1. Below is a summary of the re modelled inputs and enhancements that are being integrated into the current version:  
  
We are considering 3 major Inputs and Enhancements:  
  
1. Economic and Financial Indicator (E&F): Merging both economic and financial as one.  
  
A. Household Ability to Pay (ATP): Incorporating Financial & economic data including  
- household income levels  
- Revenue from Household commercial Activities  
- Monthly Grid spend  
- Alternate Energy CAPEX (i.e., Generator Purchase Cost)  
- Bank Account Availability  
- Access to credit/Loan.  
- Household size and employment rates  
- Commercial business size  
  
B. Household Willingness to pay (Wip): Incorporating F&E data, including  
- Current energy expenditure both for Grid and alternate source but more priority on alternate energy source i.e., Spend on Generator including Maintenance  
- Whether or not the gen is used for income generation.  
- Generator dependence (Hours of generator usage)  
- Availability of commercial activities run in the household  
- Subsidy Impact on generator spend and grid supply availability  
- Response on willingness to pay more  
- Solar monthly Payment- Willingness to pay  
  
  
C. Energy Demand Metrics (Market Availability): Added data on  
  
- Grid electricity availability and outage frequency across LGAs.  
- Estimated energy demand.  
- Frequent Power Outages  
- Enhanced analysis of population density and its correlation with energy needs.  
- Analyze generator usage patterns to highlight areas with the highest demand for renewable energy solutions.  
  
The Statistical model will now estimate Ability to Pay (ATP), Household Willingness to pay (Wip) and Energy Demand thresholds, enabling better targeting of LGAs with high ROI.  
  
2. Impact Indicator:  
  
A. Social Impact  
- Gender inclusivity  
- Potential Employment in Renewable Energy  
- Quality of life improvement on Population  
  
  
B. Environmental Impact  
- Carbon Emission Reduction (Gen Capacity and Fuel Consumed)  
- Reduction In Noise Level  
- Impact on Air Quality  
- Concerns on Environmental Impact  
  
  
  
3. Infrastructure & Cost Indicator : This indicator will be used to determine the best Alternate power solution to be deployed per LGA.  
  
A. Solution Deployment:  
  
- Road accessibility  
- Proximity to Energy Markets: proximity to energy markets for easier project implementation  
- Renewable Energy Potential: Integrate solar irradiance data to identify areas with optimal renewable energy viability. (<https://globalsolaratlas.info/download/nigeria>)  
- Other Renewables: Consider wind or biomass energy potential  
- Rooftop Availability: Assess the building structures for rooftop solar installations in residential and commercial areas.  
- Solar Awareness  
- Solar system consideration  
- Willingness to Adopt Solar  
- Land Mass  
- Water body availability  
- Time of day of peak demand  
- Solar Panel Usage : Locations where solar are already being adopted (Easier to drive the initiatives there)  
- Type of Solar panel owned  
- Security  
  
  
B. Cost Implication - Access and create an estimated cost Implication of the proposed Solution to be Deployed.  
  
  
Key Outcomes of Version 2  
- LGAs will now be ranked with more precision based on their socio-economic, infrastructural, Impact and energy demand profiles.  
- The model will allow for scenario testing, enabling us to determine outcomes under varying Indicators and support conditions.  
  
  
Next Steps  
  
- Review Indicators and metrics for prioritization to ensure its reliability.  
- Redesign the algorithm to fit the prioritization methodology  
- Pilot test the prioritization framework in selected LGAs to gather further insights.  
- Prepare a dashboard for dynamic visualization of model outputs for decision-making.