

7.1.2 Alternate energy sources: Use of Solar power as energy conservation means

Alternate to Wheeling to the grid (Netmetering)

Sophia College for Women, in its resolve to educate and empower women, aims at following an inclusive, ethically conscious teaching learning method. The relationship with our environment and climate consciousness and social responsibility play a big role in shaping the ethos of the education imparted at Sophia College. Within this educational and social context, the institution has striven constantly to move towards renewable energy sources.

To this end, the solar panels of 15KWP sponsored by Sunteck Realities Ltd. were set up on the terrace over the library. Solar inertia company executed the project. Additionally, Godrej Agrovet, too, sanctioned a solar project of 64.02KWP(12.8 KWP over the Science Building) and (51.2 KWP over the main building). Cleanmax company executed the project in May – June 2018.

The project was inaugurated by Mr Balram Yadav on 31 st August, 2018. Parallel to the installation of both the units of solar panel was the installation of 'Net Metering' as a billing tool that allowed the institution empowered with solar panels to send excess energy back to the electric grid and receive credit on their next bill. Such measures ensuring the use of alternate renewable energy have been sustained through the past years. Not only has the college benefitted after installation of the solar panels in terms of significant reduction of annual consumption of electricity units (approximately about 25% annually), it has also been key to diverting the excess daily energy harnessed as against the daily consumption, to Brihanmumbai Electricity Supply and Transport Undertaking (BEST). This normally happens during the holidays and vacations, when the College is closed. Table of Units consumed in the past seven years 2015- 2022 (in the meters which were later connected to Solar Power) online classes due to Covid Energy Management.

The relevant data is attached below.

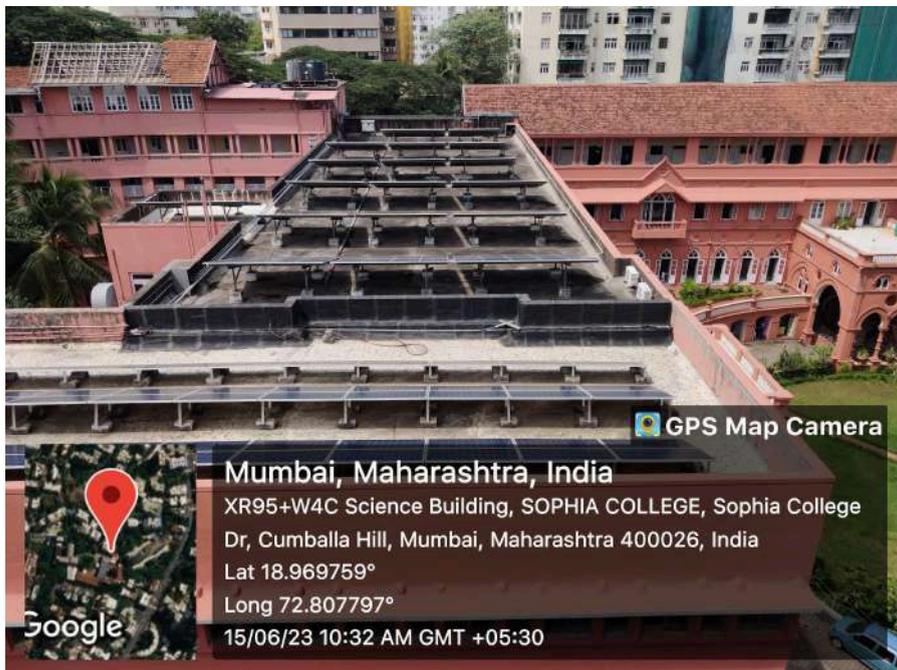
Table of Units consumed in the past seven years 2015- 2022(in the meters which were later connected to Solar Power)

Month & Year	Units consumed	
Apr 15 – Mar 16	210372	
Apr 16 – Mar 17	189554	15 KWP solar panels installed in January 2017
Apr 17 – Mar 18	200708	
Apr 18 – Mar 19	153513	64 KWP solar panels installed in June 2018
Apr 19 – Mar 20	142478	
Apr 20 – Mar 21	51096	Drop in consumption – predominantly online classes due to Covid
Apr 21 – Mar 22	37471	Drop in consumption – predominantly online classes due to Covid

