

Project Design Phase
Proposed Solution Template

Date	15 February 2025
Team ID	LTVIP2025TMID51141
Project Name	Plugging into the future:- An Exploration of Electricity Consumption Patterns Using Tableau 2 Marks
Maximum Marks	

Proposed Solution Template:

Project team shall fill the following information in the proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Current electricity data analysis is complex and lacks clear visualizations, hindering efficient energy management, forecasting, and waste reduction. There's a need for an intuitive tool to reveal consumption insights.
2.	Idea / Solution description	Develop an interactive Tableau dashboard to visualize and analyze electricity consumption patterns. This includes data preparation and creating various charts (time-series, heatmaps filters to identify trends and anomalies.
3.	Novelty / Uniqueness	Tailored, user-friendly Tableau dashboard for electricity data, integrating diverse sources. It provides specific, actionable insights into consumption behavior, going beyond generic visualizations and easy user interpretation.
4.	Social Impact / Customer Satisfaction	Social Impact: Promotes energy conservation, aids policy-making, and optimizes grid management for stable supply. Increases public awareness of sustainable energy. Customer Satisfaction: Provides immediate visual insights for cost savings and improved efficiency for energy managers and businesses.
5.	Business Model (Revenue Model)	Potential models include SaaS subscriptions for organizations, custom dashboard development, consulting on energy data analysis, and premium access to aggregated consumption analytics.
6.	Scalability of the Solution	Highly scalable with Tableau's robust architecture, handling large data volumes. Easily adaptable to include more data sources (e.g., smart meters, weather) and features. Can monitor consumption across regions or buildings.

