#### Format for Presentation of Best Practices

### 1. Title of the Practice-<u>DIET Best Practices -Green campus</u>

### 2. Objectives of the Practice

The Green Campus Audit assessment of an institution is becoming a paramount important these days for self-assessment of the institution, which reflects the role of the institution in mitigating the present environmental problems. The college has been putting efforts to keep the environment clean since its inception. But the auditing of this non-scholastic effort of the college has not been documented. Therefore, the purpose of the present green audit is to identify, quantify, describe and prioritize frame work of Environment Sustainability in compliance with the applicable regulations, policies and standards. The main objectives of carrying out Green Campus Audit are:

- 1. To document practices and implementation of rainwater harvesting
- 2. The document the quality of recycled waste water for gardening ,Zero Liquid Discharge Concepts
- 3. To document the solid Waste disposal system and e-waste management
- 4. To document the ambient environmental condition of air, water and noise in the campus.
- 5. More efficient resource management ,paper less offices
- 6. To provide basis for improved sustainability and biodiversity
- 7. To create a green campus
- 8. To enable waste management through reduction of waste generation, solid-waste and water recycling
- 9. Recognize the cost saving methods through waste minimizing and managing
- 10. Impart environmental education through systematic environmental management approach and bench marking for environmental protection
- 11. Financial savings through are duction in resource use

### 3. The Context

Green Campus Audit assessment is a process of systematic identification, quantification, recording, reporting and analysis of components of environmental diversity of various establishments. It aims to analyze environmental practices within and outside of the concerned sites, which will have an impact on the eco-friendly ambience. Green audit can be a useful tool for a college to determine how and where they are using the most energy or water or resources; the college can then consider how to implement changes and make savings. It can also be used to determine the type and volume of waste, which can be used for a recycling project or to improve waste minimization plan. It can create health consciousness and promote environmental awareness, values and ethics. It provides staff and students better understanding of Green impact on campus. If self-enquiry is a natural and necessary outgrowth of a quality education al institution. Thus, it is imperative that the college evaluate its own contributions toward a sustainable future. As environmental sustainability is becoming an increasingly important issue for the nation, the role of higher educational institutions in relation to environmental sustainability is more prevalent.

Green audit is a potential tool which can be used effectively by an educational institution for resource usage identification and optimization. 'Green auditing is the process of identifying and determining whether institutions practices are eco-friendly and sustainable'. The main objective to carry out green audit is to check green practices followed by the college and to conduct a well formulated audit report bounders and where it stands on a scale of environmental soundness.

### 4. The Practice

#### **GREENCAMPUS INITIATIVES**

#### 1. Restricted Entry of Automobiles :

The institute operates a fleet of 10 buses covering corners of Anakapalle to facilitate the students and staff. The institute encourages the staff and students to use the institute transport instead of their own vehicles for safety, security, fuel conservation and to reduce environmental pollution. The institute buses are checked for pollution by the authorized agency. The vehicles owned by faculty or students with pollution check stickers are permitted into the campus. Random checks are made to check the validation and periodicity of this certificate. For two wheelers or four wheelers, security measures are mandatory.

Unknown vehicles are not permitted inside the campus without prior permission. Visitors have to record their name, purpose of entry, in and out time and signature in the register maintained at the entry gates. Separate parking area is allotted for outsiders. CCTV cameras are also installed at the gates to monitor the entry and exit of the visitors. 'Clean Green Day 'is observed once in every semester to create awareness on air pollution.



Restricted entry of automobiles

#### 2.Use of Bicycles/Battery Powered Vehicles

Students and staff coming from nearby villages also prefer bicycles a mode of transport for attending the Institute. It is environment friendly and prevents pollution.



#### **3. Pedestrian Friendly Pathways**

Vehicle parking place is provided at the main entrance of the institute campus. As the campus is vehicle free with some exceptions, students and staff experience comfort walking through the pedestrian friendly pathways. The internal roads are lined with trees and solar lights and they are properly maintained by the campus maintenance committee.



#### 4.Ban on use of Plastic

Circulars were issued in the campus to ban Plastic usage. Within the campus, we have also gained that no-plastic zone. Single-use plastic items such as plastic bottles, bags, spoons, straws and cups are banned completely and awareness created among staff and students through orientation programme and display boards across the campus. To restrict the use of plastic, measures have been taken to replace plastic tea cups and glasses with steel glasses in the cafeteria. The staff and students are intimated to use steel or copper water bottles instead of plastic bottles. Signage on ban plastics are wall mounted in many p laces inside the campus.

