

IGEN ENSAVCLUB – St. XAVIER’S CATHOLIC COLLEGE OF ENGINEERING

ANNUAL ACTIVITY REPORT 2023



IGEN Working towards
**SUSTAINABLE
DEVELOPMENT
GOALS**



1. INTRODUCTION

Energy Saving Awareness (EnSAv) Club was established in our esteemed institution, St.Xavier’s Catholic College of Engineering, Nagercoil, Kanyakumari District in the Year 2017, inaugurated by Dr. L. Ramesh, President - GREEN9 Research Group. The objective of the club is to create awareness among the students and public on saving energy through GREEN9 Mantras and to educate them on climate change issues in the forthcoming years. The club also aims to promote United Nations Sustainable Development Goals.

With these objectives, the club motivates the student’s community, the future of our country, in increasing awareness and taking their initial step in Energy Conservation. Every year, through the club, the SXCCE G9 EnSAv Cub have been conducting several events such as seminars, symposiums, conferences, awareness rally, awareness campaigns, etc., Some of the notable events are National Level Symposium SDG713 Fest, SDG-7 Summit, International Conference on Energy Efficient Technologies for Sustainability (ICEETS), Sustainable energy exhibitions, and Energy Management conclave for sustainability. The club has created awareness on energy saving by organizing campaign in 7 villages such as Nullivilai, Ambedkar Nagar, Manalikkurai, Manjakonam, Melpuram, Mulaviali, Vavarai in Kanyakumari District, Tamil Nadu.


The SXCCE G9 EnSAv Club have also been acted as one of the organizing club for conducting IGEN events such as SDG Conclave, IGEN ENSAVCON SDG 713 Conference, Energy Conservation day celebration event, and SDG 7 9 Energy Industry Expert Talk series. The student and staff members of the club are involved in other SDG Projects and activities like Energy99Challenge, Cycle4Green, IGEN Green Day, IGEN Battery and so on.

With the same objective, the office bearers for the Academic Year 2022-2023 have been elected to enhance the club activities and work towards UN SDGs.

List of Office Bearers 2023

Internal Mentor, EnSAv Club	Dr. M. Marsaline Beno, Dean - Research / SXCCE & Vice President - IGEN
Faculty Advisor, EnSAv Club	Mr. M. Abragam Siyon Sing, Assistant Professor / EEE
Co-ordinator, EnSAv Club	Dr. V. Jesus Bobin, Assistant Professor / EEE
Chairman	Ms. Jeedith Melhiya R B, IV EEE
Vice Chairman	Mr. Aswin Sudeer, IV CSE
Secretary	Ms. J. Bijosha, III ECE
Joint secretary	Mr. Jebish J, IV MECH
Treasurer	Mr. J Rojar Donald, III EEE
Executive members	Ms. Benitta R K, IV CSE
Executive members	Ms. Jenifer J M, II ECE
Executive members	Mr. Amal Sasi, IV EEE
Executive members	Ms. Jaculin Rose R J, II EEE

2. ON CAMPUS EVENTS

Sl.No	Programs / Events conducted and Short report	Photo & FB Link
1	<p>National Level Technical Symposium SDG 713 Fest</p> <p>SXCCE G9 EnSAv Club conducted an AICTE - SPICES sponsored National Level Technical Symposium "SDG 713 Fest 2023" on 14th October 2023. The objective of the symposium is to cultivate the innovative solution from the students towards SDG Goal 7 - Affordable and clean energy & SDG Goal 13 - Climate Action. About 210 students participated in the event, in which 40 students are from other institutions. Five events such as SDG Battle, SDG poster fest, SDG video fest, SDG debate, SDG Art Gaze were conducted for the students.</p> <p>FB Link: https://www.facebook.com/groups/igengreen9ensavclub/permalink/1217320906339899/</p>	

2 Engineer's Day 2023

SXCCE G9 EnSAv Club, IET SXCCE On Campus, IEI SXCCE Student Chapter and FOSSEE Club jointly celebrated Engineer's Day 2023 on 16th September 2023 under the theme "Recent trends in Engineering Innovation". Several events such as poster presentation, video presentation, Idea Presentation, technical quiz and adzap were conducted for the students. Around 130 students have participated in the event. Prizes were distributed to the winning students in the valedictory event.

