



# SWAMI VIVEKANAND SUBHARTI UNIVERSITY

(Established under U.P. Govt. Act no. 29 of 2008 and approved under section 2(f) of UGC Act 1956)

## Distinctiveness of University

### **Title: Improving Environment Friendly Ecosystem by Adopting Newer Innovative Strategies'**

Rapid industrialization and globalization have resulted in a number of environmental concerns that affect ecosystems worldwide. Unfavorable natural changes are causing problems for all organisms. As a result, we must preserve the natural environmental quality by implementing environmentally friendly practices and treating our mother Earth with the love and respect that she deserves.

**Vision:** Swami Vivekanand Subharti University always aims to protect and improve the environment as a valuable asset to provide a clean, healthy and well protected environment to all employees and students. To achieve this, our university has projected a vision to engage the youth in environment protection which would create direct and indirect impact on changing youth behavior and attitude towards sustainable conservation of the existing natural resources.

**Priority:** At Swami Vivekanand Subharti University we have always been vigilant towards our duties towards Mother Nature. We have started numerous projects towards a 'Greener India' in alignment with 'National Objectives' and initiated many steps to 'awaken' our youth towards their duty towards the environment.

The 'Subhartian' student is encouraged to make their homes, institutes environment friendly by adopting environmentally friendly practices, recycling of different materials as well as

preserving resources such as water and electricity.

The students are encouraged to ditch paper use & adopt digital platform, save water & electricity, buy recyclable bags, recycle books and buy eco-friendly supplies and so on.

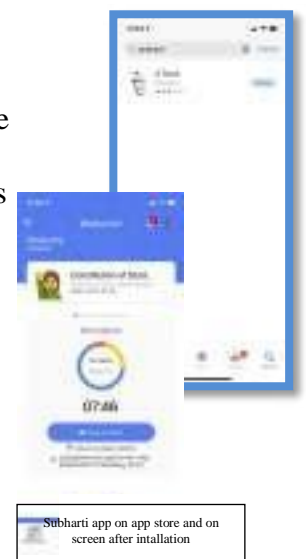
**Thrust Aspects:** The following initiatives have been taken up for improvement of the surrounding environment.

1. Paperless Reforms
2. Battery operated Vehicles
3. Solar Power
4. Sensor based lights
5. Reclaiming the waste
6. Segregate and recycle
7. Awareness, Encouragement and Involvement
8. Car free day (Every Tuesday and Wednesday)

1) **Paperless Reforms:** "Paperless" generally refers to the transition from traditional paper-based systems to digital or electronic alternatives. This shift aims to reduce reliance on physical paper, streamline processes, and increase efficiency.

a. More than 200 million trees are cut down daily to make paper. This means that a tree is cut down every 2.5 seconds. With the aim to make the university on paperless functioning system our in-house IT cell has made several modules of ERP such that most of the functioning of the university happens from, 'computer to computer'.

b. 'KIOSKS' are installed from which the students can check their profiles and are encouraged to make online entries, online queries, online payments etc. We have launched a '**Subharti App**' to further strengthen our initiative.



