



# COLLEGE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, New Delhi & Affiliated to Pondicherry University) An ISO 9001:2015 Certified Institution

#### **GREEN AUDIT CERTIFICATE**







# COLLEGE OF ENGINEERING AND TECHNOLOGY

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### **ENERGY AUDIT CERTIFICATE**

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### CERTIFICATE FOR ENERGY AUDIT

Certificate Number: PSQC960

This is to certify that, we have conducted a detailed <u>ENERGY AUDIT</u> in **RAAK COLLEGE OF ENGINEERING AND TECHNOLOGY, MUTHUPILLAI PALAYAM ROAD, SULTHANPET POST, PUDUCHERRY – 605 110** on 15, June 2023. The Audit team has identified 06 Energy Conservation Proposals (ENCONs) and summary of the energy audit is given below.

Description/Year	0.0000000000000000000000000000000000000	2022-2023				
Annual Electricity Consumption (kWh)	1,61,093 kWh					
Summary of Energy C	onservation (ENC	CON) Proposals				
Description	Present	After	Savings			
Annual Energy Consumption	1,61,093 kWh	1,44,984 kWh	16,109 kWh			
Annual Energy Cost	17.43 lakhs	15.69 lakhs	1.743 lakhs			
Simple Payback Period			1.5 years			

#### Equipment's/Systems Audited

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Electrical System	Thermal System
Electrical System & Network	Diesel generators, pumps and motors
<ul> <li>Lighting, Fan &amp; Air Conditioning System</li> </ul>	<ul> <li>Inverter, UPS and Battery System</li> </ul>

The detailed Energy Conservation Proposals are presented in the Audit Report.

Authorized Auditor

Alines

G. ARIVARASAN BEE Certified Energy Auditor (EA-21875) Lead Auditor – ISO 14001, EMS

P S QUALITY CERTIFICATION PVT. LTD.

Plougood Consultancy - Accreditation & Certification) Auditing & Training E-mail: info@psqualitycertifications.com

Web Site: www.psqualitycertifications.com

CIN: U74999TN2020PTC138625 Dr. S. SEENUVASAMURTHI, M.E. Ph.C.

No.1, Muthupillar Palayam Road, Sulthanpet Post,

Puducherry - 605 110

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# ENVIRONMENTAL AUDIT CERTIFICATE