FB Link:

<https://www.facebook.com/groups/igengreen9ensavclub/permalink/1217313823007274/>



3 Orientation Program on Saving Energy Through Green9 mantras

The orientation program on saving energy through Green9 mantras was organized by SXCCE G9 EnSav Club on 12th August 2023. The event was started at 9.00 AM in the morning. Around 25 students were benefitted from the program. The objective of the program is to train the students on creating awareness among the public and on saving energy and United Nations Sustainable Development Goals.

FB Link:

<https://www.facebook.com/groups/igengreen9ensavclub/permalink/1217311299674193/>



4 SDG-7 Summit 2023

AICTE – SPICES sponsored SDG-7 summit was conducted by SXCCE G9 EnSAv Club on 16th May 2023. The event mainly focused on Sustainable development goal – 7: Affordable and clean energy. Several events such as talk for sdg7, poster presentation, and video presentation were conducted for the students to bring out the creative solutions. Around 95 students have participated and expressed their talents in the events.

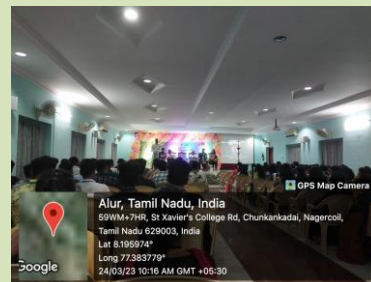
FB Link:

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5 National Level Symposium “THRONIX ‘23”

On 24th June, SXCCE G9 EnSAv Club conducted the National level technical symposium THRONIX '23 (Battle for sustainable earth) in association with IET On Campus SXCCE, IEI student chapter and FOSSEE Club, SXCCE. About 215 students participated in the event, in which 45 students are from other institutions. Several events such as Poster presentation, Paper presentation, quiz, circuit debugging were conducted for the students.



FB Link:

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6 Seminar on Engineering Innovation for a more resilient world

SXCCE G9 Ensav Club celebrated World Engineering Day on 9th March 2023 at 3.00 pm in St. Xavier's Catholic College of Engineering, Nagercoil. Er. K. Chithra, Assistant General Manager (Rtd), BSNL Nagercoil was the Guest of Honour for the function. She insisted that 5G and sustainable energy are two important areas of technology that have the potential to transform the way we live and work. About 60 participants have attended the function.



FB Link:

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7 Energy Conservation Day 2022 celebration

IGEN EnSAv Club celebrated the National Energy Conservation day 2022 on 10th December 2022. Its objective is to create awareness on energy conservation among the students and general public. It is an opportunity for students to come together to take a pledge towards conserving energy. Online competitions such as poster presentation, Idea presentations, and video presentations are conducted for the students. Many students have participated in all the events with their own interest. Around 52 students have participated in this event and shared their creativity in conserving energy.



FB Link:

