Clean Energy & Conservation Committee Report

VISION: The Clean Energy & Conservation Committee, Ram Lal Anand College, envisions a world where renewable energy sources power our lives, where energy consumption and waste are minimized, and where environmental sustainability is a shared value and responsibility. We aim to be a leading force in promoting and implementing clean energy and conservation practices on campus and beyond.

Mission: The Clean Energy & Conservation Committee's mission is to educate, inspire, and empower the college community to adopt renewable energy sources and technologies, reduce energy consumption and waste, and advocate for environmental sustainability. We do this by organizing workshops and seminars, conducting surveys and research, initiating and supporting projects that utilize renewable energy sources and technologies, and encouraging and rewarding innovation and creativity in solving clean energy and conservation challenges.

Clean Energy & Conservation Committee Faculty Information

NAME	POSITION
Prof. Archna Gaur	Convenor
Dr. Alankar	Member
Dr. Shalini Swami	Member
Ms. Leimiwon Zimik	Member

Slogan Writing Competition for Student's



1) Shivani Kumari	BA Prog (3rd year)	7870309736	shivani.ba141@rla.du.ac.in shivanikri7870@gmail.com	य हीऊजज्ज दरूु नयोग करोगो तो नैसे देकर भी घर रोशन न कर नज्ओगे
2) Drishti	BA English (Hons) 2nd year	7061133739	drishti503eng@rla.du.ac.in	रोशनी की छ ोष्टेवल्बोंकी दुनु नयल्के जगमगल्ते तलरें हैं, आओ ममरकर इन तलरोंकी लजरोंकी लजरोंकी लजरोंकी लजरों हैं
3) Kajal	BA Hons Hindi 3 rd Year	7303312953	kajal.hindi1028@rla.du.ac.in	ममटबओ अधो हेब रबओ प्रकब्श, बचबओ बबजरी करोदेश कब बवकब्स

4) Kushal Pandey	L.LB-2nd	9260974988	211awc1125543@lc1.du.ac.in	SAVE ENERGY TO ENERGIZE EARTH
5) Jaya K. Pandey	BSc. (H) Computer Science, 2nd Year	8617825101	jaya4091@rla.du.ac.in jayakumaripandey8@gmail.c om	"Watt Problem? With better Strategy: Let's Conserve Energy to achieve Synergy.
6) Nikita Pathania	BSc. (H) Computer Science, 2nd Year	9121850047	nikita4120@rla.du.ac.in	आज एक रीत हम ऐसी अन्ननाए, हर घर मैं हम बबजर ी बचाए
7) Puneet Saini	BSC PSC	7412941903	puneetbagri112004@gmail.co m	ब्बजर ीक करोसही उनयोग, वरन कर सहोगे इसक वयोग

जागरूकता मुहीम - विद्यार्थियों द्वारा रचित स्लोगन को बोर्ड के रूप में कॉलेज में दीवारों पर लगवाकर जागरूकता पैदा की गयी.

	यदि आप स्वस्थ हैं और बनें रहना चाहते हैं तो सीढ़ियों का प्रयोग करें ।			
Global WARMING is a Global WARNING SAVE ENERGY		Be COOL Save ENERGY & FUEL		
There is NO F Reduce, Reuse	PLANET B & Recycle	Only Fo & PWD ST	r Staff 'UDENTS	

<u>CLEAN ENERGY AND CONSERVATION Sub-</u> <u>COMMITTEE</u>

On the recommendations of the Swachhta Action Plan Committee of the college, the subcommittee on Clean Energy and Conservation had proposed to conduct a feasibility study of installing motion-sensor technology controlled lights in toilets, washrooms, restrooms etc of the college.

The sub-committee found the following feasibility:

There are two ways of using motion-sensor controlled lighting system:

- a) Each bathroom, toilet can have one sensor installed through which all lighting of the particular toilet/bathroom can be controlled. Such sensors are available through online portals and their price starts from Rs. 500/- appx and goes much higher. Installation of each such sensor will require technical assistance of trained installation team. Fitting of sensors and connecting them to all lights will need to be done. Floating of tender may be a requirement.
- b) Other option is to go for standalone LED Tubelights and bulbs which work on motion sensor technology. Reputed brands like Phillips manufacture and sell such LED tubelights which are also available on online portals. No professional technical assistance will be required and our college electrician's services may be used to change the current tubelights. Such motion sensor based LED tubelights start at a cost of Rs. 750 each and go higher.

Another important consideration is that different online reviews of these motion-sensor based lighting systems give an impression that such technology works well in dim light, dark mode or at night. So the committee also needs to assess whether making such changes will actually solve our purpose conveniently or not at college.

May it be proposed that first we should do an experimental change at a couple of washrooms/toilets with use of standalone LED tubelights which work on motion-sensor technology. If the results are optimum then further decision can be collectively arrived at.

The total number of toilets and bathrooms are 12 for our purpose and we may require approximately 24 LED Tubelights based on motion-sensor technology. Around a dozen such bulbs may also be used at a later stage to complement tubelights.

