input professionally enumerated household survey data, satellite and remote sensing data into our proprietary machine learning algorithms.



What products and services do we provide?

- » **Participant Profile:** Identify your target audience, where they live, and what their community looks like to inform program design and project planning
- » **Communications Approach:** Understand what communication and outreach channels are available to your target audience for effective SBC and marketing approaches
- » **Customer Identification:** Segment and classify communities based on ability to pay for different electrification options such as solar home systems or mini-grids
- » **Map Access:** Inform least cost identification plans by mapping current electrification plans to underserved areas with high demand for electricity services
- » **Sites for High Potential Growth:** Plan community-level interventions where investment will have the greatest impact with custom analysis at the neighborhood level
- » **Evaluation:** Quantify social and economic impact over time using existing historical data



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Relevant Experience

Example of mapping electricity supply in Cameroon

Off-grid market potential

Fraym maps electricity supply for targeted intervention with 1km² resolution.

Cameroon characteristics

Off-grid market potential	2.3M households
Households in urban areas with no electricity	10%
Households in rural areas with no electricity	77%
Living within 1 km of MVN lines	16%
Electricity in Centre region	5%

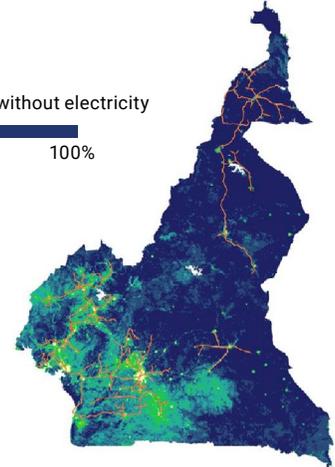
CAMEROON

Percent of household without electricity



— Medium voltage network

□ Water bodies or no data



Site Location for Off-Grid Services

Fraym partnered on the Nigeria Off-Grid Market Acceleration Program (NOMAP) to complete **geospatial analysis across 10 states in Nigeria** to provide information to the government and energy companies. With proprietary machine learning techniques and high-resolution satellite imagery, Fraym identified 200 viable communities viable for mini-grids and solar home systems across the target areas.

Electrification Assessment

Fraym partnered with RTI International to produce analysis and key visualizations to support USAID's Power Africa—Beyond the Grid market assessments. With **country-specific reports that detailed factors like electrification rates, key opportunities for solar home systems, and mini-grid partners**, Fraym provided a nuanced assessment of each priority market.

Hydro Development

Fraym worked with the IFC using grid connectivity rates to identify **the most promising locations for small hydro development in Côte d'Ivoire**. This information and analysis helped the government of Côte d'Ivoire to locate the best potential site locations based on population, connectivity, and ability to pay.

Customer Targeting

Provided custom data and analytics to understand the target customer for solar home systems in Nigeria, Kenya, Tanzania, Uganda, and Myanmar. Fraym built **3 profiles for off-grid and on-grid customers** who may want a solar home system, including their payment abilities and supplemental characteristics for sales expansion in the future.

Renewable Energy Markets

For Mobisol, Fraym **identified concentrations of profitable sales to solar home system customers** in Tanzania. Fraym leveraged its proprietary data and custom analytics to find concentrations of Mobisol target customers based on various demographic, consumption, and connectivity indicators. This analysis took the form of interactive maps and ranked lists of communities and subnational areas for sales and distribution centers, enabling Mobisol to prioritize areas for investment and growth.

Development Partners

