

5.2 Special Initiative Taken for:

5.2(i) Energy Conservation/ Use of Solar Energy

Installation of solar power plant- a step towards green energy:

There is a need of the hour that the use of green energy should be made mandatory for every government department including colleges. Since the colleges provide education for students from the near peripheral area, the message regarding the usefulness of such plants can be spread in the society through this initiative.

In Himachal Pradesh, generally we use green energy i.e. hydro and solar energy. Hydro-power projects do not pollute the water and air because it does not dispense green house gases. However, hydro-power projects affect the environment, by affecting the natural habitat near the dam. Keeping these points in mind, solar energy is the best alternative source of energy. It will not affect the environment in any way.

On the request submitted by the college, the directorate of H P higher education took the initiative for setting up a solar power plant of 56 kwp in the college. The directorate of H P higher education approved this project in the year 2022. Documentary proof and geo tag photograph are attached for ready reference. The said solar power plant started functioning fully in March 2023. It is grid connected with capacity 56 kWp. Few important points regarding this solar power plant are listed below:

Date of commissioning of Solar Power Plant: 17-01- 2023

Cost : Rs. 25,20,000

Capacity: 56 kWp

Consumer : Principal Govt. Degree College Jukhala

A/C No: 100008002068

Installation No: 1321511212

Applicable tariff/category: NDNC Two Port

Sanctioned Load/CD of Consumer with supply voltage: 87.930 kw, CD 50KVA, 11kv

Executing Agency: HIMURJA, Bilaspur

Billing Agency: HPSEB: Sub Division Namhol

As per technical Inspection by Him Urja, total units of energy generated

since commissioning to 20-08-2024 = 92000 KWH

Energy consumed in the campus since commissioning to 20-08-2024 (19 months) = 76000 KWH (approx.)

Energy Consumption in campus for one month : 4000 units (Approx.)

Saving per month (upto 19 months) = 4000×5.20 = Rs. 20800 (Approx.)

Saving per month (upto next 14 months) = 4000×6.12 = Rs. 24480 (Approx.)

Total saving since commissioning up to October, 2025 (33 Months) = $20800 \times 19 + 24480 \times 14$ = Rs.737920

(Approx.)

Evidences of success:

Since commissioning we have total saving Rs. 737920 (approx.), which is about 29% an average of total cost of the solar power plant. The electricity supply has become smooth and there is no problem of voltage. The science labs, smart class rooms, I T lab and offices are working smoothly. The institution has been become successful in communicating the message of conservation of environment among the students and society at large. Students were advised to

More over the institution have installed solar lights in the college premises which is a welcome step in energy conservation. The lights are very charming and beautify the campus at night. Enriching the concept of energy conservation, conventional bulbs and lights have been replaced with LED bulbs, tubes. These lighting solutions helped a lot in maintaining campus security providing better quality light, improving student safety



Dr. Rajkumar
Superintendent
664
30/8/24

**Electricity
Inspection**

(H.P. GOVT. ENERGY DEV. AGENCY)
Rourkela Sector-11, B.I. NSP-II, 751001
Phone: 01978222591

NO. Himurja Bhp. SPP (Govt. School) 2020-21 — 252 Dated: 29-08-2024

To
✓ The Principal,
Govt. Degree College Jukhada
District Bilaspur.

Subj: - Request for Technical Inspection of Roof top Solar Power Plant installed at college Jukhada.

Sr.

Kindly refer to your office letter no. 210-11 dated 19.08.2024 and 216-18 dated 21.08.2024. It is intimated that, the site visit of Solar plant has been carried out dated 20.08.2024. During the site visit, it is found that, the Solar Plant(50KW) is running successfully, and total 92000kwh has been generated since commissioning.

The Bi-directional meters reading during the visit was: Main Energy Export:15372KWH, Import 2534KWH and Net Export to HPSEB: 42836KWH as 4.5084 units 20.08.2024. As per the data compilation, you have consumed 76000KWH approximately campus since commissioning the project i.e. 17.01.2023 in 19Months and average per day plant is generating 161KWH (Average).

Secondly, the matter of billing is related to the HPSEB. Therefore you are requested contact Sr. Executive Engineer, HPSEB, Bilaspur for the clarification being the DDO please

Thank you.

Yours Sincerely,
Kartar Singh (Bakar)
Project Officer,
Himurja, Bilaspur
(HP)

[illegible]

Dated: Shimla-171001

2021

13 JAN 2022

To

Subject

Memo

The Principal,
Govt. Degree Colleges,
As marked below.

