

Sustainable Living Inc



Carbon Footprint and Energy Audit

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Acknowledgment

Sustainable Living Inc

Hiran Prashanth
Environmental Sustainability Auditor

01 August 2022

Carbon footprint and Energy audit at GIET Institutions, Rajahmundry

The Sustainable Living Inc acknowledges with thanks the cooperation extended to our team for completing the study at GIET Institutions, Rajahmundry (GIET).

The interactions and deliberations with GIET team were exemplary and the whole exercise was thoroughly a rewarding experience for us. We deeply appreciate the interest, enthusiasm, and commitment of GIET team towards environmental sustainability.

We are sure that the recommendations presented in this report will be implemented and the GIET team will further improve their environmental performance.

Kind regards,



Yours sincerely,

A handwritten signature in black ink.

Hiran Prashanth
Environmental Sustainability Auditor
Sustainable Living Inc

About Auditor

Hiran Prashanth is a sustainability consultant based in London. He has over 14 years of experience in climate change and environmental sustainability. He was working with the Confederation of Indian Industry (CII) before moving to London to pursue a master's degree at King's College, London.

Hiran Prashanth has helped more than 150 organizations around the world to achieve carbon neutrality. Apart from carbon neutrality, Hiran Prashanth has also facilitated organizations to achieve net-zero energy, water neutrality, and zero waste to landfill. He has audited more than 500 companies for their sustainability performance.

Hiran Prashanth was awarded the 'Best Sustainability Assessor' by the Honorable Minister for HRD, Mr. Prakash Javadekar. Hiran Prashanth is a CII certified carbon footprint expert and a resource efficiency expert. He has trained more than 1000 industry personnel across the world on climate change and sustainability. He is a guest faculty at IIM Lucknow and SIBM, Pune. His credentials can be found on [Hiran Prashanth | LinkedIn](#). Sustainable Living Inc provides services on carbon footprint, energy audit, resource management and embodied carbon.



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Executive Summary

The growth of countries across the world is leading to increased consumption of natural resources. There is an urgent need to establish environmental sustainability in every activity we do. In a modern economy, environmental sustainability will play a critical role in the very existence of an organization.

An educational institution is no different. Built environment, especially an educational institution, has a considerable footprint on the environment. Impact on the environment due to energy consumption, water usage and waste generation in an educational institute is prominent. Therefore, there is an imminent need to reduce the overall environmental footprint of the institution.

As an Institution of higher learning, GIET Institutions, Rajahmundry (GIET) firmly believes that there is an urgent need to address the environmental challenges and improve their environmental footprint.

True to its belief, GIET has solar PV for generating clean energy for its campus. 480 KWp of solar panels has been installed in the campus. GIET is also in the process of replacing conventional lamps with energy efficiency lamps. Sustainable Living Inc Team congratulates GIET team for their efforts.

Keeping GIET's work in energy efficiency, we recommend the following to be taken by the competent team at GIET:



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Work towards achieving carbon neutrality: INDC emphasizes creating an additional carbon sink of 2.5 to 3 billion tonnes of CO₂ equivalent through additional forest and tree cover by 2030. GIET's net carbon emission for the year 2021-22 is **1522.30 MT CO₂e**. GIET should focus on energy efficiency, renewable energy, and carbon sequestration as tools that will enable them to offset the present carbon emissions and achieve carbon neutrality.

Installation of biogas plant: In 2021-22, GIET had used 34.20 MT of LPG. There is an opportunity to install a biogas plant to generate biogas from sewage water. Presently, sewage water is being let out to the drain without treatment. An opportunity exists to generate biogas from the untreated sewage water and use the generated biogas to substitute LPG used in the college. By generating biogas from sewage water, about 0.93 MT of LPG can be replaced which will result in carbon savings of 2.79 MT CO₂e.

Improve energy efficiency of the college: It is recommended to adopt latest energy efficient technologies for reducing energy consumption in fans, lighting, and air conditioners. We recommend the following projects to be implemented at the earliest:

- Replace conventional 70W ceiling fans with energy efficient BLDC fans of 30W
- Installation of Air conditioners energy savers
- Replace conventional lamps with LED lamps
- Installation of solar water heaters for hostel


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