DADI INSTITUTE OF ENGINEERING & TECHNOLOGY Approved by A.I.C.T.E., New Delhi & Permanently Affiliated to JNTUK, Kakinad NAAC Accredited Institute & Inclusion of Section 2(1) & 12(B) of UGC Act. An ISO 9001:2008, ISO 14001:2004 & OHSAS 18001:2007 Certified Institute. NH-16, Anakapalle – 531002, Visakhapatnam, A.P. Diet Phone: 9963981111, www.diet.edu.in, E-mail: info@diet.edu.in Date: 06-1-2021 Anakapalle Circular-1 Circular-Ban on Plastic within the Campus As a part of the green campus practices in the DIET, there will be complete ban on single use plastics in class rooms, Labs, Cafeteria, Corridors, Seminar Halls, Drawing Halls and Playgrounds in the institute premises. Not only single usage of plastics, but also anything made of polythene materials is now banned within the campus. All of you join hands to make DIET as eco-friendly campus. Mo ll N Green Campus Convener -a) Principat Engineering & Technolog, ANAKAPALLE 531 002 Dau



Ban of plastic sign boards



Ban of plastic sign boards

#### 5.Landscaping with trees and plants

Dadi Institute of Engineering and Technology having 10.16 acres of land has various buildings such as main building and cafeteria. In the campus, nearly 35 species of plants were planted. Students of N.S.S., non teaching staff will take care of the campus and keep the campus green and clean at all the times.

Diet (	DI INSTITUTE Approved by A.I.C.T.E., N NAAC Accredited Instit An ISO 9001:2008, ISO NH-16, Ana Phone: 996398111	OF ENGINEERINC ew Delhi & Permanently Affiliated tute& Inclusion of Section 2(f) & 14001:2004 & OHSAS 18001:200 kapalle – 531002, Visakhapatna 11, www.diet.edu.in, E-mail: info	to JNTUK, Kakinada) 12(B) of UGC Act. 7 Certified Institute. m, A.P. @diet.edu.in
			Date: 17-02-2021 Anakapalle.
		Circular-2	
As a below - mei	part of the green on ntioned rules and r	campus practices in the egulations.	DIET, all have to follow the
:	Wear a seat belt v Avoid Vehicle poll Wear helmet with Always avoid tripl Use bicycles to re	while driving the four wh lution and horn Annoyan nin the campus le riding duce carbon emission	eeler ce
All of you jo	pin hands to make I	DIET as eco-friendly cam	pus.
M Green Car	 npus Convener	DIET ANAMAN	Dadi Institute of Engineering & Technology ANAKAPALLE - 531 002



Landscaping with trees and plants



Landscaping with trees and plants

### **Plantation:**





Landscaping with trees and plants

### **Green Campus practices**

#### ENVIRONMETNAL AND ENERGY AUDITS

#### **Environmental Education-Eco-score**

Environmental education is a process that allows individuals to explore environmental issues, engage in problems solving, and take action to improve the environment. As a result, individuals develop a deeper understanding of environmental issues and have the skills to make informed and responsible decisions.

Recommendations at DIET:

- 1. **Eco-club** should be established
- 2. Awareness and sensitivity to the environment and environmental challenges
- 3. Knowledge and understanding of the environment and environment l challenges
- 4. **Attitudes** of concern for the environment and motivation to improve or maintain environmental quality
- 5. Skills to identify and help resolve environmental challenges
- 6. Participation in activities that lead to the resolution of environmental challenges

