Sustainable Living Inc

Environmental Audit (Water and Waste Management)

PRINCIPAL
Godavari Institute of Engineering & Technology (Autonomous)
NH-16, Chaitanya Knowledge City,
RAJAMAHENDRAVARAM-533 296

Acknowledgment

Sustainable Living Inc

Hiran Prashanth
Environmental Sustainability Auditor

01 August 2022

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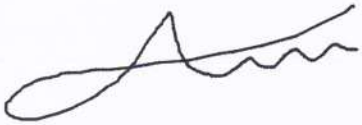
The Sustainable Living Inc acknowledges with thanks the cooperation extended to our team for completing the study at GIET Institutions, Rajahmundry (GIET).

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,



Hiran Prashanth
Environmental Sustainability Auditor
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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 the 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 a 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 implemented rainwater harvesting in the campus. Continuing with rainwater harvesting, the college can also investigate the following recommendations:

- **Attain water positive status:** GIET should focus on capturing the harvested rainwater to substitute freshwater consumption, work on sustainable groundwater beyond the fence and create a framework towards attaining water positive status over a period. Presently, GIET is consuming nearly 200 KL of fresh water per day. Since metering is not available, the water consumption is calculated rather than measure value.

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The first step is to increase the water conservation activities in the campus to reduce water consumption at source. The next step is to increase the rainwater harvesting capacity to completely offset the freshwater requirements of the plant. GIET can also explore adopting lakes, desilting of ponds and restoration of water bodies in localities surrounding the campus. Water getting harvested in those structures can offset the freshwater consumption of the college.

- **Install water efficient fixtures**: The best way to conserve water is at the source. Therefore, GIET will have to install water efficient fixtures to reduce water consumption. Some of the water efficient fixtures are:
    - Waterless urinals
    - Electronic taps (e-taps)
    - Electronic flush urinals (e-flush)
    - Foam taps
    - Spring loaded push taps
    - Low flush cistern
- **Install water flow meters**: Water flow meters are vital in understating the water consumption patterns of the campus. Presently, the water consumption is calculated rather than being measured. Water flow meters gives an accurate status if water consumption in the campus and from the water consumption values, the roadmap for water conservation activities can be prepared.
- **Segregate waste at source**: GIET has provided bins for waste collection. GIET must embark on awareness creation methods to increase the effectiveness of collection and provide more bins for proper waste segregation.
- **Maintenance of waste management yard**: The waste management yard is to be maintained just like raw materials storage room. Waste is nothing but a resource in wrong place. Therefore, by maintaining the waste management yard, quality of wastes can be maintained.

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