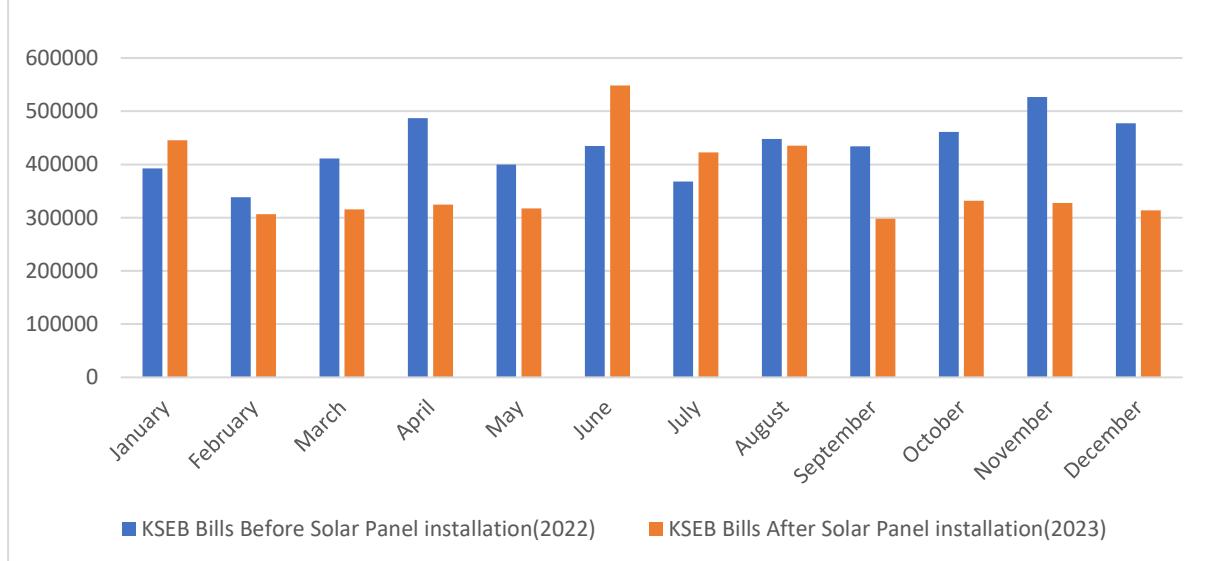


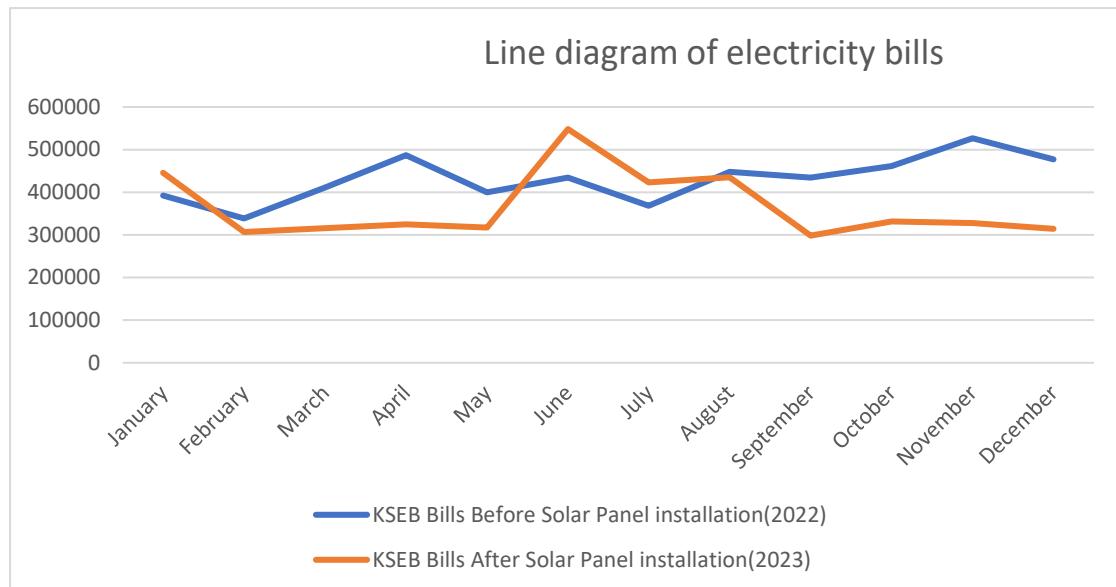


### QUANTITATIVE DATA ANALYSIS

	KSEB Bills Before Solar Panel installation(2022) in Rs	KSEB Bills After Solar Panel installation(2023) in Rs
January	392465	445485
February	338582	306432
March	411427	315593
April	486941	324715
May	399914	317081
June	434353	548259
July	367991	422840
August	448013	435276
September	434139	298293
October	461368	331547
November	526699	327451
December	477555	313955

