

License No. 25/2145/A

M/s DEEPAK KUMAR PATEL
'A' Class Electrical Contractor
Gawatiya Para, Shivnandanpur, Bishrampur
District – Surajpur (C.G.) 497226

An inspection survey and analysis of energy flows for conservation are being conducted on government College Silphili District Surajpur (C.G.). The college campus as single source of energy supply. There is no any renewable source of energy found i.e. Solar, wind power etc. The required load of college building premises is dependent on non-renewable source of power supply provided by Chhattisgarh Power Distribution company. The Solar Energy would be supporting source of power supply during sunny days and enhance the energy conservation. It may also lower the cost of energy used by college campus.

Energy consumption as per actual service load year 2022-23 of Govt. College Silphili District Surajpur (C.G.)

Sr.No.	Year	Consumption (in kwh)	Amount paid @3.65 Rs/kwh
1	2022-23	8960.32	32705.17 Per Year

Note: Details report is enclosed in separate sheet. Amount for energy consumption is taken as per energy rate of Chhattisgarh Power Distribution Company.



Total load on various appliances used in college building as per specification, capacity and market price
Energy Consumption as per actual sevice load Year 2022-23 of Govt. College Silphili, District Surajpur (C.G.)

Sr. No.	Name of appliance	Capacity of appliance in watts	Connecte d Qty	Qty in service	Total watts (W)	Hrs/day	Wh
1	Ceiling fans	60	104	5	300	8	2400
2	CFL Bulb	9	5	5	45	8	360
3	LED Bulb	12	6	6	72	3	216
4	Tube light	40	42	8	320	3	960
5	Cooler	300	3	2	600	3	1800
6	Freeze	600	1	1	600	8	4800
7	Exhaust Fan	120	41	4	480	1	480
8	Computer	200	5	5	1000	6	6000
9	Printer	1000	3	3	3000	1	3000
10	Water Pump	1100	1	1	1100	1	1100
11	Water cooler	600	1	1	600	2	1200
12	Chemistry Lab Oven	1150	1	1	1150	1	1150
13	CC TV Set	200	1	1	200	24	4800
							28266 Wh
							28.27 kwh

$$\begin{aligned}
 \text{Energy consumption per year} &= \text{no. of day} \times \text{kwh} \\
 &= 317 \times 28.266 \\
 &= 8960.322 \text{ KWH/year}
 \end{aligned}$$

$$\begin{aligned}
 \text{Cost of Energy} &= 8960.32 \times 3.65 \\
 &= 32705.1753 \\
 &= 32705.1753 \text{ Rs per year} \\
 &= 2725.43128 \text{ Rs per month}
 \end{aligned}$$