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3. OFF CAMPUS EVENTS

Sl.No	Programs / Events conducted and Short report	Photo & FB Link
1	<p>Energy Saving Awareness campaign at Vavarai village</p> <p>The EnSAv club of SXCCE organized an energy saving awareness campaign at Vavarai village on 25th February 2023. Around 37 student members have visited with 5 staff members have participated in the campaign and given awareness to the people and students. The Faculty advisor addressed the student participants, shared what to do while visiting a home and How to give the awareness to the family members.</p> <p>FB Link: https://www.facebook.com/groups/igengreen9ensavclub/permalink/1217320906339899/</p>	
2	<p>Energy Saving Awareness campaign at St. Francis Higher Secondary School, Vavarai</p> <p>SXCCE IGEN EnSAv Club organized an energy saving awareness campaign at St. Francis Higher Secondary School, Vavarai on 25th February 2023. Around 37 student members have visited with 5 staff members have participated in the campaign and given awareness to the people and students. The Faculty advisor addressed the student participants, shared what to do while visiting a home and How to give the awareness to the family members.</p> <p>FB Link: https://www.facebook.com/groups/igengreen9ensavclub/permalink/1217320906339899/</p>	
3	<p>Awareness program at Ambedkar Nagar Village</p> <p>SXCCE IGEN EnSAv Club celebrated the IGEN GREEN DAY 2022 on 22nd October 2022. Its objective is to inspire people on being green and to carry out any one of the Green actions listed or any other of one's own choice. Around 20 students have participated in this event by promoting the green actions. As a part of this celebration, an awareness program was also conducted in the nearby Ambedkar Nagar Village in Chunkankadai to promote the Green Action and Green9 mantras.</p> <p>FB Link: https://www.facebook.com/groups/igengreen9ensavclub/permalink/944995443572448/</p>	

4. ACHIEVEMENTS

- **IGEN Sustainability Best Practices Award**

Received the award successful demonstration of Best Practice on “Energy Saving Village Awareness Campaign” and the strong commitment towards attaining the SDG 7 and its related UN Sustainability Goals. The award was presented on IGEN ENERGATHON 2023 – A 19.13 Hours Marathon organized on 27th May 2023.

- **NIEP STAR VOLUNTEER AWARD 2023**

Faculty Ambassador, Mr.M.Abragam Siyon Sing received the award from The Noble Institution for Environmental Peace, Canada in aid of the United Nations International Volunteer Day on April 09, 2023 for his remarkable contribution to the Institution of Green Engineers in creating a green environment and striving to achieve the UN Sustainable Development Goals 2030.

- **NIEP Volunteer Appreciation Award 2023**

Third year EEE student Mr.J.Rojar Donald, received the award from Noble Institution for Environmental Peace, Canada in aid of the United Nations International Volunteer Day on April 09, 2023 for his remarkable contribution to the Institution of Green Engineers in creating a green environment and striving to achieve the UN Sustainable Development Goals 2030.

- **IGEN SDG Action Award 2023**

12 students and 2 faculties have received the award for the successful completion of IGEN Energy99Challenge. The Objective of the project is to implement energy saving, #igengreen9mantras to 99 public in 99 days with outcome to save 36K Units per Year.

- **Certificate for achievement and Leadership**

Faculty Mentor and Dean-Research, SXCCE Dr.M.Marsaline Beno received the award for completing Green Leaders Academy and Fellowship for extraordinary efforts towards environment sustainability.

- **BEE Certified Energy Manager**

Faculty Mentor and Dean-Research, SXCCE Dr. M.Marsaline Beno has completed the Energy Manager Examination and certified as Energy Manager by Bureau of Energy Efficiency, Govt. of India.

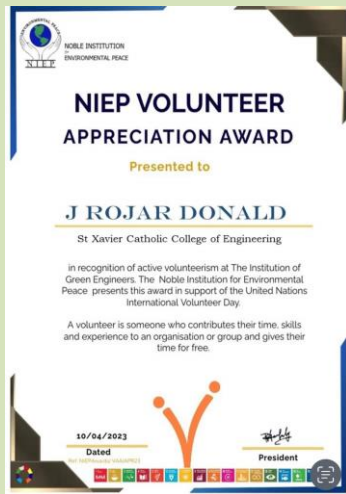
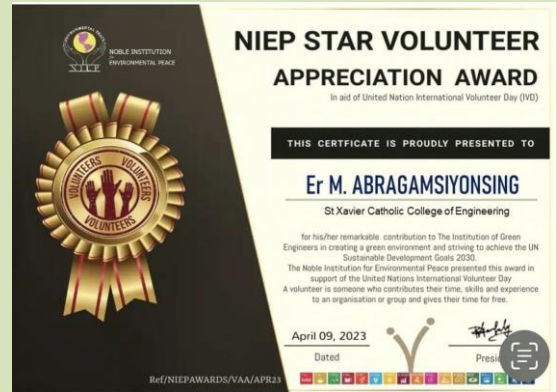
- **AICTE Funded under SPICES Scheme**