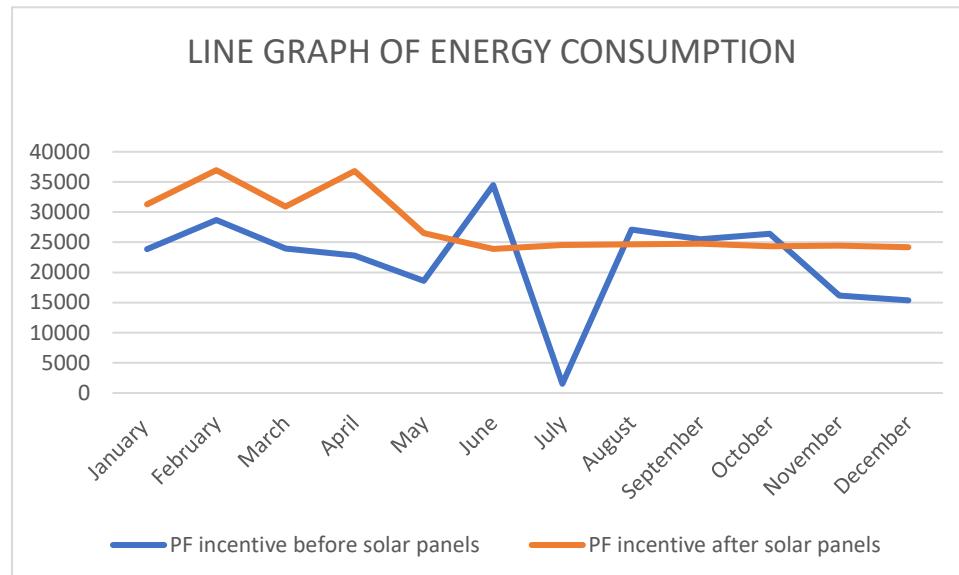
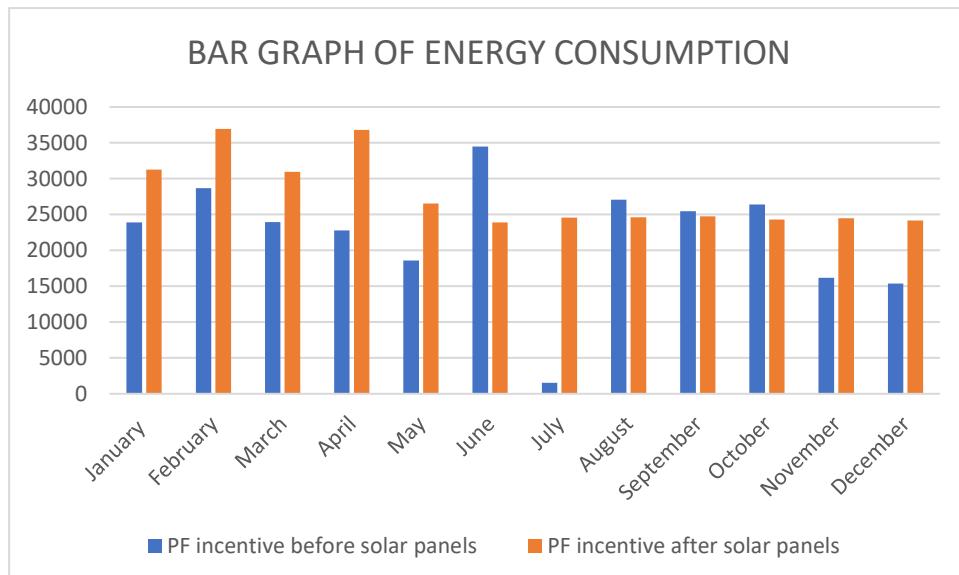
**Bar graph of electricity bills**





### ENERGY CONSUMPTION (KVAh)

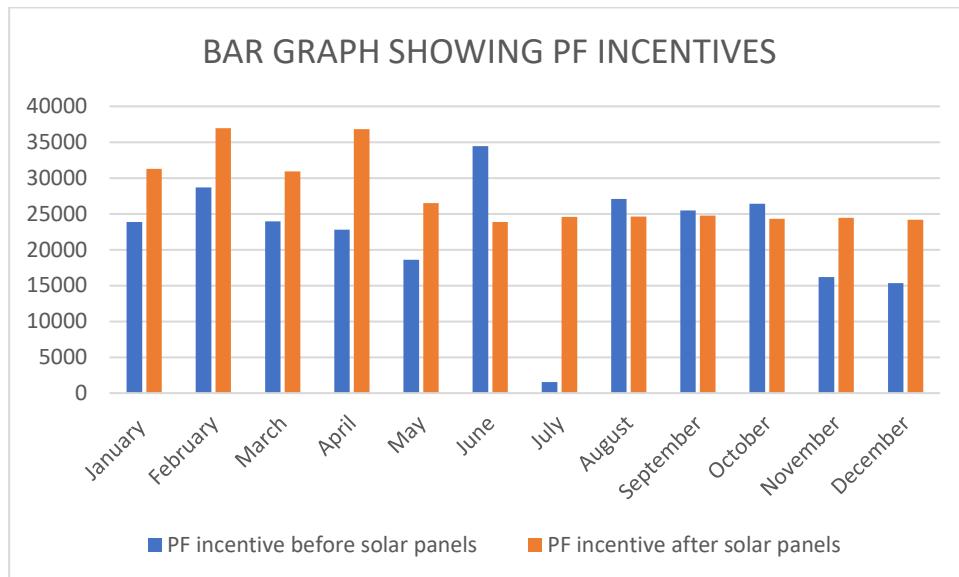
	Before Solar Panel installation(2022)	After Solar Panel installation(2023)
January	45630	46239
February	39168	35913
March	35974	35193
April	55816	37830
May	45834	36555
June	50652	43149
July	44370	40251
August	47828	35565
September	45370	33156
October	46878	34651
November	51764	38730
December	48897	34671