#### **Eco-Audit checklist**

					_		
Audite	v name	N salish Audit Dat	e- 11	Inter			
Organization Name & Address		Dadi institute of Engineering & Technology NH-16, Anokapolle, Visakhapotnom, 996398	nn, 4	19636	9		
Purpo	se:	To ensure that the environmental management system, maintenance of gr lead environment clean and neat, Waste management, recycling of water, and materials, plastic use in the campus are being implemented effectively by	enance of green campus which g of water, disposal of sewag				
		PROCEDURE					
Pro	ocedure	Description Re	sponsi	bility			
Annua	i plan	an Each year a plan for the environmental audit is prepared by management. This plan serves to ensure that the entire environmental management system is implemented to ensure the campus very clean and neat.					
Audit		Based on the checklists, the audit is carried out in the form of Audit tea observations of campus.	eam nmental Coordinato				
Follow	-up	Corrective action has to be taken and implemented within the Environm prescribed duration.					
Report	ing	Submission of corrective action in the form of report in Environm association with Eco club of the Institute.	Environmental Coordina		na		
	7	Eco-Audit Environmental Check list					
S. No		Requirements	Conf	ormity	-		
		15	Y	N	1		
1	Have inter	nal Eco audit procedures been developed and implemented?	V	-	H		
2	Have env developme	irronmental aspects identified and evaluated for planned or new ents, or new or modified activities?	19-00	~			
3	Are the fol	lowing environmental aspects considered in sufficient detail?	-	1.1			
	3.1. Waste	water effluent treatment plant	1	12			
*	3.2. Waste	management and recycling of waste water	4	-	l		
	3.3. Natur	ural resource usage					
-	3.4. Hazar	zardous and toxic material disposal					
4	4 Have responsibilities been assigned for programmes at each appropriate function level?		~	-	-		
5	Have prog establishe	rammes for the achievement of environmental objectives and targets been d and implemented?	-	V			
6	Are the sig	significant evaluation criteria reasonable and adequate?					
7	Are object	ives and targets specific, measurable, concrete and understandable?	-	-	-		
8	Has the or	ganization ensured that personnel performing environmental specific tasks	1	1700			

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	Eco-Audit Environmental Check list	_		
S. No	Requirements		100	200
- needste	a star i prova a seconda e e e e e e e e e e e e e e e e e e e	Conf	ormity	9
9	Are objectives and targets documented?	Y	'N	N/A
10	Has a Management Representative, Environmental Engineer, Ani	5		200
	assigned? Agriculture Staff been	1		
11	Have the roles, responsibilities, and authorities for the Management	×		
inverse.	been defined?	1		
12	Are the required resources (e.g., personnel, technology, General Contents	·		
Vere 1	and control of the environmental management system provided by	11		
13	Have training on Eco Audit needs been identified?	~		
14	Are all monitoring equipment appropriately maintained and an		1	
15	Any other environmental specific investory maintained and calibrated?		V	
	piping etc.,		V	2

	Eco Audit with respect to the Le	vel of sta	rtus	
5. NO	Requirements		Level o	f Status
	A	Good	Satisfactory	Need improvement
1	Waste water treatment facility in the campus	-	-	There is an STP
2	Solid waste management facility in the campus	-	-	ON- BUDDIOS
3	Renewable energy utilization (Solar energy implementation schemes)		~	only used in at
4	Water facility in the campus	1		curl - woniger-
5	Availability of Biogas plant	-	-	There is no Biographicat
6	Implementation of integrated waste treatment facility	-	-	Not to innovent
7	Practice of energy audit (Documents and awareness camp)		~	Grood but improve the
8	Any Hygienic audit conducted so far, if yes, number of microbial loads in college canteen, hostel dining hall, etc.		~	Negl to conducted.
9	Practice of water recycling process	~		North 40 improve
10	Incorporation of water leakage detection facility		~	Need to proposit
11	Functioning of Eco clubs to ensure college campus.		~	Not maintained
12	Implementation of Government schemes (Swatch Bharath)		~	theybay bared
13	Conduction of awareness programmes for environmental monitoring and Ecosystem maintenance.		1	week to conducted more autometrical programmental Monitor

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# ENVIRONMENTAL AUDIT CHECK LIST



_	Eco Audit with respect to th	e Level o	f status	
C No.	Requirements		Level o	f Status
3. 110		Good	Satisfactory	Need improvement
14	Conduction of outreach programmes for dissemination of natural resources and environmental pollution	2	~	ortably balloning
15	Implementation of composting pits, recycling of kitchen wastes collected from Hostels and other places	-	1	Noot to therewood
16	Implementation of rain harvesting system, maintenance of natural resources in the campus		~	need to impand
17	Waste disposal facility and functioning status in campus, hostels and other buildings	-	-	even burning
18	Role of Environment Monitoring System in ensuring green campus including social issues.	-		weat to improved
19	Students projects offered towards environmental science and management.	25	-	had to imposed
20	Overall rating for college campus with neatness upon Environmental impact analysis.	3	~	30/13 factures

12/10 21

Signature of Eco Auditing Chairman

phone.