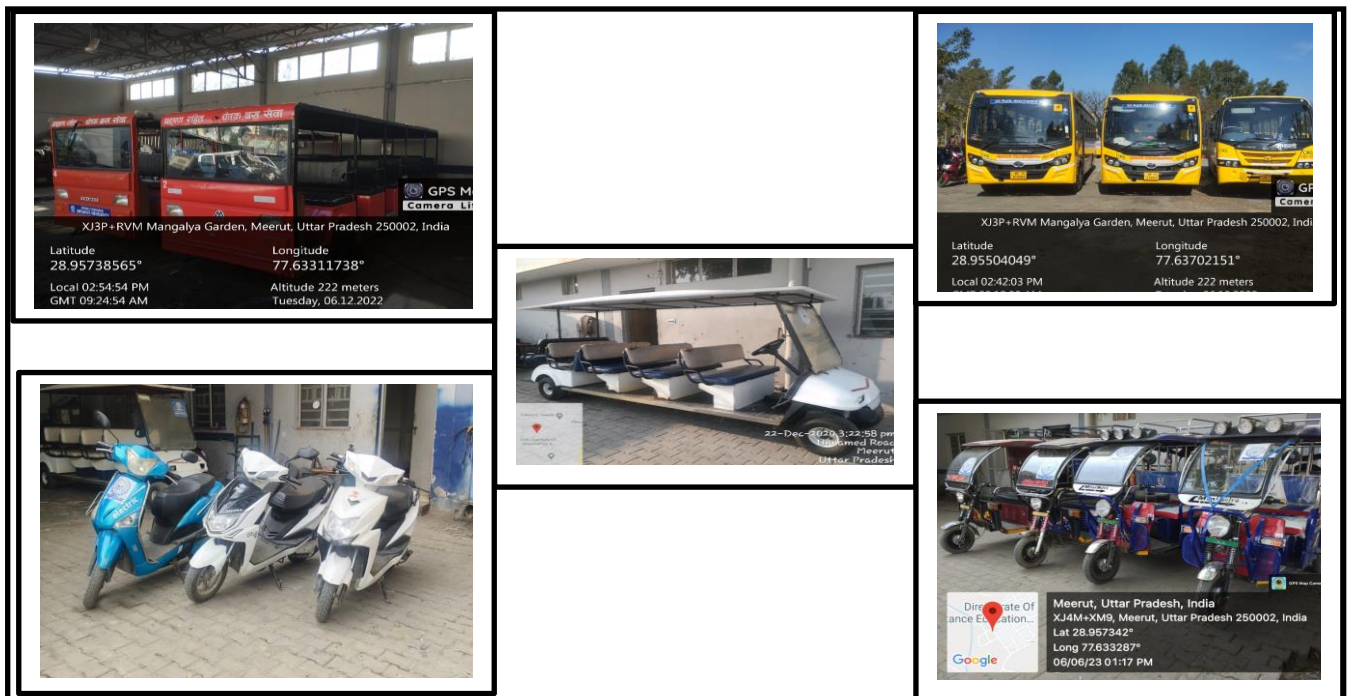
- c. There are places where paper is needed. Then use of rough or single side used paper is encouraged. Students are encouraged to take prints on both sides to utilize every bit of the paper they are using.



**STUDENT USING THE 'KIOSK'**

## 2) Battery Operated Vehicles:

Another contribution towards environment protection is to minimize the pollution created as a result of several activities. In the same league we encourage the use of battery-operated vehicles. The university is using battery operated rickshaws, scooters, and cart for in campus transport. Our students are also encouraged to build and use the same.



a. **E Cycle:** An E-cycle made by our student of Subharti Institute of Engineering is successfully made and is even in production. The e cycle assists the rider's pedal-power, and uses rechargeable batteries. It has the top speed of 25 km/h. E-bikes are acting as a source of exercise and also allows the rider to take short breaks from pedaling. The University intends to make this as a part of cardiac rehabilitation programmes, as a study has shown that it can reduce deaths in people with coronary heart disease by around 27%.



News on the E-Cycle made by our student

b. **Twin Bicycle:** John F Kennedy very aptly said “Nothing compares to the simple pleasure of riding a bicycle” and what makes it more pleasurable is when you have someone to ride with you. The twin bicycle has been designed by Dr Krishna Murty, an illustrious student of Subharti Medical College and the design has been industrial designed too

(Reg No. 306717). The twin cycle is available for use both for the residents and nonresidents of the campus within the campus. The twin cycle, campus residents have started enjoying evening rides rather than taking any other form of transportation. The residents can take the cycles from the designated parking places and can leave them at other dedicated parking spaces. The concept has gained popularity just like carpooling; the residents prefer the cycle pooling



Children enjoying a ride on the TWIN BYCYCLE

**b. Garbage Van:** The garbage van of the University was made by the students of mechanical engineering department to be fully mechanized and electrically driven. The University's all garbage is collected and thrown in the designated place with the help of this van.