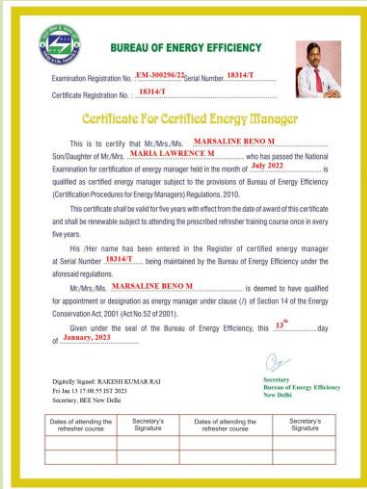
AICTE has sanctioned INR 1,00,000 fund for SXCCE EnSAv Club under SPICES scheme(Ref. No. 10-3/AICTE/IDC/SPICES/2022-23 dated 16 January 2023). Coordinator: Dr. M. Marsaline Beno, Co-coordinator: M. Abragam Siyon Sing.

- **Performer Band in NSIIR Ranking**

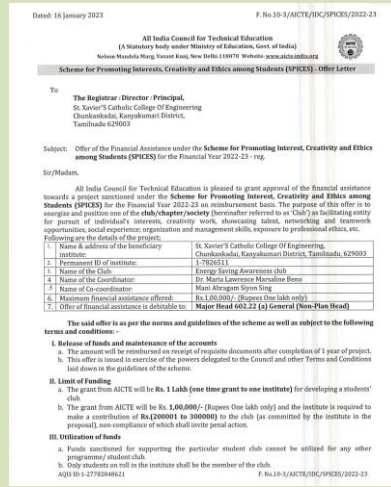
SXCCE has achieved this band in NSIIR Ranking among the educational institutions in India conducted by Atal Incubation Center(AIC) Raise based on the implementation of SDG in institution. **Link:** <https://aicraise.com/nsiir/#result>