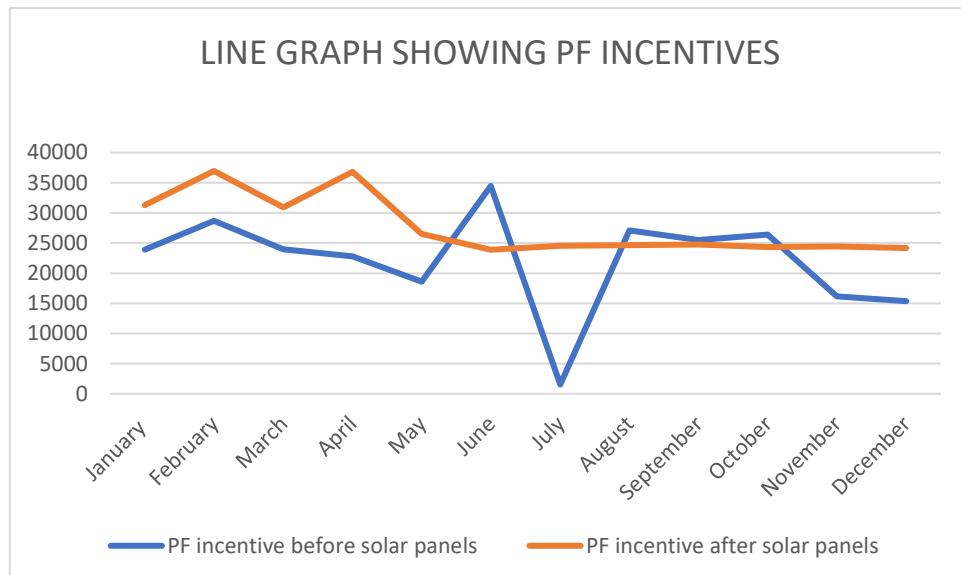




### PF INCENTIVE BEFORE AND AFTER SOLAR PANEL INSTALLATION

	PF incentive before solar panels	PF incentive after solar panels
January	<b>23884</b>	<b>31269</b>
February	<b>28698</b>	<b>36954</b>
March	<b>23943</b>	<b>30943</b>
April	<b>22790</b>	<b>36798</b>
May	<b>18601</b>	<b>26519</b>
June	<b>34475</b>	<b>23888</b>
July	<b>1532</b>	<b>24570</b>
August	<b>27091</b>	<b>24629</b>
September	<b>25477</b>	<b>24772</b>
October	<b>26413</b>	<b>24321</b>
November	<b>16178</b>	<b>24466</b>
December	<b>15362</b>	<b>24172</b>







## ACTION TAKEN REPORT

As part of the institution's ongoing commitment to green campus initiatives, a 200 kW solar power plant was installed and commissioned on 27/10/2022 by Watsun Energy India Private Limited. The installation has played a vital role in promoting energy conservation and reducing electricity usage costs. The accompanying bar chart highlights a clear reduction in electricity charges following the commissioning of the solar panels, demonstrating the positive impact of renewable energy adoption before and after installation of solar Pannel.

However, during the months of June and July, there was a noticeable increase in electricity bills as compared previous months. This was primarily due to unfavourable weather conditions and reduced energy conversion efficiency caused by the accumulation of dirt on the panels. To address this issue, prompt action was taken to clean the panels, which resulted in improved energy generation and subsequently reduced KSEB electricity expenses from August 2023 onwards.

Further, the energy Consumption was reduced due to the constant efforts in conserving electricity by placing motion sensor lights and LED lights in the campus.

Currently, the solar plant is functioning efficiently and continues to support the institution's sustainability goals. Regular maintenance activities, including cleaning and technical inspections, are carried out in every six-month intervals to ensure optimal performance and long-term reliability and durability. The initiative has not only reduced energy costs but also contributed significantly to the institution's vision of creating an environmentally responsible and energy-efficient campus by producing sustainable power.



**PMS COLLEGE**  
OF  
**DENTAL SCIENCE & RESEARCH**

(A Unit of NRI Service and Educational Trust)

Recognized by DCI, Affiliated to KUHS, Recognized under section 2(f) of UGC Act 1956 & KUHS Approved Research Centre



Golden Hills, Venkode P.O., Vattappara, Thiruvananthapuram 695028

✉ [info@pmscollege.ac.in](mailto:info@pmscollege.ac.in)

🌐 [www.pmscollege.ac.in](http://www.pmscollege.ac.in)

📞 0472 2587878, 0472 2587979