The Launch of Garbage van

### 3) Solar Power:

The University has been slowly getting solar electricity panels, solar heaters etc installed. Meanwhile our students took inspiration and built;

- a. **Solar Rickshaw:** Another variant of the e-Rickshaw which has been designed by the students of Subharti Technical Campus is solar-powered e Rickshaw that is fitted with solar panels. It is directly solar-powered, driven solely by electric motors, powered by solar panels mounted on the vehicle and capable of operating while the vehicle is in motion. The solar panels provide power directly to the motor without the need for batteries. These solar panel fitted rickshaws are used exclusively for the waste disposal. Currently two solar rickshaws are plying in the campus and the efforts are on to redesign the same as it looks bulkier in its present state.

**b. Solar based water purifier:** Solar water purifier has been designed by the students of Subharti Technical campus and has been installed near the Vice Chancellor office. The water is purified based on solar radiation treatment and water distillation with additional use of solar heating. The system consists of three main components: the solar energy collector, the solar distillation system and the solar water disinfection system. The solar energy collector collects solar radiations and converts it into thermal energy for the solar distillation process. Solar water disinfection system takes low turbidity, micro-biologically contaminated water and disinfects it to drinkable water with utilization of solar radiation. The main advantages associated with are Free of charge sunenergy and it is reliable and almost maintenance free. However, it has low production capacity so the students are working on increasing the same.



#### 4. Sensor Based Lights:

Our students committed towards adopting the newer means of energy conservation and a firm belief that every unit of energy saved can be utilized in the future. The students of Subharti Institute of Technology and Engineering have been instrumental in installing the electronic motion detector-based sensor lights at 125 different locations in the University campus. Motion detectors are being used in activating street lights as well as indoor lights in walkways, lobbies and staircases. Due to these lighting systems, energy is conserved by only powering the



lights for the duration of a timer, after which the person has presumably left the area.

### 5. Achievement due to implementation of solar plant

By installing a 2 MW solar power plant on campus, we are able to lower the amount of coal burned and the corresponding 700 tons of CO2 emissions released into the atmosphere. We are nevertheless able to cut down on the removal of roughly 100,000 trees. By doing this, we are attempting to meet sustainable goals and contribute to environmental protection.

Carbon Dioxide reduced (in tons)	776.22
Standard Coal saved (in tons)	776.22
Deforestation reduced (in number of trees)	106733.6

### 6. Reclaiming the Waste:

Our multitalented founder who has started a blog of her own called ‘busy bee’ (<https://subharti.org/blog/category/busybee/>) has inspired many of our students to do the same. Our students from the Faculty of fine arts, department of interior design, have been making several sculptures and art items from ‘scrap’. This not only redefines creativity but also reduces the waste created. Some examples for such are Lamp Shades from waste, Cartoon characters from discarded newspapers; waste carrying man sculpture and many more.

#### SCULPTURES AND ART PIECES MADE FROM SCRAP





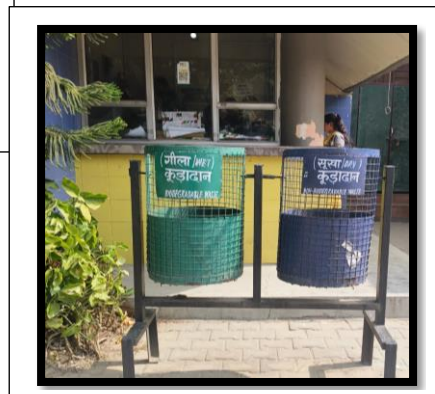


## 7. Segregate and Recycle:

The University initiates, encourages and ensures the segregation of waste along with its adequate disposal. Along with it we involve our students to become participants in recycling the green waste into compost.



DUSTBINS FOR RESIDENTS  
FOR SEGREGATION OF  
WASTE



BIO FERTILIZER

PROGRAMME

(BIOCOMPOST,

VERMICOMPOST)



- a. **Bio compost:** The University has 3 pits for utilizing the green waste and making it into bio compost.
- b. **Vermi-compost:** The University has defined an area for making vermicompost.

In both the projects the students of Faculty of Science, department of agriculture are made to participate to help them learn and also inspire them to do it at homes, spread its awareness.