Signature of Eco Auditing Auditor

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#### **Green Audit Checklist**

		Children Children	- 2	1	1		
	-						
Audit	or name	N abd	Audit Date	nti	0 2021	+	
Organ	nization	V-Sonish.					
Name	& Address	Dodi Inditudi of Bigireuning & Technology NH-16, Anokatolik, Visakhatatram. 99.	6398111	1, 99	16369	444	
Purpo	se:	To ensure that the college campus is greenish in terms of planting lawns in the campus and to reduce environmental pollution, pro recycling of water, disposal of sewage and waste materials, blod the campus are being implemented effectively by the college.	a large nu per water iversity co	mber irrigat nserva	of trees tion system ation et	s and stem. sc., in	
-		PROCEDURE					
Pr	ocedure	Description	Res	ponsi	bility	-	
Annu:	il plan	Each year a plan for the green campus audit is prepared by management. This plan serves to ensure that the entire environmental management system is implemented to ensure green campus.	reen campus audit is prepared by Management erves to ensure that the entire it system is implemented to ensure				
Audit		Based on the checklists, the audit is carried out in the form of observations of green campus.	Audit team				
Follow	/-up	Corrective action has to be taken and implemented within the prescribed duration.	Green campus Coordinator				
Repor	ting	Submission of corrective action in the form of report in association with Eco club or any other clubs including NCC, NSS bodies and Social Service League of the Institute.	n Green campus S /Environmental Coordinator				
Sec.	and some	Green Audit Implementation Check list		-		-	
5. No	32.8	Requirements		Conf	ormity		
-		()		Y	N	N/J	
1	Have intern	al Green campus audit procedures been developed and implement	ited?	1			
2	Have envi developme	ronmental aspects identified and evaluated for planned nts, or new or modified activities?	or new	1	1	1-	
3	Whether Green campus audit and Eco audit are simultaneous carried out or separately carried out?						
4	Whether Indian Biodiversity Act as per the Ministry of Environment, Forests and Climate Change, New Dethi				1		
5	Are the folk	owing environmental aspects considered in sufficient detail?		1			
	5.1. Waster	vater efficient treatment plant		1	V		
	5.3 Natural	Waste management and recycling of wastes water					
	5.4. Hazard	nural resource usage					
	5.5. Recycle	d water use for irrigation system		1	10-20		
	5.6. RO wat	er use in the college		V			
	5.7. Recycle	d and RO water physic chemical properties analyzed		1			

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# **GREEN AUDIT CHECKLIST**

10



C 14-				
2. 140	Requirements	- W C	Level o	f Status
		Good	Satisfactory	Need improvement
1	Waste water treatment facility to avoid waste water storage in the campus to minimize the disease spread to students			there is no str plant
2	Solid waste management facility in the campus to reduce bad odor and smell and also to reduce disease incidence to students			oren Burning
3	Renewable energy utilization (Solar energy implementation schemes) for effective campus maintenance			only used in main sate
4	Sufficient number of trees, shrubs, herbs and lawns to ensure green campus facility to students and also to reduce environmental pollution	6		plantation is
5	Maintenance of plantations in the campus and steps taken during summer season to maintain plants	1		sprinkler aste
6	Water facility in the campus and steps taken for water scarcity during summer season	~		hainly depend bore coel only
7	Implementation and practice of energy audit and hygiene audit in the campus	×	~	the hysiene au
8	Number of trees, number animals including bird and establishment of any aquarium in the campus.		/	present only there,
9	Whether plants are tagged properly with their common name and Botanical name for students	/		togged to imposed to althe
10	Practice of water recycling process and Frequency of watering for plantations (Record maintenance	1		required reco
.11	Functioning of Eco clubs and other clubs / Cells / Forums / Units to ensure green campus through students		~	Regulated the for of eco clubes a dube for shall
12	Implementation of Government schemes (Swatch Bharath) and conduction of awareness programmes for green campus		$\checkmark$	need to improv for steen com
13	Conduction of outreach programmes for dissemination of green campus motto.		~	awareness of a Greek compusion
14	Implementation of advanced methods for watering plantations (Trip and sprinkler irrigation methods)	-	-	Thre is no System
15	Implementation of rain harvesting system, use of	1	~	meed to improv