Photo proof of Achievements





BEE Energy Manager Certificate

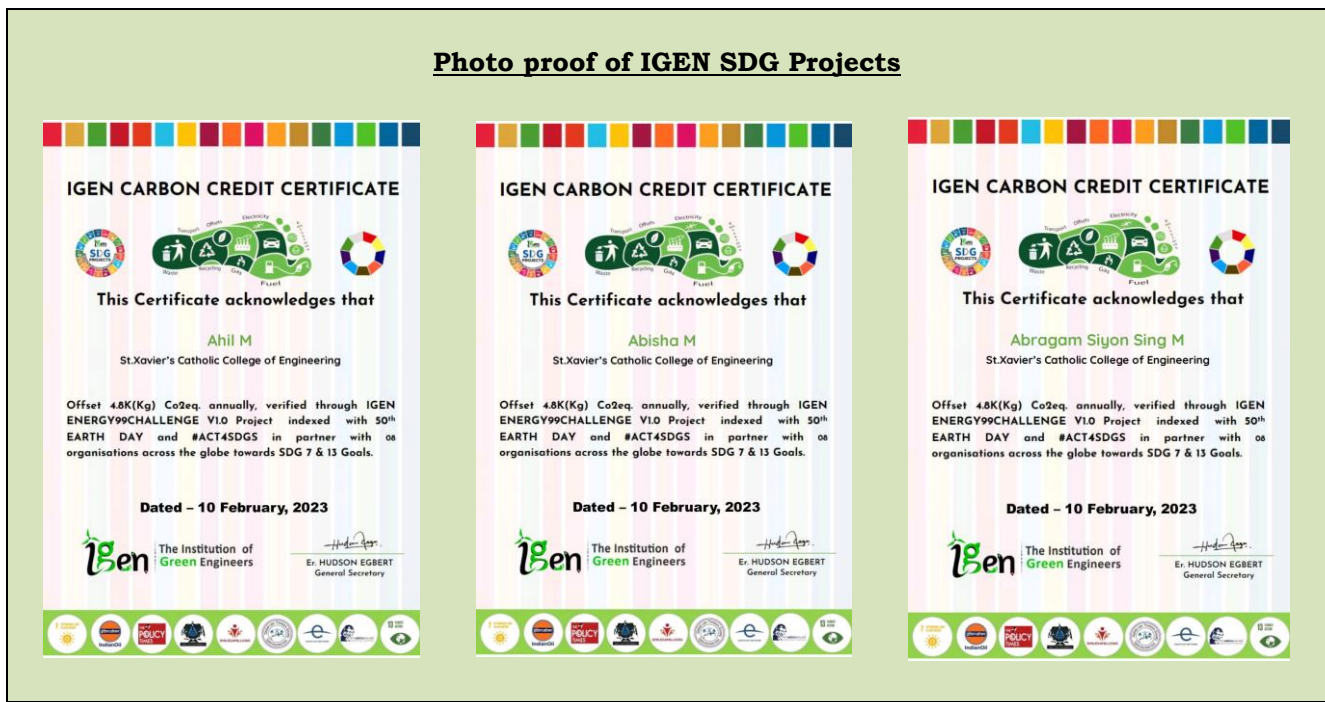


AICTE – SPICES Order

5. IGEN SDG Projects

Sl.No.	IGEN SDG Projects	Completed Students & Staffs
1	Energy99 Challenge	Ahil M, III EEE
2	Energy99 Challenge	Fathima Shapna Aashme Y, II ECE
3	Energy99 Challenge	Bijosha J, II ECE
4	Energy99 Challenge	Abinaya J R, II ECE
5	Energy99 Challenge	Abisha M, II ECE
6	Energy99 Challenge	Ashmika P, II ECE
7	Energy99 Challenge	Rojar Donald J, III EEE
8	Energy99 Challenge	Aswin Prince, III EEE
9	Energy99 Challenge	Francis Xavier S, II ECE
10	Energy99 Challenge	Babin Dhas, IV EEE
11	Energy99 Challenge	Navin Richard, III EEE
12	Energy99 Challenge	Francy Rani S, IV EEE
12	Energy99 Challenge	V Jesus Bobin, AP/EEE
12	Energy99 Challenge	M Abragam Siyon Sing, AP/EEE

Photo proof of IGEN SDG Projects



6. IGEN Events Participation

- Our students and staffs have participated in IGEN GREEN DAY 2023 on 14/10/2023 and posted the green actions in Facebook.
- Few faculties have participated in IGEN ENERGATHON 2023 on 27/05/2023.
- The SXCCE G9 EnSAv Club have participated in IGEN EnSAv CLUB INDUCTION CEREMONY and ENERGY CONSERVATION DAY CEELEBRATION on 16/12/2023 and taken energy conservation Oath.
- Our Students have attended IGEN BATTERY Quiz and received certifications.
- The SXCCE G9 EnSAv Club have participated in IGEN Energy Conservation Festival 2022 and received appreciation certificate for organizing the event in the campus.

Photo proof of IGEN SDG Participation





7. COLLABORATIONS AND PARTNERSHIPS EVENTS

- **Tree Plantation Event**

Eco Club of SXCCE has organised a tree plantation event inside the campus on 14th July 2023 in association with SXCCE Ensav Club. The correspondent, principal, staff and students have actively participated and planted trees, which is an action towards sdg13.

