



ACHARYA'S NRV SCHOOL OF ARCHITECTURE
SOLADEVANAHALLI, BENGALURU -560107

FACILITY FOR E-WASTE RECYCLING CENTER IN BANGALORE
ARCHITECTURE DESIGN PROJECT (THESIS) – 2023-24

Submitted in partial fulfillment of the Requirements for the
“Bachelor of Architecture” Degree Course

Submitted by : GANJIKUNTA TEJASWINI
USN : 1AA19AT018
Guide : Ar. KUSUMANJALI S

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VISVESHVARAYA TECHNOLOGICAL UNIVERSITY
“Jnana Sangama”, Machhe, Belgaum – 590018

ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಬೆಳಗಾವಿ - ೫೯೦೦೧೮



CERTIFICATE

This is to certify that this thesis report titled FACILITY FOR E-WASTE RECYCLING CENTER IN BANGALORE by GANJIKUNTA TEJASWINI of IX SEMESTER B. Arch, USN No. 1AA19AT018, has been submitted in partial fulfillment of the requirements for the award of undergraduate degree **Bachelor of Architecture (B.Arch)** by Visveshwaraya Technological University VTU, Belgaum during the year 2023- 24.

Guide

Principal

Ar. KUSUMANJALI S

Prof. Ar. SANJYOT SHAH

Examined by :

1)Internal Examiner :

2)External examiner 1 :

3)External examiner 2 :

DECLARATION

This thesis title “FACILITY FOR E-WASTE RECYCLING CENTER IN BANGALORE”, submitted in partial fulfillment of the requirement for the award of the undergraduate of Bachelor of architecture is my original work to the best of my knowledge.

The sources for the various information and the data used have been duly acknowledged.

The work has not been submitted or provided to any other institution/ organization for any diploma/degree or any other purpose.

I take full responsibility for the content in this report and in the event of any conflict or dispute if any, hereby indemnify Acharya’s NRV School of Architecture and Visveshwaraya Technological University, Belagavi, and its official representatives against any damages that any raise thereof.

GANJIKUNTA TEJASWINI

1AA19AT018

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- I would like to acknowledge the critical issue of electronic waste (e-waste), a global concern that demands urgent attention. The understanding of the detrimental impact of e-waste on our environment, health, and communities has been pivotal in shaping the awareness and direction of this [e-waste recycling center]. The need for responsible e-waste management and sustainable practices remains paramount.
- This facility stands as a beacon of innovation, encompassing dismantling, segregation, refurbishing, material-specific storage, testing, and plastic recycling processes. The commitment to regulating informal e-waste handling while ensuring an environmentally friendly process with zero landfill impact is commendable. This initiative sets a remarkable standard for sustainable practices, paving the way for responsible e-waste management globally. Heartfelt thanks to all involved in realizing this transformative and vital endeavor."

ABSTRACT

In an era marked by rapid technological advancement, the proliferation of electronic devices has resulted in a concerning surge of electronic waste (e-waste). This abstract presents a comprehensive overview of an innovative e-waste recycling center, designed to address the environmental and societal challenges posed by the disposal of electronic devices. The e-waste recycling center adopts a multi-faceted approach, integrating cutting-edge technology and environmentally conscious methodologies to efficiently manage, sort, dismantle, and recycle electronic waste. Through advanced sorting processes, the facility segregates e-waste into distinct categories, facilitating the extraction of valuable materials for recycling and reuse. Furthermore, emphasis is placed on environmentally responsible disposal methods for hazardous components, ensuring compliance with stringent environmental regulations. The center aims to minimize the environmental footprint of e-waste while maximizing the recovery of precious resources, contributing to a sustainable circular economy. Collaboration with stakeholders, including manufacturers, policymakers, and the local community, forms an integral part of the center's mission. Public awareness campaigns and educational initiatives are conducted to promote responsible e-waste disposal practices and foster a culture of sustainability.

The e-waste recycling center serves as a beacon of innovation and sustainability, offering a scalable model for addressing the burgeoning challenge of e-waste management while championing environmental stewardship and resource conservation."

KEY WORDS : E-waste , Recycling , Electronics , Disposal , Collection , Hazardous materials , Sustainable , Recycling center , Electronic recycling , Waste management , Repurposing , Environmentally friendly , Circular economy , Recovery , Green technology

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