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5. No	Requirements		Level o	Status
18:336)	requirements	Good	Satisfactory	Need improvement
16	Signing of MoU with Government and Non- Governmental Occupitations to account of the State		~	Not naintainees
17	Presence of (a) forest ecosystem (b) grassland ecosystem (c) desert ecosystem (d) aquatic ecosystem in college		~	the listed econvisition
18	Role of College management in Natural resources maintenance and wildlife protection act implementation		~	Not APPLICANS
19	Role of Environment Monitoring System in ensuring green campus including social issues		/	met to improve
20	Overall rating for Green campus		~	satistactory

12/0/21

Signature of Green Auditing Chairman

Habitulelat

Signature of Green Auditing Auditor

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### Energy Audit checklist

REST

# ENERGY AUDIT CHECKLIST

Additor name	A.Roma Akhilesh	Audit Date: 11 1 10 2021					
Organization Name & Address	255 Dadi institute of Engineering & Technology NH-16; Anakaralle; visakhopidnam - 531002						
Purpose:	To ensure that the college campus is involving energy sav roadmap of the State development economy by assess number of Tube lights, Sodium vapor lamps, Bulbs, Merc Uninterruptible power supply (UPS), Generator backup, Fa consumption machines such as Hot-air-oven, Microwave u in Laboratories, Hostels, Canteens and others in the campu by the college. As per the Energy Conservation Act, 2001, Energy Aud monitoring and analysis of use of energy including submit recommendations for improving energy efficiency with cos to reduce energy consumption.	ings and consumptions towards the ing the electric current usage. The ury Vapor lights, Ultra-violet lights, ns, A/C machine, Solar lights, power oven, Refrigerator, Equipment used is are being implemented effectively dit is defined as "the verification, ssion of technical report containing it benefit analysis and an action plan					
	The Energy Audit would give a positive orientation to the maintenance and quality control programmes which an activities. Such an audit programme will help to keep foc energy costs, availability and reliability of supply of energy identify energy conservation technologies, retrofit for energy identify energy conservation technologies, retrofit for energy identify energy conservation technologies, retrofit for energy identify energy conservation technologies.	e energy cost reduction, preventive re vital for production and utility us on variations which occur in the , decide on appropriate energy mix, rgy conservation equipment etc.					
	The Energy Audit would give a positive orientation to the maintenance and quality control programmes which a activities. Such an audit programme will help to keep foc energy costs, availability and reliability of supply of energy identify energy conservation technologies, retrofit for ene PROCEDURE	e energy cost reduction, preventive re vital for production and utility us on variations which occur in the , decide on appropriate energy mix, rgy conservation equipment etc.					
Procedure	The Energy Audit would give a positive orientation to the maintenance and quality control programmes which a activities. Such an audit programme will help to keep foc energy costs, availability and reliability of supply of energy identify energy conservation technologies, retrofit for ene PROCEDURE Description	e energy cost reduction, preventive re vital for production and utility us on variations which occur in the , decide on appropriate energy mix, rgy conservation equipment etc. Responsibility					
Procedure Annual plan	The Energy Audit would give a positive orientation to the maintenance and quality control programmes which an activities. Such an audit programme will help to keep foc energy costs, availability and reliability of supply of energy identify energy conservation technologies, retrofit for energy identify energy conservation technologies, retrofit for energy PROCEDURE Description Each year a plan for the Energy Audit is prepared by Management. This plan serves to ensure that the entire environmental management system is implemented to ensure savings of electrical energy (current) in terms of money.	e energy cost reduction, preventive re vital for production and utility us on variations which occur in the , decide on appropriate energy mix, rgy conservation equipment etc. Responsibility Management/Principal					
Procedure Annual plan Audit	The Energy Audit would give a positive orientation to the maintenance and quality control programmes which an activities. Such an audit programme will help to keep foce energy costs, availability and reliability of supply of energy identify energy conservation technologies, retrofit for energy identify energy conservations for the Energy Audit is prepared by Management and an agement system is implemented to ensure savings of electrical energy (current) in terms of money. Based on the checklists, the audit is carried out in the form of observations of the campus.	e energy cost reduction, preventive re vital for production and utility us on variations which occur in the , decide on appropriate energy mix, rgy conservation equipment etc. Responsibility Management/Principal Audit team					
Procedure Annual plan Audit Follow-up	The Energy Audit would give a positive orientation to the maintenance and quality control programmes which an activities. Such an audit programme will help to keep for energy costs, availability and reliability of supply of energy identify energy conservation technologies, retrofit for energy identify energy conservations for the Energy Audit is prepared by Management. This plan serves to ensure that the entire environmental management system is implemented to ensure savings of electrical energy (current) in terms of money. Based on the checklists, the audit is carried out in the form of observations of the campus. Corrective action has to be taken and implemented within the prescribed duration.	e energy cost reduction, preventive re vital for production and utility us on variations which occur in the , decide on appropriate energy mix, rgy conservation equipment etc.					