FB Link -

<https://www.facebook.com/groups/igengreen9ensavclub/permalink/1233394211399235/>

- **TECH FEST 2023**

SXCCE has conducted TECH FEST 2023 under the theme “Sustainable Development Goals” on 20th April 2023 in collaboration with SXCCE G9 EnSAv Club. Various events for all the engineering disciplines were conducted for all the students on 17 SDG Goals.

FB Link -

<https://www.facebook.com/groups/igengreen9ensavclub/permalink/1232352624836727/>

- **International Conference ICEETS '23**

The International Conference on “Energy Efficient Technologies for Sustainability (ICEETS'23)” was jointly organized by the Department of EEE, Department of Mechanical, SXCCE G9 EnSAv club and IET SXCCE ON Campus on 27th & 28th April 2023. The conference invited research articles across 8 technical tracks namely, Application of Free/Libre Open Source Software, Alternate Energy for Sustainability, Energy Efficient Manufacturing Systems, Energy Efficient Building Technologies, Application of Intelligent Techniques, Energy Efficient Power System Technology, Energy Efficient Automotive Technologies, Modeling and Design of Energy Efficiency. Out of 63 papers, 41 papers were accepted and 38 papers were finally registered for the conference. These papers were presented in the conference in 4 sessions including online and offline presentations.

FB Link -

<https://www.facebook.com/groups/igengreen9ensavclub/permalink/1217306369674686/>

- **Energy Management conclave for sustainability**

SXCCE G9 EnSAv Club in collaboration with IEI Kanyakumari Local Centre jointly organized the Energy Management conclave for sustainable development on 10th October 2022 at Einstein Seminar hall. About 125 students and faculty members have participated in the conclave. There were six sessions by six resource persons on Energy Scenario and Need for energy conservation, Energy efficiency in thermal utilities, Energy efficiency in Buildings, Energy efficiency in Electrical systems, Energy Management standards and Energy audit and Handling energy audit instruments

FB Link -

<https://www.facebook.com/groups/igengreen9ensavclub/permalink/944993033572689/>

Photo proof of Collaboration Events



TECH FEST 2023



International Conference ICEETS 23



Energy Management conclave for sustainability



Tree Plantation event

8. OUTREACH AND ENGAGEMENT

- **Awareness Campaign at Vavarai**

The EnSAv club of SXCCE organized an energy saving awareness campaign at Vavarai village and St. Francis Higher Secondary School, Vavarai on 25th February 2023. It gave the opportunity to the club to engage with the broader community and local residents. Around 37 student members have visited with 5 staff members have participated in the campaign and given awareness to the people and students. The Faculty advisor addressed the student participants, shared what to do while visiting a home and How to give the awareness to the family members.

- **Energy Audit in Emmanuel College**

SXCCE G9 EnSAv club and Energy Management Cell, SXCCE conducted an Energy Audit at Emmanuel College, Vazhichal, Thiruvananthapuram on 24th November 2023. The objective of energy audit undertaken has the objective of identifying the energy saving opportunity through the visit, equipment study with measurements & to recommend the action plan with energy saving & financial calculation for implementation of proposed energy saving measures.

- **Energy Audit in Stella Mary's College of Engineering**

SXCCE G9 EnSAv club of and Energy Management Cell, SXCCE conducted an Energy Audit at Stella Mary's College of Engineering, Kanyakumari District on 20th December 2023. The energy saving opportunity has been identifies through the preliminary visit, equipment study has been done & the action plans are recommended with energy saving & financial calculation.

- **Online Workshop at Shri Vishnu Eng. College for Women**

The Energy Management Cell, SXCCE and SXCCE EnSAv Club jointly conducted online workshop at Shri Vishnu Engineering College for Women, AP, India on 23rd June 2023. Dr. M. Marsaline Beno and Mr. M. Abragam Siyon Sing acted as the resource persons for the workshop and delivered lectures on "Innovative Technologies in Energy Auditing and Management".

