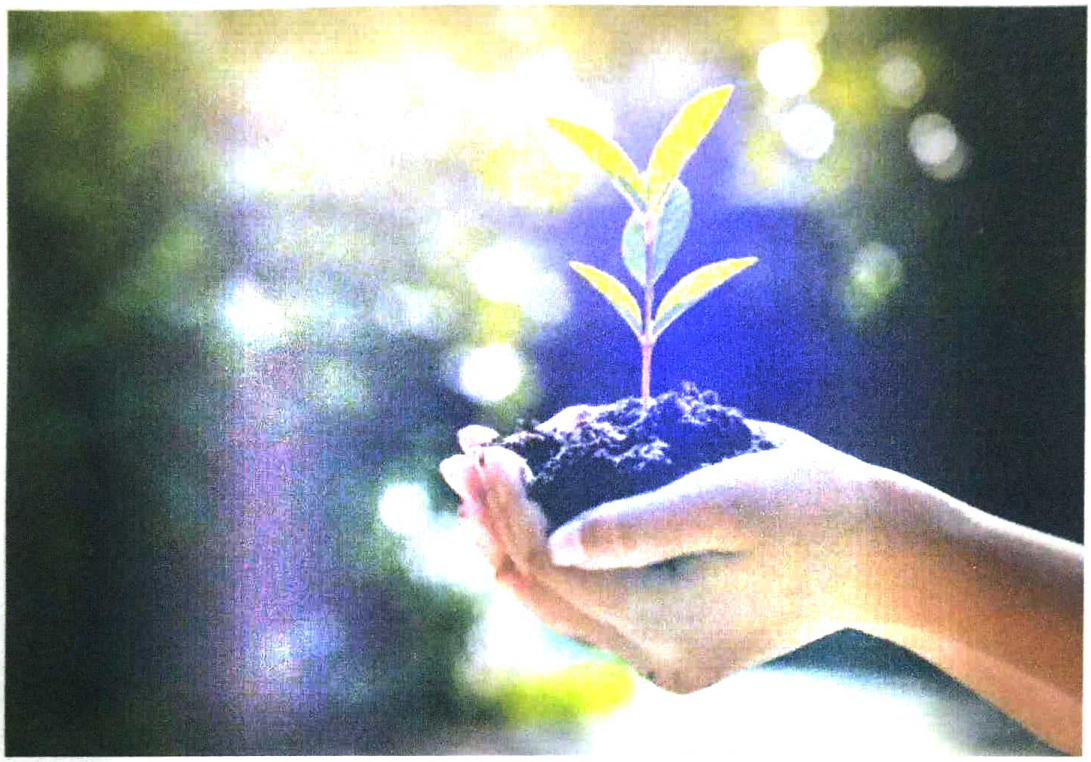
Energy Audit

2018-19, 2019-20



Prepared by:

Department of Environmental studies

Acknowledgement

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Our special thanks are due to:

Principal of the college – Dr. Falguni Mukhopadhyay

IQAC Member and professor of Chemistry– Dr. Sujit Kumar Bera

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Energy Audit coordinators – Debdyuti Sengupta & Soumi Sengupta

We are thankful to all the faculty members and teaching and supporting staffs of this college.

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Energy Audit

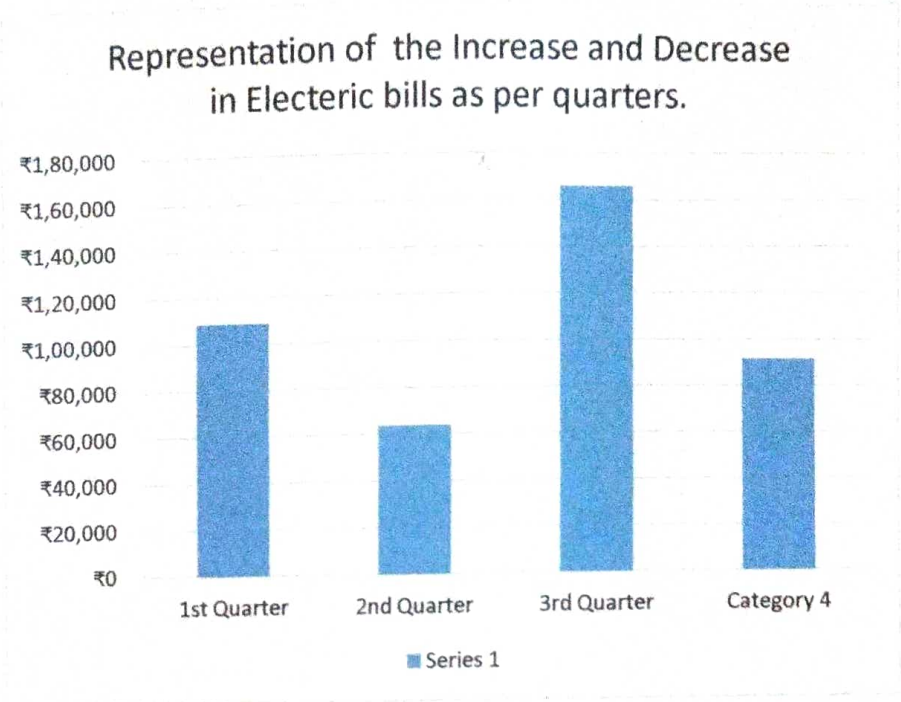
Energy Audit is the systematic approach for decision making in the sphere of energy management. It estimates total energy utilisation in the campus for lighting, Air conditioning, running of laboratories and their appliances, water heating, water pumping and cooking among others.