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# ENERGY AUDIT CHECKLIST

	Energy Audit Implementation Check list		-	_
S. No-	Requirements	Conf	ormit	y
<u></u>		Y	N	N//
1	Have internal Electrical Energy Audit procedures been developed and implemented?	V	-	-
2	Have any steps taken for savings of energy by means of controlling number of lights and fans ON/OFF mechanisms by the Management?	~		
3	Whether ordinary tube lights, sodium vapor lights and sodium vapor lights are replaced with LED bulbs in all the places in the campus?	~		
4	Whether power consumption is being controlled by means of creating awareness among the stakeholders such as students, teachers, and etc.	~		1
5	Are the following energy conservation aspects considered in sufficient detail?			1
	<ul> <li>5.1. Number of Uninterruptible power supply (UPS) used : 19 ; gottered: 2.96</li> <li>5.2. Number of Solar systems used for lighting : 06</li> <li>5.3. Usage Solar systems used in boiling water in hostels</li> <li>5.4. Number of Power generators installed : 01</li> <li>5.5. Automatic sprinkler system used for irrigation purpose</li> <li>5.6. RO water use in the college and its current supply</li> <li>5.7. Ultra-violet lights and any other harmful lights used</li> <li>5.8. Attempt in reducing the energy expense and carbon footprint</li> </ul>	11 1 1 1	- 2 2	N/A
6	Have responsibilities been assigned for maintenance of Electrical items and gadgets for long run?	~		101
7	Have programmes for the achievement of prescribed financial outlay for current bill for each building in the campus towards power consumptions?	$\checkmark$		
8	Any display is made to switch ON / switch OFF in the college to create awareness among students and teachers towards power consumptions?	V		
• 9	Are objectives and targets specific, measurable, concrete and understandable in power consumptions?		V	
10	Has the organization ensured that personnel performing environmental specific tasks have the required knowledge on energy audit (e.g., education, training experience, workshop, camp and etc.)?	V		
. 11	Are objectives and targets documented towards energy audit periodically and any Register is made?	V		
12	Has a Management Representative, Electrical Engineer, Staff in charge been assigned for energy savings on power consumptions?	V		
• 13	Have the roles, responsibilities, and authorities for the Management Representative been defined?		~	
14	Are the required resources (e.g. personnel, technology, finance) for implementation of energy savings provided by Management?	V		
15	Are all electrical equipment towards power consumptions appropriately maintained and calibrated?	V		

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# **ENERGY AUDIT CHECKLIST**

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	Energy Audit Implementation Check list		_	
S. No	Requirements	Confe	ormit	y
10		Y	N	N/A
• 16	Any energy conservation technologies and retrofit for energy conservation equipment are being implemented?	V		1
• 17	Any analysis of energy flows for energy conservation in terms of the amount of energy input into the system without negatively affecting the output in Buildings in the Cellege	V		-
18	Implications of alternative energy efficiency measures sufficient to satisfy the financial criteria of sophisticated investors	~		
19	Identification of the most efficient and cost-effective Energy Conservation Opportunities (ECOs) or Measures (ECMs) taken by the management	~		

	Energy Audit with respect to the Lev	vel of sta	tus	in the second se
S. No	Requirements	0	Level o	f Status
		Good	Satisfactory	Need improvement
1	Number of UPS, Solar system and Generator for power back up to alternative current supply facility in each building	1	~	weed to im prove the ingreation of solars systems orman
2	Implementation and practice of energy audit, eco audit and hyglene audit in the campus	10	~	Hygiene audit is n conducting, so required
3	Functioning of Clubs / Cells / Forums / Units to ensure the safety precautions on current scared to students and teachers	-	-	required format of clubs/cells to everythe solely
4	Implementation of advanced methods for watering plantations (Trip and sprinkler irrigation methods) and boiling water system on energy savings mode	-	_	required installate the sprinkles indi
5	Roles, responsibilities, and authorities for the Management Representative for energy savings and amount of money savings		~	Broat the MR & Responsibilities a encross savings & m
6	Use of Ultra-violet and Harmful lights without creating any awareness and safety precautions.	-	-	Not using any
7	Servicing and calibration of Electrical equipment items and gadgets for energy savings and power consumptions		~	Nequired calibration
8	Signing of MoU with Government and Non- Governmental Organizations to ensure energy audit		~	NO, any MOU with Graveronment
9	Cost-effective energy conservation measures is well taken.	-	-	up to 2 KWP MI
10	Overall rating for Energy Audit		V	need to improve