Session 2022-2023

Law of Conservation of Energy says energy can neither be created nor destroyed, only transformed from one form to another that implies light energy; with this under the mandate of our subcommittee "Clean energy and conservation," which comes under the Swachta Action Plan Committee, efforts were made to reduce energy consumption and conserve energy via the judicious use of energy in conjunction with decreased energy consumption from conventional energy sources. The following initiatives were taken to create awareness and inculcate the mindset of the Ram Lal Anand College students on the wise and judicious use of energy.

A slogan writing event on **"Save Electricity"** was organized on 10th October, 2022 in online mode for the cognition of the prudent use of electricity. A group discussion and deliberation under Statecraft Society centered on the theme of Political Ecology. The event was organized on 17th January, 2023 in collaboration with the **Clean Energy and Conservation Committee** as well as **Samdrishti**' the college magazine. More than 65 students attended the event. The aim of the event was to engage the students to delve into the complexities of Political Ecology as well as its issues pertaining to contemporary India. A grid-connected solar rooftop system of 130KW on the college premises without a battery backup was installed to conserve the renewable energy source. Since 2017-18 all the lights in the classrooms and laboratories have been well equipped with LED lights and powersaving fans with brushless direct current to minimize energy loss. Additionally, 16 solar lights utilizing 10-12 watts were installed on the streets of Ram Lal Anand College premises to explore better use of the renewable energy source Further, a dedicated team of faculty members and students monitor the lights and all the electrical appliances like computers, laboratory instruments etc should be switched off in classrooms, laboratories, libraries, and staffrooms when not in use or before leaving the rooms to make a judicious use of power.



Electricity Saver

rooftop system of premises without

<u>Solar Panel and</u>

A grid – connected solar 130 KW onthe college the battery backup wasinstalled to conserve the renewable energy source .Since 2017-18 all the lights in the classroom andlaboratories have been well equipped with LED lightsand power -saving fans with brushless direct current tominimize energy loss. Additionally ,16 solar lightsutilizing 10-12 watts were installed on the street of Ram Lal Anand College premises to explore better useof the renewable energy source further ,a dedicated team to faculty members and student monitor the lights and all the electrical appliances like computers, laboratory's instruments ect. should be switched off inclass rooms , laboratories , library and staff roomswhen not in use or before leaving the rooms to make ajudicious use of power.

Solar Panel



Boards in the Classrooms for Electricity Saver



PLEASE SWITCH OFF LIGHTS / FAN BEFORE LEAVING

Clean Energy and Conservation

Energy is the requirement of our daily lives hence its production and usage matters. Nowadays Energy is the very screated through combustion of coal and fossil fuels which creates a lot of heat and nossil fuels which creates a lot of heat and fossil ^{nost} energy and the state of ca^{uses} pollution such as solar, hydro, wind, geothermal, tidal etc energies. Their plant installation is p^{o} pollutes. The pollute investment with higher long term returns and proves to be triendly. Clean energy is not only compared with higher long term returns and proves to be expensive build on the state of production. Force of the state of production and proves to be pocket friendly. Clean energy is not only economically efficient but also causes no health damage pocket metric and still a lot of potential is left to acquire in the to result in the production of clean energy.

po you know according to a study only one percent of sunlight that falls on earth gets utilized by plants only utilized by our solar panels is next to nothing. As you know more demand requires that nuch supply that's how the market works. This leads to more combustion of fossil fuels which directly hits nature and has consequences. Thus we need to conserve energy too by reducing the overuse of appliances, off the vehicle's engine during red light or in jam and many more ways you read during junior kindergarten. THis not only refuses your bills but also makes a step towards environment protection.

By generating and consuming clean energy and energy conservation we can bless our future generations. It may not get mentioned in your will but believe me upcoming generations will be highly obliged to you.

> Written by Devansh Kumar 2nd year, Microbiology (Honors) Roll number- 4553

Clean energy and Conservation of energy

Energy plays a significant role in our daily activities, so we must be aware of the impending energy crisis the world will face in the upcoming years if we do not adopt energy conservation measures. There will be few sources of energy left for our future generation, or there won't be any at all.

Therefore, "Energy Conservation" should be wisely practiced and should become a part of everyone's lives. The phrase itself is self-explanatory: we must conserve energy in order to survive on the planet, and we owe it to future generations to provide them with enough energy.

Everyone finds it difficult to conserve energy, but we must still develop the habit of doing so. Small steps to significant savings. For example, we frequently steps toward energy conservation can add up to significant savings. For example, we frequently forget to turn off the fan when we leave the sitting area, which wastes a lot of electricity (another type of type of energy), or we leave the engine running while waiting at a stop sign, both of which waste energy and contribute to pollution. We are reducing pollution by using less energy.

And now is the time to be mindful of the energy-producing sources we are using, as we will soon run out of non-renewable energy sources like coal and oil refineries. Consequently, we are switching to renewable energy sources. Today, renewable energy sources are used to $\operatorname{produce}_a$ large portion of the energy consumed. However, the majority of renewable energy sources pollute. Thus, "clean energy" sources are required because they produce energy without causing any kind of pollution. Hence, using clean energy sources like wind, hydroelectric, and geothermal energy has many benefits. They are safe to use, environmentally friendly, can be used indefinitely, encourage energy independence, and support local economies by creating jobs.

Swati mishra Bsc hons microbiology 2nd year