A.P. Patil
PRINCIPAL SOPHIA COLLEGE
(AUTONOMOUS)



Solar Panels Connected to Net metering



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PRINCIPAL SOPHIA COLLEGE
(AUTONOMOUS)

Net Metering Alternate to Wheeling to the grid



The College has installed three Net Energy Meters (NEM). The Net metering system installed helps to divert the excess daily energy harnessed as against the daily consumption, to Brihanmumbai Electricity Supply and Transport Undertaking (BEST). This normally happens during the holidays and vacations, when the College is closed. Under net metering, the energy produced by the solar panels that is not used is credited back and one receives credit on the next bill.





बृहन्मुंबई विद्युत पुरवठा आणि परिवहन उपक्रम

(बृहन्मुंबई महानगरपालिका)

बेस्ट भवन, पो.बॉ.नं. १९२, बेस्ट मार्ग, कुलाबा, मुंबई - ४०० ००१

Ward Office Address:
Customer Care 'D' Ward B.E.S.T.
Undertaking, New Administrative Bldg, 3rd
Floor, Tardeo Complex, R.S. Nimbkar
MUM, Tardeo, Mumbai-400008, Tel. No. 21026757

Name : PRINCIPAL SOPHIA COLLEGE HOSTEL Mobile No:95XXXXX629 Email ID:XXXXXXXXXXXXXbai@gmail.com Billing Address : FLOOR-1,2ND,61F,SOFIA COLLEGE BUILDING,VIVEK SINGH LANE,CUMBALLA HILL,MUMBAI-400026 Power Supply Address : FLOOR-1,2ND,61F,SOFIA COLLEGE BUILDING,VIVEK SINGH LANE,CUMBALLA HILL,MUMBAI-400026	Bill For : Aug-2024 Date of Bill : 23/08/2024 Invoice No. 408135400016																				
	<table border="1"> <tr> <td>Book Folio No.</td> <td>Consumer No.</td> <td>135-400-016*0</td> </tr> <tr> <td>Cycle 35</td> <td>C.A.No.</td> <td>400008381</td> </tr> <tr> <td>Type of Supply 3P</td> <td>Bill Period</td> <td>30/06/2024 -</td> </tr> <tr> <td>Service No 473940-X-X</td> <td></td> <td>31/07/2024</td> </tr> <tr> <td>Installation No.</td> <td>Tariff</td> <td>LT I B</td> </tr> <tr> <td>Sanctioned Load 13.80</td> <td>Category</td> <td>RESIDENTIAL</td> </tr> <tr> <td>Security Deposit 2800.00</td> <td>Ward</td> <td>D</td> </tr> </table>	Book Folio No.	Consumer No.	135-400-016*0	Cycle 35	C.A.No.	400008381	Type of Supply 3P	Bill Period	30/06/2024 -	Service No 473940-X-X		31/07/2024	Installation No.	Tariff	LT I B	Sanctioned Load 13.80	Category	RESIDENTIAL	Security Deposit 2800.00	Ward
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Last Payment Received ₹ 73200.00		Last Payment Received Date 08/08/2024																			

Reading Parameter Of Net Meter

Meter No.	P.F.	Demand Details(KVA)			M.F.	Unit Details		
		MD	BD	CD		B/F	C/F	Billed
S180040					1.000	0	0	8399
TOD UNITS	Import Reading		Import Units(A)	Export Reading		Export Units(B)	Net Units (A-B)	TOD Units
	PREVIOUS	CURRENT		PREVIOUS	CURRENT			
TOTAL KWH	259889.00	268288.00	8399	146009.00	146009.00	0	8399	
T1 (22-06-HRS)	82081.00	84107.00	2026	0.00	0.00	0	2026	
T2 (6-9 HRS)	85292.00	88744.00	3452	102861.00	102861.00	0	3452	
T3 (09-12 HRS)	28743.00	30196.00	1453	43117.00	43117.00	0	1453	
T4 (12-18 HRS)	0.00	0.00	0	0.00	0.00	0	0	
T5 (18-22 HRS)	63774.00	65242.00	1468.00	31.00	31.00	0.00	1468.00	
RKVAH(lag)	132393.00	135782.00	3389.00	7.00	7.00	0.00	3389.00	
RKVAH(lead)	3.00	3.00	0	38017.00	38017.00	0	0	
MD (22-06 HRS)		16.5400	17.0000					
MD (06-09 & 12-18 HRS)		32.0000	32.0000					
MD (09-12 HRS)		31.8400	32.0000					
MD (18-22 HRS)		30.4200	30.0000					