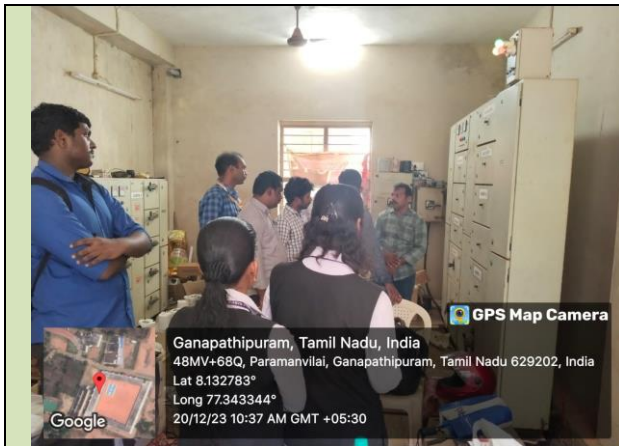
Photo proof of Outreach activity



Awareness Campaign at Vavarai Village



Awareness Campaign at St. Francis Hr. Sec. School, Vavarai



Energy Audit in Emmanuel College



Energy Audit in Emmanuel College



Energy Audit in Stella Mary's College of Engineering



Energy Audit in Stella Mary's College of Engineering

9. IMPACT AND SUSTAINABILITY

By conducting several events as listed above, the SXCCE G9 EnSAv Club is creating huge impacts on the environment and to the society. Several impacts are listed below.

- Being a member of EnSAv club, the student members are educated on saving energy in their home and on SDGs.
- Through the Energy saving awareness campaigns in villages, large number of people have been educated who might not have access to such information otherwise.
- People are now aware of their energy consumption habits and are actively seeking ways to reduce their energy usage.
- The EnSav Club has empowered individuals to take control of their energy consumption. This empowerment leads to more sustainable practices and contributes to overall community resilience.

- The EnSav Club's activities align closely with Sustainable Development Goal 7 (Affordable and Clean Energy) and Goal 13 (Climate Action). By promoting energy conservation and the adoption of energy-efficient technologies, the club directly contributes to global efforts to combat climate change and ensure access to affordable, reliable, sustainable, and modern energy for all.
- By instilling a culture of energy conservation and sustainability within local communities, the club lays the foundation for long-term positive change that will benefit both current and future generations.

CONCLUSION

SXCCE IGEN EnSAv Club is extremely happy for successful completion of the activities for the year 2023. The club has conducted 7 on campus activities, 3 off campus activities. Through the symposiums, conferences, summit, and orientation programs, a total of 670 students from the host institution and other institutions have shared their ideas on SDG7 and SDG13. To be more precise, all the conducted events focused on SDG Goals 7 & 13. The EnSAv club and ECO club of SXCCE has jointly planted around 50 trees inside the campus as an action towards SDG13. In addition, TECH FEST 2023 is a mega event conducted by the college under the theme Sustainable Development Goals collaborating with all the professional bodies including EnSAv Club. It had created a good platform for more than 2000 students in the campus to know about the 17 SDG goals. Through the awareness campaign in village, the club members have visited around 150 houses and given awareness on saving electricity in their home using GREEN9 mantras. The students and staff of SXCCE G9 EnSAv Club are actively participating in IGEN SDG Projects and other IGEN Events such as Energy99 Challenge, SDG Battery, Energy Conservation festival, Green day celebration, and IGEN Energathon. Along with Energy Management cell, the club executed Energy Audit at Emmanuel College ad Stella Mary's College of Engineering. The proposed recommendations could save annually 2 Lakh and 8.5 Lakh rupees respectively.

Overall, it has been a fruitful year 2023 for SXCCE IGEN EnSAv Club as various events conducted by the club focus on achieving sdg 7 and 13.

Report Prepared By :

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Faculty Ambassador – SXCCE IGEN EnSAv Club