Budget Announcement (Para No. 153) regarding Setting up Roof Top Solar Energy plants in all health and education institutions in a phased manner connected with the grid.

With reference to the Govt. Letter No. EDN-Gha(4) 2/2019, Dt. 24.12.2021 on the subject, cited above.

The budget allocation under relevant HOA/SOE as per details is being hereby accorded:-

Sr. No.	Name of Degree College	Solar Plant in KW	Funds Allocated (Rs.)	Head Of Account
1	Govt. College Jukhala, Distt. Bilaspur	70	30,87,000/- (Thirty Lakh Eighty Seven Thousand Only)	2202-03-103-01 S00N Demand No.08 SOE-"33-M&S" FY 2021-22
2	Govt. College Bhoranj, Distt. Hamirpur	38	16,75,800/- (Sixteen Lakh Seventy Five Thousand Eight Hundred Only)	
3	Govt. College Dehri, Distt. Kangra	25	11,02,500/- (Eleven Lakh Two Thousand Five Hundred Only)	
4	Govt. College Haripur Manali, Distt. Kullu	75	33,07,500/- (Thirty Three Lakh Seven Thousand Five Hundred Only)	
5	Govt. College Khadd, Distt. Una	20	8,82,000/- (Eight lakh Eighty Two Thousand Only)	

- Therefore expenditure is subject to maximum restriction under above HOA & SOE may be incurred. The expenditure sanction be accorded after completion of codal formalities as per delegation of powers to incur expenditure vide Finance Department's letter No. Fin.-F(A)-(11)-11/2004 dated 3rd June, 2014 & further delegated vide letter No. Fin-F-(A)-(11)-11/2004 dated 29th June, 2015. Items under "05-OE" be purchased only on the bases of replacement where furniture has been condemned after following due procedure or in case of new office/institution.
- Before incurring the expenditure following procedure be observed -
 - No splitting of orders / piecemeal purchases be made to avoid bid process.
 - Procurement may be made through HIMURJA in compliance with HPFR-2009.
 - Ensure installation of Solar Panel as per specification & complete utilisation of funds within this finance year i.e. 2021-22. UC thereof be sent to this office well in time.

In case of any doubt or clarification, the buyer of College may contact this Directorate of Higher Education. The purchase should be affected only after approval of the purchase committee of respective Office/Institution. The buyer/purchase committee shall be responsible to ensure that the procurement done by them are in compliance of HPFR-2009, all T&C and other procurement guidelines notified by the Govt. from time to time.

Director Higher Education
Himachal Pradesh

Endst No. Even. Dated Shimla the 2021.
Copy to:-

1. The Chief Executive Officer, HIMURJA, SDA Complex, Kasumpti, Shimla-171009, w.r.t. letter No.5836 dt 18.11.2021 for information and compliance in coordination with the Principal of concerned colleges.

5.2 (ii) Solid Waste Segregation/Management

The institution pays special attention for managing its solid waste. Separate dustbins are placed on the campus for biodegradable and non-biodegradable waste. Bins have been provided across the campus for collection of the solid waste. These bins are coded with specific colours, viz.

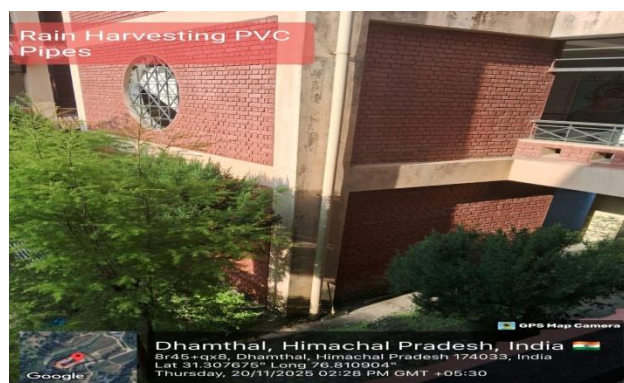
Green –for biodegradable organic waste like cooked food, vegetables, fruit, leaves etc. and blue – for recyclable waste like paper, cartons, cans, metallic items etc.



The institution manages solid waste properly in order to keep the campus clean and hygienic. The solid waste generated by all sorts of routine activities carried out in the college includes paper, plastics, glass, left-over food, etc. The NSS unit along with Rovers & Rangers unit carries out cleanliness drives regularly which helps in keeping the campus of the institution clean. One incinerator is installed in girls' washroom to dispose of the waste in toilet. Most of the non-biodegradable waste is sold to scrap dealers for further recycling purposes.