Reading parameters of Solar Generation Meter

Meter No.	MF	Meter Reading		Generated Units
		PREVIOUS	CURRENT	
N213417	1.000	20965.00	21526	561
Sanctioned/Installed Solar Generation Capacity (KW)			10	



A.P. Pahi
PRINCIPAL SOPHIA COLLEGE
(AUTONOMOUS)

Your Bill Details	Amount ₹
Fixed Charges / Demand Charges	320.00
Energy Charges	95846.27
Wheeling Charges	16546.03
Fuel Adjustment Charges	0.00
Electricity Duty	18033.97
M. Tax Sale on Electricity	2187.10
Power Factor Penalty / Incentive	0.00
Load Factor Incentive	0.00
Penalty for Exceeding Contract	0.00
TOD Charges	0.00
Current Months Bill Amount (A)	132933.37
Delayed Payment Charges (@1.25% monthly bill including Taxes and Duties)	0.00
Intrest on Arrears	0.00
Prompt Payment Discount	0.00
ECS Discount	0.00
Digital Payment Disc./ebill disc (if applicable)	0.00
Total Adjustment Amount	0.00
Net Other Charges (B)	0.00
Total Current Month charges (A + B)	132933.37
Previous Month Bill amount	73202.83
Payment Received	73200.00
Net Arrears (C)	2.63
Total Bill (A + B + C)	132936.00
Total Bill Amount (Rounded)	132930.00

Important Messages

* Prompt payment discount of Rs. 1127.12 will be given if payment is made on / before 02/09/2024.

Monsoon Precautions
Do's

1. Protect the meter cabin from rain water by way of concreting, raising the height of the cabin etc. and in case of wooden cabin, protecting it suitably.
2. Get the electrical wiring, right from the meter position to individual flats / premises and internal wiring thoroughly checked through Licensed Electrical Contractor & provide Earth Leakage Circuit Breaker (ELCB) of proper rating.
3. Switch "OFF" the main switches in premises and cabin in case of water leakage / logging
- g. Electric supply may be switched "ON" only when it is attended and electrical installation is checked and "certified as safe" by Licensed Electrical Contractor / BEST staff.
4. Inform concerned Fuse control centers in case of sparking or shock in meter cabins, street lighting poles, distribution pillars etc.
5. Restrict your load when temporary supply is given to your building or installation.

Don'ts

1. Don't touch the installation with bare or moist hands or without taking safety measures such as hand-gloves, wooden / insulated platforms etc. in case of water leakages.
2. Don't touch meters, street lighting poles, Red coloured distribution pillars on road etc.

* As per CBDT notification dt. 13-May-20, w.e.f. 1-Oct-20, Tax Collected at Source (TCS) will be levied on your electricity bill exceeding Rs. 50 Lakhs (excluding taxes) in a financial year. TCS rate will be 0.1% for PAN holders and 1% for non-PAN holders in FY22-23. Multiple consumer accounts with same PAN will be considered as single entity. TCS certificate will be issued as per TDS Rules. Kindly update your PAN with concerned ward office of BEST.



Meter No.	Tariff/Duty	Energy Consumed				P.F.	Load	Contract Demand in KVA	Billing Demand in KVA
		Previous Reading	Current Reading	MF	Units Consumed				
S180040	LT I B/A	259889	268288	1	8399	0.000	13.80	17.2500	0.0000

Your Tariff Structure

Consumer Category (units in kWh slab)	Fixed/Demand (₹/Connection/mth)	Energy Charges (₹/kWh)	Wheeling Charges (₹/kWh)	E.D. Rates (₹/kWh)	M. Tax (₹/kWh)	FAC Rate (₹/kWh)	
LT I B							
0 - 100	90/-	1.60/-	1.87	1.97	16% of FC+VC+FAC or as applicable	26.04	0.00
101 - 300	135/-	1.60/-	5.46				0.00
301 - 500	135/-	1.60/-	9.56				0.00
> 500	160/-	1.60/-	11.73				0.00

