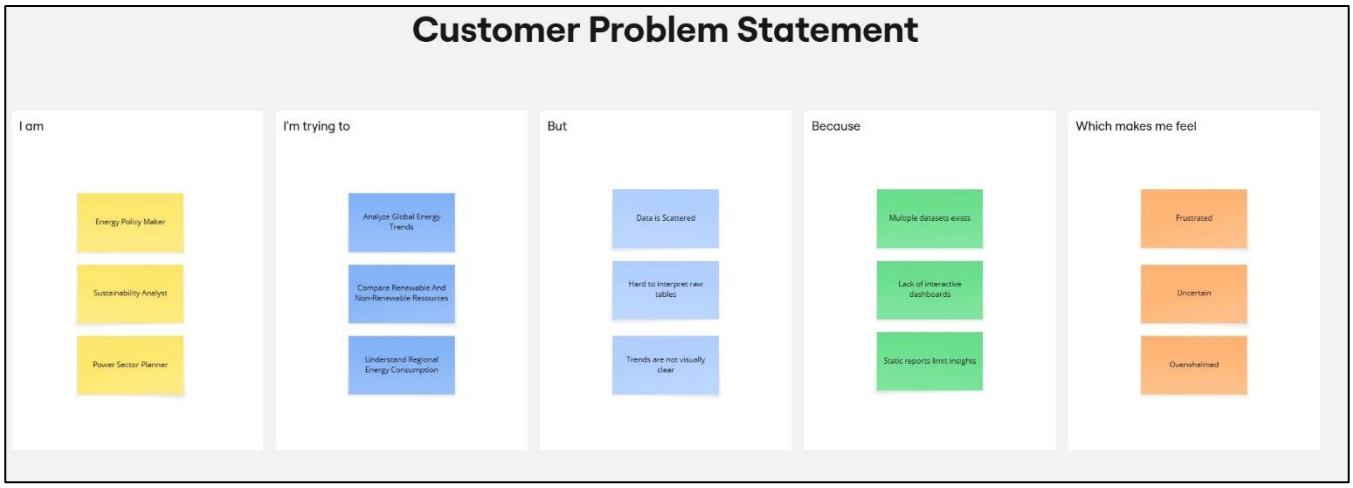
Project Initialization and Planning Phase

Date	14 December 2025
Team ID	SWUID20250254709 (Anshika Arya)
Project Name	Global Energy Trends: A Comprehensive Analysis of Key Regions and Generation Modes.
Maximum Marks	3 Marks

Define Problem Statements:

Despite availability of large scale energy data, stakeholders struggle to interpret global energy trends because data sources are fragmented, datasets are wide format and hard to compare and static reports hide time based patterns. A single interactive analytical dashboard is required to compare renewable vs non-renewable generation, study regional and country trends and support data driven sustainability decisions.



Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	An energy policy maker	Understand regional and national energy consumption patterns and the pace of renewable adoption.	Data is scattered across files and presented in wide, non-comparable formats; trend signals are buried in tables.	Raw datasets lack standardized structure, easy aggregation, and visual comparison tools.	Confused and slow to make policy recommendations.
PS-2	A	Compare	Static reports	Renewable data is	Frustrated and

	sustainability analyst	contribution and growth of different renewable sources across countries.	don’t highlight growth rates, composition, or country level breakdowns.	in multiple files (source-wise, top 20 countries, historical trends) and often in wide format.	unsure about prioritization of interventions.
PS-3	Plant operations manager evaluating grid mix.	Understand the regional generation mix to plan procurement and balancing.	Aggregate numbers do not reveal source composition or seasonal/yearly patterns.	Non-standard column names and totals in the source files cause confusion in aggregation.	Risk averse and unable to optimize procurement quickly.