**Smart Meter Data**

| **Variable Name** | **Description** | **Data Type** |
| --- | --- | --- |
| **household\_ID** | Unique identifier for each household. | Categorical |
| **EXPORT** | Electricity exported to the grid or not. | Categorical |
| **DATE** | Date of the data recording. | Date |
| **TIME** | Time of the data recording. | Time |
| **TOTAL\_IMPORT (kWh)** | Total electricity imported from the grid. | Numeric |
| **TOTAL\_EXPORT (kWh)** | Total electricity exported to the grid. | Numeric |
| **TOTAL\_IMPORT - PV1 (kWh)** | Electricity imported from the grid, specifically related to PV1. | Numeric |
| **TOTAL\_EXPORT - PV1 (kWh)** | Electricity exported to the grid, specifically related to PV1. | Numeric |
| **TR1\_TOTAL\_IMPORT (kWh)** | Electricity imported through Transformer 1. | Numeric |
| **TR2\_TOTAL\_IMPORT (kWh)** | Electricity imported through Transformer 2. | Numeric |
| **TR3\_TOTAL\_IMPORT (kWh)** | Electricity imported through Transformer 3. | Numeric |
| **TR1\_TOTAL\_EXPORT (kWh)** | Electricity exported through Transformer 1. | Numeric |
| **TR2\_TOTAL\_EXPORT (kWh)** | Electricity exported through Transformer 2. | Numeric |
| **TR3\_TOTAL\_EXPORT (kWh)** | Electricity exported through Transformer 3. | Numeric |
| **TR1\_TOTAL\_IMPORT - PV1 (kWh)** | Electricity imported through Transformer 1 related to PV1. | Numeric |
| **TR2\_TOTAL\_IMPORT - PV1 (kWh)** | Electricity imported through Transformer 2 related to PV1. | Numeric |
| **TR3\_TOTAL\_IMPORT - PV1 (kWh)** | Electricity imported through Transformer 3 related to PV1. | Numeric |
| **TR1\_TOTAL\_EXPORT - PV1 (kWh)** | Electricity exported through Transformer 1 related to PV1. | Numeric |
| **TR2\_TOTAL\_EXPORT - PV1 (kWh)** | Electricity exported through Transformer 2 related to PV1. | Numeric |
| **TR3\_TOTAL\_EXPORT - PV1 (kWh)** | Electricity exported through Transformer 3 related to PV1. | Numeric |
| **PHASE\_A\_CURRENT (A)** | Current in Phase A at the time of recording. | Numeric |
| **PHASE\_A\_VOLTAGE (V)** | Voltage in Phase A at the time of recording. | Numeric |
| **FREQUENCY (Hz)** | Frequency of the electrical supply at the time of recording. | Numeric |

**Non-Smart Meter Data**

| **Variable Name** | **Description** | **Data Type** |
| --- | --- | --- |
| **household\_ID** | Unique identifier for each household. | Categorical |
| **Month** | The month for which the electricity consumption data is recorded. | Categorical |
| **Consumption** | Total electricity consumption for the household in the given month. | Numeric |