** Additional fixed charges of Rs.160/- per 10KW load or part thereof above 10KW load shall be payable. ***Green Power Tariff i.e. Rs.0.66/kWh - Electricity Duty (as applicable to

Adjustment & Claim Details

Adjustment & Claim Details	Amount ₹

Electricity Duty rates as shown in tariff structure will be applicable as per the schedule in Maharashtra Electricity Duty Act, 2016, GOM Notification no. ELD.2016/CR.252/Energy-1 dated 21.10.2016. Maharashtra Tax rate as shown in tariff structure will be charged as per Govt. Notification no. VVK-2018/CR-161-Energy-1 dated 26.12.2018.

Online Billing Details

You can pay your electricity bill using credit debit card or netbanking. No need to stand in a queue. Visit our Website www.bestundertaking.com and click on "Online Electricity Bill"

Other payment options :

- * BEST Cash counter
- * BEST's Mobile cash
- * Selected banks
- * Post Offices
- * NACH (National Automated Clearing Housing)
- * Bill Desk
- * M/s. Tech Process (Net)
- * PayTM
- * CitiBank (RTGS/NEFT)
- * miBest (Mobile app)

PAY BY NACH TO AVAIL DISCOUNT (NACH mandates forms available at our website and Cash Collection Centers)

For More details :22799559(South), 24194549 (North)

Important Notes:

1. DELAYED PAYMENT CHARGES and INTEREST ON ARREARS will be charged as per Tariff schedule if the Electricity bill payment is not made before due date.
2. If the Electric supply meter is not in use for a long period Kindly contact respective ward office.
3. Safety of the meter is consumers responsibility.
4. Using your Electricity connection for purpose other than provided for, is a tariff violation and may lead to disconnection / penal actions.
5. Please quote your consumer no. ###-###-###-# and contact number in all your correspondence.
6. Do not issue outstation or post dated cheques.
7. A Penal amount of Rs.250 per cheque will be charged on a dishonoured cheque.
8. Mention your account number and amount on backside of the cheque while making multiple bill payment by single cheque.
9. Electricity bill where amount of bill is greater than Rs20000/- will be accepted only by cheque or demand demand draft.
10. "Consumer Right Statement" Application to CGRF, ECS form, etc Will be available at our Website www.bestundertaking.com as well as at our ward offices



A.P. Patil
PRINCIPAL SOPHIA COLLEGE (AUTONOMOUS)



बृहन्मुंबई विद्युत पुरवठा आणि परिवहन उपक्रम

(बृहन्मुंबई महानगरपालिका)

बेस्ट भवन, पो.बॉ.नं.१९२, बेस्ट मार्ग, कुलाबा, मुंबई - ४०० ००२

400001 Ward Office Address
Customer Care 'D' Ward, B.E.S.T.
Under the 'D' Administrative Bldg, 2nd
Floor, Tardeo Complex, R.S. Nimkar
Marg, Tardeo, Mumbai - 400008. Tel No. 2302365

Name : PRINCIPAL SOPHIA COLLEGE HOSTEL Mobile No: 95XXXXX629 Email ID: XXXXXXXXXXXXXXXXbai@gmail.com		Bill For : Aug-2024 Date of Bill : 23/08/2024 Invoice No. : 408135400016
Billing Address : FLOOR-1, 2ND, 61F, SOFIA COLLEGE BUILDING, VIVEK SINGH LANE, CUMBALLA HILL, MUMBAI-400026		Book Folio No. : Cycle : 35 Type of Supply : 3P Service No : 473940-X-X Installation No. : Sanctioned Load : 13.80 KW Security Deposit : 2800.00
Power Supply Address : FLOOR-1, 2ND, 61F, SOFIA COLLEGE BUILDING, VIVEK SINGH LANE, CUMBALLA HILL, MUMBAI-400026		Consumer No. : 135-400-016*0 C.A.No. : 400008381 Bill Period : 30/06/2024 - 31/07/2024 Tariff : LTIB Category : RESIDENTIAL Ward : D
		Last Payment Received ₹ 73200.00 Last Payment Received Date 08/08/2024