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Certificate Number: PS0C962         Stocertificate Number: PS0C962         INEERING AND TECHNOLOGY, MUTHUPILLAI PALAYAM F         THANPET POST, PUDUCHERRY – 605 110 on 15, June 2023. This Audit higherery balance sheet indicating various energy carriers associated with the regular activity oblige and their CO2 mapping.         Environmental System: CO2 Balance Sheet (2022-2023)         S.       Energy Consumption & CO2 Emission       CO2 Neutralization         No.       Description       Annual Usage       CO2 Finission       Neutralized         1.       Electrical       161093 Energy       132.09       Matured Trees       189 Nos.       4.12         2.       Total Emission       132.09       Total Neutralized       4.12         2.       Total Emission       132.09       Total Neutralized       4.12         CO2 Accountability for RCET       650.21 Tons/Annum       4.12         CO2 Accountability for RCET       650.21 Tons/Annum       CO2         Ciaculated based on the weighted average of total strength of students, teaching and technical staff = 506       Systems Audited <td< th=""><th>P</th><th>SOC</th><th></th><th></th><th></th><th><u>, , , , , , , , , , , , , , , , , , , </u></th><th></th></td<>	P	SOC				<u>, , , , , , , , , , , , , , , , , , , </u>	
INEERING       AND       TECHNOLOGY,       MUTHUPILLAI       PALAYAM       F         THANPET POST, PUDUCHERRY – 605 110 on 15, June 2023. This Audit hig       nergy balance sheet indicating various energy carriers associated with the regular activities only and their CO2 mapping.       This Audit hig         Environmental System:       CO2 Balance Sheet (2022-2023)         S.       Energy Consumption & CO2 Emission       CO2 Neutralization         No.       Description       Annual Usage       CO2 Neutralization         1.       Electrical       161093       132.09       Matured       189 Nos.       4.12         2.       Total Emission       132.09       Trees       127.97 Tons/Annum       4.12         CO2 Accountability for RCET       650.21 Tons/Annum <sup>1</sup> 650.21 Tons/Annum <sup>1</sup> CO2 Accountability for RCET       650.21 Tons/Annum <sup>1</sup> Clackulated based on the weighted average of total strength of students, teaching and technical staff = 506)       Usage of Chemical, Salts, Acids & Cleaning Agent         Diesel consumption (Transport)       Solid and E-waste Handling & Management       RO and water distribution system	toce	-				<b>4UDIT</b> in I	RAAK COLLEC
S.       Emission       CO2       Description       Annual Usage       CO2       Description       Annual Usage       CO2       No.       Description       Annual Usage       CO2       No.       CO2       No.       CO2       No.       CO2       No.       CO2       No.       CO2       No.       CO3	NEE HA ergy	<b>RING AND</b> <b>NPET POST</b> <b>balance sheet</b> and their CO <sub>2</sub> r	<b>TECHNO</b> <b>PUDUCH</b> indicating va napping.	DLOGY, ERRY – 60 rious energy	MUTHUPIL 05 110 on 15, carriers assoc	LAI PA June 2023. iated with t	LAYAM R This Audit hig he regular activi
No.DescriptionAnnual UsageCO2 Emission (Tons/Ann um)DescriptionAnnual UsageCO2 Neutralized (Tons/Annum)1.Electrical Energy161093 kWh132.09Matured Trees189 Nos.4.122.Total Emission132.09Total Neutralized4.122.Total Emission132.09Total Neutralized4.12Balance CO2 to be neutralized127.97 Tons/Annum4.12CO2 Accountability for RCET650.21 Tons/Annum'Co2 Accountability for RCET650.21 Tons/Annum'Clacklated based on the weighted average of total strength of students, teaching and technical staff = 506)Systems AuditedUsage of Chemical, Salts, Acids & Cleaning AgentDiesel consumption (Transport)Solid and E-waste Handling & ManagementRO and water distribution systemSolid and E-waste Handling & Management	s.			n & CO2	CO <sub>2</sub> Neu	tralization	
1.       Electrical       161093       132.09       Matured Trees       189 Nos.       4.12         2.       Total Emission       132.09       Total Neutralized       4.12         3.       Total Emission       132.09       Total Neutralized       4.12         Balance CO2 to be neutralized       127.97 Tons/Annum         CO2 Accountability for RCET       650.21 Tons/Annum         Campus         ( <sup>1</sup> Calculated based on the weighted average of total strength of students, teaching and technical staff = 506)         Systems Audited       Usage of Chemical, Salts, Acids & Cleaning Agent         Diesel consumption       Usage of Chemical, Salts, Acids & Cleaning Agent         RO and water distribution system       Solid and E-waste Handling & Management	No.		Annual	Emission (Tons/Ann	Description		
2.       Total Emission       132.09       Total Neutralized       4.12         Balance CO2 to be neutralized       127.97 Tons/Annum       CO2 Accountability for RCET       650.21 Tons/Annum <sup>1</sup> Campus       ('Calculated based on the weighted average of total strength of students, teaching and technical staff = 506)       ystems Audited         Electricity consumption       Usage of Chemical, Salts, Acids & Cleaning Agent         Diesel consumption (Transport)       Solid and E-waste Handling & Management         RO and water distribution system       1	1.	and the second sec				189 Nos.	4.12
Balance CO2 to be neutralized       127.97 Tons/Annum         CO2 Accountability for RCET       650.21 Tons/Annum <sup>1</sup> Campus       ('Calculated based on the weighted average of total strength of students, teaching and technical staff = 506)         ystems Audited       Electricity consumption         Usage of Chemical, Salts, Acids & Cleaning Agent         Diesel consumption (Transport)       Solid and E-waste Handling & Management         RO and water distribution system       1000000000000000000000000000000000000	2.			122.00		alized	4.12
CO2 Accountability for RCET       650.21 Tons/Annum <sup>1</sup> Campus       ('Calculated based on the weighted average of total strength of students, teaching and technical staff = 506)         Systems Audited       Electricity consumption         Usage of Chemical, Salts, Acids & Cleaning Agent         Diesel consumption (Transport)       Solid and E-waste Handling & Management         RO and water distribution system	Ba	ance CO2 to b	e neutralized		127.97	Tons/Ann	um
( <sup>1</sup> Calculated based on the weighted average of total strength of students, teaching and technical staff = 506)         systems Audited         Electricity consumption       Usage of Chemical, Salts, Acids & Cleaning Agent         Diesel consumption (Transport)       Solid and E-waste Handling & Management         RO and water distribution system	CC	2 Accountabili			650.21	Tons/Ann	um <sup>1</sup>
Systems Audited           Electricity consumption         Usage of Chemical, Salts, Acids & Cleaning Agent           Diesel consumption (Transport)         Solid and E-waste Handling & Management           RO and water distribution system	( <sup>1</sup> Ca	lculated based		hted averag	e of total strer	ngth of stud	dents, teaching
Diesel consumption (Transport)     Solid and E-waste Handling & Management       RO and water distribution system							
RO and water distribution system	Elec	tricity consump	tion	Usage of	Chemical, Salt	s, Acids &	Cleaning Agents
	Dies	el consumption	(Transport)	Solid and	E-waste Hand	ling & Man	agement
he detailed Environmental aspects & impacts are presented in the Audit Re							
Authorized Auditor G. Auron Dr. S. SEENVYASAMURTHI	utho	orized Audito		pects & im		GEENIN	ANNURTHI.
Mr. G. ARIVARASAN BEE Certified Energy Auditor (EA-21875) Lead Auditor – ISO 14001, EMS P S QUALITY CERTIFICATION PVT. LTD.	lr. G EE (	. ARIVARAS Certified Ener Auditor – ISC	rgy Auditor D 14001, EN	18	5) RAAI	K College o No.1, Muth	f Engineering & upillai Palayam