**8. Encouragement, Awareness, and Involvement:**

- a. All days like ‘Environment Day’ ‘Plantation day’ are celebrated, our students are encouraged to plant saplings, donate trees to encourage them to realize the importance of nature.





Plantation of Saplings



- b. The University gifts planters on all events, and gets students to prevent plucking of flowers, and encourage growing of plants.
- c. Students are involved in ‘nukkadnatak’, ‘poster competition’ etc, on such themes to encourage their mindset towards encouraging ‘Green India’



Welcome of guests with Saplings

- d. Regular Blogs, Facebook campaigns for using environment friendly things, like ‘own cloth bags’ instead of plastic ones, carry own bottles instead of using plastic bottles, not using single time plastic etc..



Few snapshots of blog

## FEW MORE GLIMPSES



### Subharti University: A message of environmental protection on World Car Free Day

**Transparent News Bureau**

Subharti University is a car-free day every Wednesday on the campus at Greater Noida. Vice-Chancellor Subharti University, Noida for today the University shares the day with the whole world stating as we all celebrate 'The World Car Free Day'. On the occasion of World Car Free Day, an vehicle was used in Subharti University and all the faculty members and students enjoyed walking and cycling on the open roads of the campus. Subharti University has been promoting the health and preservation of the environment since its inception. The campus is lush with beautiful trees and lush green gardens that are not only pleasing to the eye but help the environment by reducing pollution and increasing the level of oxygen. The shaded walkways within the campus and walking by providing much-needed respite during the summer season. The campus also promotes sustainability by installing solar-powered lighting and street lights, water-conserving and a biodegradable menu.

On the occasion of World Car Free Day, Vice-Chancellor of Subharti University, Noida, welcomed everyone to health and sustainable future. He said 'Car Free Day is already celebrated in Subharti University every Wednesday. The main purpose of a Car Free Day is to decrease pollution from petrol-fueled and reduce a habit in every individual for walking and cycling. By not operating our vehicles within the campus we give another name, a much-needed day off when the car is not in health'. Dr. Shalini Rai, Chief Executive Officer of 'Swara' also benefits to promote such practices such as conservation of water by watering plants with wastewater and the importance of energy-saving habits as individuals. She said that by celebrating Car Free Day every Wednesday on the university, pollution is prevented by saving fuel, carbon & toxic emissions along with a target from noise pollution. She said that it is our moral responsibility to conserve the environment and Subharti University is committed to the environment by encouraging sustainable habits and technology. She also said that the main value of Subharti University is to promote sustainability. She also said that the main value of Subharti University is to promote sustainability.

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## FACULTY SETS EXAMPLES FOR STUDENTS BY APARTING WHAT THEY PREACH



NUKKAD NATAKS

PROJECTS MADE BY STUDENTS FOR ENVIRONMENT



E- RICKSHAW

### सुभारती इंजीनियरिंग के छात्रों ने बनाया ईको फ्रेंडली ई-रिक्शा

सौरत से चलने वाला कार्बन डियरेक्ट ई-रिक्शा पर्यावरण ई-रिक्शा में बेहतर, बाजार के मॉडलों से 70 प्रतिशत कम लागत में बन सकेगा यह रिक्शा, ग्रीन हाउस गैसीस को घटाने में भी होगा सक्षम

ई-रिक्शा को बनाने का सफल यत्न गुरुजी सा. लाले अग्रवाल।

श्रीमती शिंदे

सौरत से चलने वाली ई-रिक्शा ई-रिक्शा का विकास है जो पर्यावरण के दोस्त है। यह रिक्शा को चलाने में सौर ऊर्जा का उपयोग करता है। यह रिक्शा को बनाने में 70 प्रतिशत कम लागत में बन सकेगा। यह रिक्शा, ग्रीन हाउस गैसीस को घटाने में भी होगा सक्षम।

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Student's participation





A plantation drive of planting 547 trees, each on the name of each soldier who gave the country his life – in his memory, to make his memory unforgettable! The families of the Martyrs were called and honored. Offered jobs(if they needed, education and support)