Current Bill Amount ₹	Past Dues ₹	Due Date *	Bill Amount Before Due Date ₹	Bill Amount After Due Date ₹ **
132933.37	2.63	17/09/2024	132930.00	134598

* Due date valid only for current bill amount ** Interest will be levied on arrears as applicable

Important Contact Details Fuse Control/Off Supply 23094242/23018169/99 20584242/9920474242 8828871647	Billing Complaints 8657906865	Electricity Theft/ Unauthorised use South-22814996	Fault Control 22066661/22066611/90 29156611/9920196611	For Street Lighting Complaints 8097584815/7208836089
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Internal Complaint Redressal Cell
Assistant Admin. Manager, Customer Care 'D' Ward, New Administrative Bldg, 2nd Floor, Tardeo Complex, R.S. Nimkar Marg, Tardeo, Mumbai - 400008.
Tel No - 23092365, 23026761.
Email : igrcddward@bestundertaking.com

Consumer Grievances Redressal Forum
Ground Floor, Multistoried Annex Bldg, Accomodation Road, Colaba, Mumbai - 400001
Visit : www.cgrf.best.org.in
Email : decgrf@bestundertaking.com

"IMPORTANT MESSAGE"
NEFT / RTGS Electricity Bill Payment (IDFC First Bank)
Name of Beneficiary : Best Undertaking
Beneficiary Account Number : BESTXXXXXXXXXXXX9 digit Consumer No.
Bank Name and Branch : IDFC First Bank Ltd, Chennai, R.K. Sairal
IFSC Code : IDFC000101

NEFT / RTGS Additional Security Deposit Payment (IDFC First Bank)
Name of Beneficiary : Best Undertaking
Beneficiary Account Number : BESTXXXXXXXXXXXX9 digit Consumer No.
Bank Name and Branch : IDFC First Bank Ltd, Chennai, R.K. Sairal
IFSC Code : IDFC000101

NEFT / RTGS Electricity Bill Payment (SBI)
Name of Beneficiary : Best Undertaking
Beneficiary Account Number : BESTXXXXXXXXXXXX9 digit Consumer No.
Bank Name and Branch : STATE BANK OF INDIA, MAIN BRANCH
IFSC Code : SBIN0003000

Past Consumption
Bar Graph Unit KWH Month
Meter No - S180040

4713	Jul-24
1647	Jun-24
3032	May-24
6452	Apr-24
5602	Mar-24
5920	Feb-24
5854	Jan-24
3088	Dec-23
7022	Nov-23
7594	Oct-23
7594	Sep-23

Units Consumed KWH

Aug-24	8399
Aug-23	7231

Bill Collection Centers in your area
Kamathipura : Near Panchsheel Bldg. Manaji Raju Marg, Mumbai 400008
Tardeo : Pande Compound, Tardeo
Nana Chowk : Jobanputra Compd., Municipal 'D' Ward, Nana Chowk, Mum-7
Grant Road : Near Super Cinema, Shaukat Ali Rd, Mumbai
Gol Devul : Sant Sena Maharaj Marg, 2nd Kumbharwada, Mumbai 400004
Tardeo Bus Station : Near Navjeevan Society, R.S. Nimkar Marg, Mumbai
Kherwadi : Near Alankar Cinema, S.V. Patel Marg, Mumbai 400 004
Walkeshwar : Best House, Walkeshwar Bus Station, Mumbai

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Available on the App Store | GET IT ON Google Play
www.bestundertaking.com

(Girish G. Chandankar)
Chief Engineer Customer Care

"This bill for power supply cannot be treated or utilised as proof that the premises for which the power supply has been granted is an authorised structure nor would the issuance of the bill amount to proof of ownership of the premises."

1 -3 SEP 2024
CASH/CHEQUE / D.O.
Receipt No. 132930
Received Rs. 132930

Consolidated Stamp Duty paid to General Stamp Office, Mumbai vide Order No. MUDRANK SHULK NUMBER, CSD/20/2023/ (Validity Period from dtd. 29.11.2023 to dtd. 31.01.2026)/4848, dtd. 30.11.2023.



A.P. Palsi
PRINCIPAL SOPHIA COLLEGE (AUTONOMOUS)

This Bill is issued for electricity used and may not be treated as proof for ouster