5.2(iii) Rain water harvesting and its use for gardening and cleanliness

Water is a precious, essential and a biotic component of the ecosystem. Today we all are heading toward the scarcity of water, and this is mainly because of the lack of water conservation and pollution of water bodies. So, let us not waste a drop of water and start conserving water for further use. With rapid climatic changes, increase in global temperature and population growth, there is a scarcity of potable water. Rainwater harvesting is best described as the technique by which rain water is accumulated and stored with the intention of reusing it during the dry season or when there is a drought.



The college has a rain water harvesting system. Rain water is collected in the gutter of roof top and stored in an underground tank through PVC pipes. In the later stage, the collected rain water is used for various purposes viz. gardening and cleanliness of the campus. It is one of the best methods practiced and followed to support the conservation of water. Rainwater harvesting also minimized the chances of flood like situations and water logging at various locations of college building. Thus rain water harvesting is one of the most effective methods of water management and water conservation in our college.

5.2 (iv) Plastic free campus

Educational institutions need to actively contribute to the effort of banning the use of single use plastics. Students are the face of the Nation and they can be molded, made aware and sensitized to imbibe good values for sustainable development. Our generation needs to understand the importance of passing safe environment to the future generation. Himachal Pradesh government has banned the single use of plastic. Govt. College Jukhala is a plastic free campus. We aim to measurably reduce plastic waste and pollution in our campus and the area around us. Our institution also ensures that there is no use of any plastic material in the premises. To achieve this we have undertaken following steps:



- We sensitize students and staff on ways to avoid or reduce single use plastic in any form.
- We carry out awareness drives time to time to clean the campus so that no plastic is found in the college.

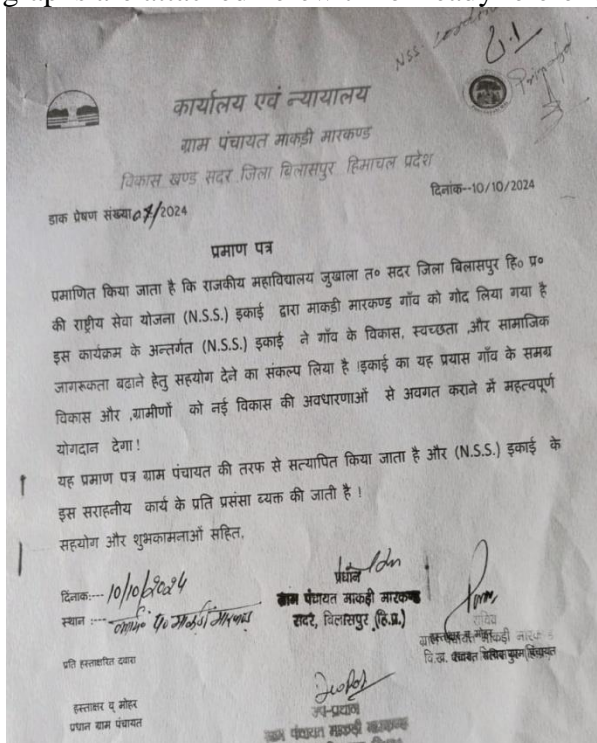
- We encourage students to avoid bringing non-bio-degradable plastic items to the college. They are asked to bring steel lunchboxes steel water bottles and cloth bags.
- We encourage students to sensitize their respective households about the harmful effects of plastics and make their households and habited region also 'plastic-free'.
- We have installed necessary alternative facilities like drinking water unit having sufficient and safe drinking water in 24 hours so that the students do not bring plastic water bottles in the campus.
- We are using steel glasses, plates and spoon in our offices and staff room.

5.2 (v) Blood donation camp

No blood donation camp was organized during the session 2024-25.

5.2 (vi) Adoption of village/educational institution

NSS unit of our college has adopted a nearby village Markandaya in the previous session. The unit carried out various activities such as awareness campaign on cleanliness, yoga, nuked natak voting rights and health issue. NSS unit members along with their in charge participated enthusiastically in the said activities. They made an interaction with villagers and sensitized them about the above matter. The documentary proofs in terms of media report and photo graphs are attached herewith for ready reference.



Signature

Principal
C. G. Jadhav
Bilaspur (H. P.)