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# **Preliminary ECO-SCORE ASSESSMENT**



GREEN CAMPUS Eco-Score for DIET				
	ECO SCORE ON A SCALE OF 1 FOR VERY POOR TO 5 AN EXEMPLARY			
S.NO	PARAMETER	ECO SCORE		
1	Rain Water harvesting:	4		
2	Terrace farming:	1		
3	Neutralization Tank:	2		
4	Zero Liquid discharge	1		
5	Hazardous and e-waste management	3		
6	Paperless office	3		
7	Fire and safety provisions	2		
8	Wealth from waste	1		
9	Green Curriculum	3		
10	Internal Revenue Generation	2		
11	Ban on plastics	2		
12	Environmental Education	2		
13	Energy Efficiency	3		
14	International Carbon Trade	2		
15	Environmental Self Audit	1		
16	Biogas Plant/Vermicompost	2		
17	DG Set stack	1		
18	Noise	3		
19	Green building concepts	2		
20	Biodiversity of campus	2		
TOTAL ECO-SCORE 42				
IDEAL ECO SCORE =20X5 = 100				

Based on the three audit (Green, Eco & Energy) checklists, all the 20 components of eco- score calculated. Eco-score on a scale of 1 for very poor to 5 an exemplary.

New eco-score below table was calculated after implementation of recommendations within 2 months period.

## **Problems Encountered and Resources Required**

#### Action Taken Report on Green Campus Audit

S N o	Parameter & Recommenda tions	Action Taken Report	PROOFS
1.	<ul> <li>Rain Water Harvesting</li> <li>Divert water to proper storm water channel constructed in the campus premises without wastage of any runoff.</li> <li>Divert the water to pits at different positions in the campus such that ground water recharge can be attained.</li> <li>Divert water to harvesting tanks or nearby water bodies in the premises.</li> <li>Reuse the collected water for gardening and for domestic uses.</li> </ul>	<ul> <li>As per the recommendations of audit report display boards are placed near the Rain Water Harvesting pit.</li> <li>It is planned to construct cannel to let the waste water to be reused for watering the plants.</li> </ul>	

2	Zero Liquid Discharge • The treated water can be used in the campus for gardening	<ul> <li>Based on the recommendation sthe tests have to be conducted and achieved satisfied results. The usage may range from utensil cleaning, flushing, floor mapping and gardening.</li> <li>APPENDIX -I attached</li> </ul>					
			S.no	Results	on RO	Rejected wash	ater
			1	Temperature	29.1°c	No relaxation	Satisfied result
			2	РН	9.94ppm	No relaxation	Satisfied result
			3	Turbidity	45.6ppm	With in average of 41ppm	Not Satisfied result
			4	Dissolved solids	1094ppm	500 to 2000ppm	Satisfied result
			5	Hardness	306.25ppm	200 to 600ppm	Satisfied result
			6	Acidity( methyl orange indicator)	605ppm	Less than 900ppm	Satisfied result
			7	Alkalinity (methyl orange indicator)	352.5ppm	200 to 600ppm	Satisfied result
			8	Chlorides	744.56ppm	250 to 1000ppm	Satisfied result

3.	<ul> <li>Hazardous and e- waste manag ement</li> <li>Segregate different types of wastes as dry and wet waste.</li> <li>Hazardous</li> <li>E-waste collection bins.</li> <li>Initiate disposal methods with</li> </ul>	<ul> <li>The waste is segregated after collecting it from various points in the campus into dry and wet.</li> <li>Invited contractors to collect the dry wastage material.</li> </ul>	

4.	Fire and Safety provisions • Flammable and Hazardous materialssources are limited, isolated, eliminated, or secured: This includes electrical lines and appliances, heaters and stoves, natural gas pipelines and LPGcanisters, flammable or combustible liquids.	<ul> <li>Refilled the fire extinguishers and sand buckets and planned to conduct mock fire drill with fire and safety department Anakapalle.</li> </ul>		
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#### Wealth from waste

- The wastes such as Demolition waste. garbage from the kitchens, remaining food from the canteens, paper from the offices, Water from Kitchens, water from STP and Neutralization Tank can be converted into useful product s. Encourage students to make innovative projects.
- Rubber tire benches at . play grounds and at open Sitting classroom. benches with used plastic bottles.
  - **Green Curriculum**
- Existing Open classroom to be developed fully and operational.