Fossil Fuel and electricity are major expenses in major organizations today. Efficient energy consumption is crucial for the economic success of all organization. Few ways that we use to conserve in our institution are:

- Electricity is saved by the usage of LED Blub
- LPG is saved by the usage of pressure cookers for cooking food
- We always try to run our computers at power saving mod
- We never use our Air conditioners, computers, weighing balance, printers, etc. in standby mode
- When these are not in use we completely shut them down or switch those off.
- We switch off our electrical appliances immediately after the dispersal of classes and when these are not in use.
- All Streetlights are in sensor based LED energy efficient module.

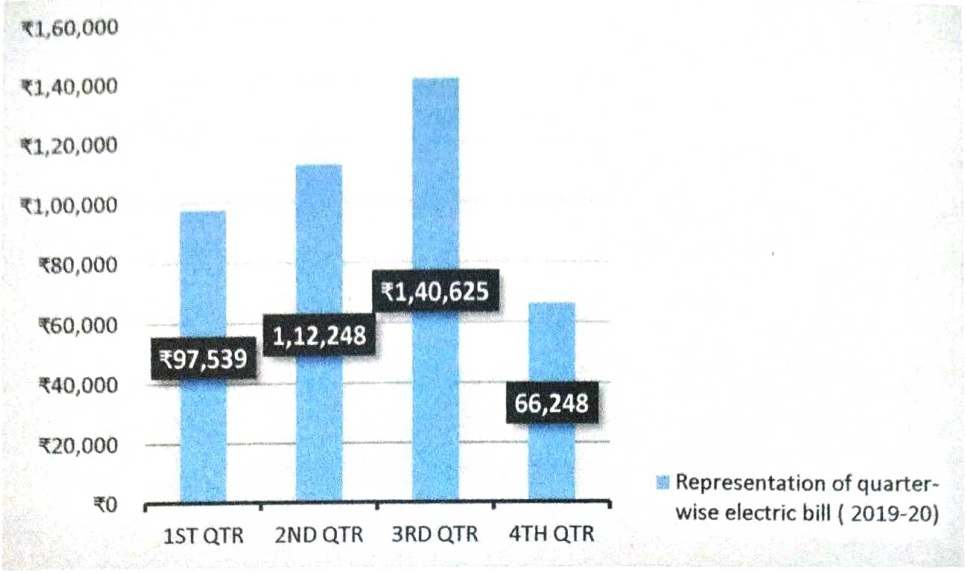
Quarter-wise electric bill (2018-19)

1st quarter May – July (2018)	₹ (8377+22238+78295) = ₹1,08,910
2nd quarter August – October (2018)	**₹ (4309+41294+52+78+7966) = ₹63,699**
3rd quarter November - January (2018-19)	**₹ (59+73+40570+7733+13359+104254) = ₹1,66,048**
4th quarter February -April (2019)	**₹ (73236+13359+4899) = ₹91,494**



Quarter-wise electric bill (2019-20)

1st quarter May – July (2019)	₹ (78+58+74599+16959+5843) = ₹ 97,539
2nd quarter August – October	**₹(76646+2610+28557+227+2029+61+1427+541+77+73)** **= ₹ 1,12,248**
3rd quarter November – January	**₹ (944+58+78+76+31999+107470)** **= ₹ 1,40,625**
4th quarter February –April	**₹ (64302+1656+49+173+78)** **= ₹ 66,258**



ROOM NO	ROOM NAME	SEATING CAPACITY	TUBELIGHT/BULB/LED	FAN
307	SEMINAR ROOM	90	23	18
301	Commerce Programme Classroom	>72	7	07
314	Arts Classroom	>72	11	11
208	Physics Office	-	04	04
209	Physics Lab	-	16	05
302	Commerce Honours Classroom	48	07	07

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Recommendation

The Energy Audit team has made short term and long-term suggestions for energy conservation. Some recommendations to towards energy management are as follows:

1. Sensor based energy conservation should be encouraged more.
2. Replacement of conventional ceiling fans with efficient ceiling fans.
3. Replacement of conventional classroom tube lights with LED tube light.
4. Solar energy panels should be installed as alternative energy resources. The public lights within the campus may be run with solar panels.
5. Uses of bicycles should be promoted.
6. Increase environmental promotional activities for spreading awareness among students in the campus.

Reference

- The Environment [Protection] Act – 1986 (Amended 1991)
- Environment [Protection] Rules-1986 (Amended 2010)
- Energy Conservation Act 2010
- Energy Conservation Rule 1956 (Amended 2006)

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