



**COMPREHENIVE ENERGY AUDIT
PRELIMINARY DATA QUESTIONNAIRE**

Plant Information

| | | |
|---|-------|-----|
| Name & Address of Company Phone No. Email Fax Contact Person Name Designation & Phone | Plant | H.O |
| | | |
| Type of Industry Product/Products Capacity | | |

Source of Energy

| Source | Year 2014-15 | | Year 2015-16 | | Major Consumption Points |
|-------------|--------------|----|--------------|----|--------------------------|
| | Qty | RS | Qty | RS | |
| Electricity | | | | | |
| FO/LSHS | | | | | |
| Coal/LPG | | | | | |
| HSD | | | | | |
| Others | | | | | |
| Production | | | | | |



Electricity

Contract Demand kVA :
Demand Charges Rs/kVA :
Unit Charges RS kWh :

a. Transformers

| No. of transformers & type | Capacity | Location | Incoming Voltage | Supply Voltage | OLTC Details |
|----------------------------|----------|----------|------------------|----------------|--------------|
| | | | | | |

b. Capacitors

Avg. Plant Power Factor :
Total Capacitance provided kVAR :
Location of Capacitors :

c. Motors

| Size | kW Range | Nos. | | | | Operating h/y |
|--------|----------|------|----------|-------------|-----|---------------|
| | | SC | Slipring | Synchronous | D.C | |
| Large | | | | | | |
| Medium | | | | | | |
| Small | | | | | | |



j. Air Compressors

Installed capacity :
Capacity utilisation :
Major users :

| Compressor Type & Make | FAD capacity m ³ /h | Motor rating kW | Comp. Air pressure kg/cm ² g | Approx. energy consumption per year |
|------------------------|--------------------------------|-----------------|---|-------------------------------------|
| | | | | |

d. Gas / Oil fired Furnaces / driers

| Furnace particulars | Fuel used | Capacity | Application areas | Energy consumption per year |
|---------------------|-----------|----------|-------------------|-----------------------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |



e. Electrical heating / melting Furnaces / Driers

| Furnace particulars | Rated kW | Capacity | Application areas | Energy consumption per year |
|---------------------|----------|----------|-------------------|-----------------------------|
| | | | | |
| | | | | |

f. Thermic Fluid Heaters

| Type & Make | Capacity, kCal/h | Fuel | Application | Annual Fuel consumption | Remarks, if any |
|-------------|------------------|------|-------------|-------------------------|-----------------|
| | | | | | |

g. Thermic Fluid Application Areas

| Equipment | Type of control | Temp °C | Operating hours/year | Remarks, if any |
|-----------|-----------------|---------|----------------------|-----------------|
| | | | | |



h. Boilers & Hot water Generators

| Type & Make (Pressure) | Capacity, TPH or (kCal/h) | Fuel | Application | Annual Fuel consumption | Remarks, if any |
|---------------------------|---------------------------------|------|-------------|----------------------------|-----------------|
| | | | | | |

i. Steam/ Hot water Application Areas

| Equipment | Type of control | Temp °C | Operating hours/year | Remarks, if any |
|-----------|-----------------|---------|-------------------------|-----------------|
| | | | | |

j. Refrigeration and Air-conditioning

Air Conditioning System : Centralised/Decentralised

| Unit capacity TR | Compressor Type / VAU | Make & Model | Application & desired condition | Energy consumption per year |
|---------------------|--------------------------|-----------------|------------------------------------|--------------------------------|
| | | | | |
| | | | | |



k. Pumps, Fans & Blowers

| Type & Nos. | RATED | | | Type of control* | Application |
|----------------|------------------------|-------|----------|------------------|-------------|
| | Flow m ³ /h | Pres. | Motor kW | | |
| Pumps | | | | | |
| Fans & Blowers | | | | | |

l. Cooling towers

| Type | Cooling load kcal/h | Design range °C | Approach °C | PUMP | | | FAN | |
|------|------------------------|--------------------|----------------|-------------|---------------------------|-----------|-------------|-------------------------------|
| | | | | Motor kW | Flow m ³ /h | Head m | Motor kW | Air flow m ³ /h |
| | | | | | | | | |

m. Lighting

| Lamp/ Luminaire type | Lamp Watt X Nos. | Type of work | Method of switching | Operating load kW | Power consumption kWh/y |
|----------------------|------------------|--------------|---------------------|-------------------|-------------------------|
| | | | | | |



n. Captive Power Generation

| Type* & Nos. | Capacity | Fuel used | % Loading | Units generated/y | SEGR** |
|--------------|----------|-----------|-----------|-------------------|--------|
| | | | | | |

* DG Set/Gas turbine/Waste heat boilers/ etc.

** Specific Energy Generating Ratio

o. Please enclose brief description about the process _____

**Note: Please Download the Questionnaire Fill it and send us back at permaweld@permaweld.com
We will get back to you soon.**