Seminars and Conferences to be conducted on Environmental Issues and expert lectures and discussions be made regular in the curriculum.

As per the guidelines of the audit committee the reusable plastic and rubber tires have been converted into useful products.



 Initiated the Open Class facility available in the campus near civil labs. Planning to conduct awareness session on Global Warming Climate Change.

5

- 6.

#### **Ban on Plastics**

• Strive to make the campus'plastic-free'

7

- Ban use of single-use plastics in canteens, shopping complexes in the institution's premises and hostels, etc.
- Carry out awareness drives and sensitization workshops on the harmful impacts of single-useplastics.
- Mandate all students • to avoid bringing nonbio-degradable plastic items to the institut Encourage ions. students to sensitize their respective households about the harmful effects of plastics and make their households 'plastic-free'.

Single use and Usage of plastic is banned in the campus and regular monitoring is done.



8	<ul> <li>International CarbonTrade</li> <li>Encourage transportation in such a way that to reduce CO2 emissions.</li> <li>Increase awareness among the students and staff to reduce CO2 emissions perperson.</li> </ul>	• Initiated horn annoyance	<image/> <image/> <image/> <text><text><text><text><text><text><text><text></text></text></text></text></text></text></text></text>
9	Green Building Concepts • Already DIET has existing open class room system near to civil department labs, it has to be developed further in various departments to create an awareness on Green building concepts.	<ul> <li>Created awareness to students on energy efficiency, water efficiency and also waste reduction.</li> </ul>	

REST	- CAC Como Jon-	
	CERTIFICATE OF RECOGNITION	
CAMPUS	is hereby awarded to	
AWARD	Dadi Institute of Engineering & Technology <sub>Anakapalle</sub> , A.P, India	
	ON 25 DAY OF DECEMBER 2021	
In recognition of "(	Outstanding Performance" in Green Campus towards building a n environment in educational institutions	10re sustainable
1	GREEN CAMPUS ASSESSMENT	
G Dr Rekhapalli Srini	vasa Ran K Kamer	is (
DIRECTOR REST PVT LT	TD, ENVIRONMENTAL PRO	FOR ITECTION SOCIETY,
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Final ECO-SCORE ASSESSMENT

# **GREEN CAMPUS Eco-Score for DIET**



ECO SCORE ON A SCALE OF 1 FOR VERY POOR TO 5 AN EXEMPLARY					
S.NO	PARAMETER	ECO SCORE after implemented recommendations			
1	Rain Water harvesting:	4			
2	Terrace farming:	1			
3	Neutralization Tank:	2			
4	Zero Liquid discharge	3			
5	Hazardous and e-waste management	4			
6	Paperless office	3			
7	Fire and safety provisions	4			
8	Wealth from waste	3			
9	Green Curriculum	3			
10	Internal Revenue Generation	2			
11	Ban on plastics	3			
12	Environmental Education	2			
13	Energy Efficiency	3			
14	International Carbon Trade	3			
15	Environmental Self Audit	1			
16	Biogas Plant/Vermicompost	2			
17	DG Set stack	1			
18	Noise	3			
19	Green building concepts	3			
20	Biodiversity of campus	2			
	TOTAL ECO-SCORE 52				
IDEAL ECO SCORE =20X5 = 100					

1			
	Eco-Score	Certification Level	Recognition
	40-50	Certified	Best Practices
	50-60	Silver	Outstanding Performance
60-70 Gold		Gold	National Excellence
	>70	Platinum	Global Leadership

### **ISO CERTIFICATE**



# **Diet Green Campus MOU**

1. This Memorandum of understanding (MOU) Sets for the terms and understanding between the GREEN WAVES ENVIRONMENTAL SOLUTIONS and Dadi Institute of engineering and technology for disposal waste.



#### AWARDS

Dadi institute of engineering and technology achieved District Green championship award for the Academic year 2021-22 from Mahatma Gandhi National Council of Rural Education (MGNCRE), Department of Higher Education, Ministry of Education, Government of India

