

GREENUS
GREEN waste management new edUcation
System for recycling and environmental
protection in asia

ECOCAMPUS: Guidelines for replicability

WP2: Pilot Eco-Campus project



INDEX

	Page
1. Introduction	2
2. Steps to be followed	3
3. Risks and success factors	3
4. Short summary of GREENUS Eco-Campus experience	5
5. Conclusions	19

ECOCAMPUS PILOT PROJECT

1. INTRODUCTION

The idea of recycling waste in Vietnam is partially new and not yet rooted in the social behaviour as an important issue. In order to create awareness on this topic is important to inform younger generation but also general public about the consequences of a missing recycling policy and practice.

The central objective of a university solid waste action plan is to maximize resource recovery (i.e. the proportion of solid waste stream recovered for high resource value use), with the corollary that this minimizes waste disposal to landfill. The main strategy is to apply the “waste hierarchy” – avoid purchasing products which will end up as waste, repair and reuse, then recycle, and finally if there are no other options, dispose.

Preliminary research in Vietnam, showed that inside the University campuses a sustainable waste management plan does not exist (see analysis in Eco-Campus Report).

Within GREENUS project, WP2 tried to apply the concept of sustainability in waste management, to create new policies and develop Campus-wide initiatives as part of an Action Plan in each and all of the Partner Country Universities. The idea beyond in fact was to create a small community of people informed about the importance of recycling wastes and to teach them how to do it. In order to put in place the proper strategy, a detailed analysis of needs and collection of scientific data and references has been summarized in the ECOCAMPUS report (please find it here: <https://drive.google.com/file/d/18ZZRVguEYN3yKIBxIMznCbRnXf6QRLr2/view?usp=sharing>).

ECOCAMPUS has been a small pilot project developed inside the campuses of the three Vietnamese Universities involved about the instalment of recycling bins located in strategic points of the campus together with posters than in English and local languages show why is important to separate waste and how to do it in the correct way.

2. STEPS TO BE FOLLOWED

1. Investigate the internal policy of the University about environmental issues and management of waste in the campus, identify the gaps and the points to be updated or integrated.
2. A clear and realistic mission statement will be drafted by each University with respect to waste management on campus.

Read the international guidelines and standards related to campus-waste management best practice all over the world (e.g. The latest version of the Greening Universities Toolkit - Transforming Universities into Green and Sustainable Campuses, developed by the United Nations Environment Programme (UNEP) and develop a ECOCAMPUS sustainability strategy by Reviewing existing internal sustainability policies in Asian and European Universities focusing on waste management. Modification of policies according to each University requirements and development of a draft

sustainable waste management strategy. In order to guarantee the sustainability of the action, University commits to allocate internal staff for the management and maintenance of ECO-CAMPUS at least for the 4 years following the project.

3. Identify the responsible for the waste Management of the Campus and get in touch with them in order to create synergies and find common solutions.
4. Perform a need analysis and map the bins of the campus and make a first report as starting point of waste management in the campus, mentioning all the involved stakeholders (companies, dealing with collections, board of the university, students, Association operating in environmental issues at local level, etc). Develop a stakeholder map based on the following aspects, a) who needs to be involved, b) why do they need to be involved, c) how they should be involved d) what resources are required to involve them.
5. Nominate a Sustainability Committee (University experts) and an Action Team (students).
6. Each University will establish an ECO-CAMPUS Committee (responsible for developing and updating Campus regulations with respect to waste management, performing the SWOT analysis) and an ECO-CAMPUS Action Team (responsible for developing and implementing the Action Plan)
The ECO-CAMPUS Action Team will perform a qualitative and quantitative assessment of waste management in each Campus. This assessment will be used by the Committee to perform a SWOT analysis, set measurable targets and establish specific monitoring indicators.
7. Awareness and training: Before the implementation of the Action Plan, two separate training programs will be developed: 1. for staff and 2. for students. The first group of trained staff will form the ECO-CAMPUS Committee and the first group of students will become members of the ECO-CAMPUS Action Team. A list of potential training activities is provided in the Eco-Campus Report.

The Action Plan will need to incorporate a communications strategy to facilitate engagement of the University community and maximize the chances of success for the Eco-Campus project. Towards this purpose, ISO 14063: 2006 Environmental management – Environmental communication, will be used. A potential list of Dissemination and Communication Activities is provided in the Eco-Campus Report. Dissemination and Communication initiatives will be delivered in English and the national language.

3. RISKS AND SUCCESS FACTORS

3.1 RELATED ASSUMPTIONS AND RISKS

A 2.1 University staff and students are willing to improve the environmental sustainability of their institution

A 2.2 Waste production in Campus and the related threats to the environment have increased, so there is need for action

A 2.3 Local, regional and national legislation allows for the development and implementation of waste management initiatives in University Campuses

A 2.4 Basic funding is available to start

- R 2.1 Lack of interest and awareness by staff and students
- R 2.2 Universities are slow in developing a sustainability policy
- R 2.3 Lack of interest from external stakeholders
- R 2.4 No agreement signing with recycling companies
- R 2.5 No space for pilot-scale composting on Campus

- Mit. 2.1 Delivery of more motivation meetings and training for staff/ develop a reward program for students who follow sustainable practices, in order to motivate them.
- Mit 2.2 Delivery of presentations to University officials, providing real time info of successful Eco-Campus projects across the globe.
- Mit. 2.3 Provide more opportunities for external stakeholders to participate in this project, according to the capacity, knowledge and expertise.
- Mit. 2.4 Offer the recycling companies Campus space to advertise their products.
Establish small-scale home composting bins, as demonstration only units.

3.2 SUCCESS FACTORS

Can Tho University

The need to implement an Eco-campus project in CTU can be addressed as follows:

- **Environmental protection:** The project promotes sustainable practices such as waste reduction, recycling, and composting, which help to protect the environment.
- **Cost savings:** The project reduces waste disposal costs and also generates income through the sale of recyclable materials and the use of compost for planting vegetables.
- **Community engagement:** The project encourages students, staff, and stakeholders to actively participate in environmental protection activities and fosters a sense of community.
- **Improved aesthetics:** The project improves the appearance of the campus through the installation of green spaces and the reduction of waste.
- **Educational opportunities:** The project provides educational opportunities for students and the community to learn about environmental issues and sustainable practices.

Ho Chi Minh City University of Technology:

The idea of recycling waste in Vietnam is partially new and not yet rooted in social behaviour as an important issue. In order to create awareness on this topic, it is important to inform not only the younger generations but also the general public about the consequences of a missing recycling policy and practice. An Ecocampus, or ecological campus, offers several benefits that contribute to sustainability and environmental responsibility.

Ecocampus is suitable for our university vision to be globally recognized as a leading university in the region as to training, learning, research, and innovative startup activities. The project fits in very well with 3/5 core values of the university, such as (1) the moral qualities, thinking, and skills of students; (2) the spirits of pioneer, startup, innovation, globalization in training and scientific research; and (3) the tradition, culture, quality, and international accreditation. This project also supports our university missions of training the human resources of international quality, creating new knowledge via scientific research and innovation, and performing social responsibilities.

Hanoi University of Science and Technology

ECOCAMPUS is a small pilot project implemented in HUST and other two technical universities in Vietnam under the framework of the Erasmus+ GREENUS with the aim of inspiring university community to embrace sustainability. This pilot project introduces recycling bins with informative posters, guiding students and staff on waste separation. At ECOCAMPUS's core is a ECO-CAMPUS action plan to avoid wasteful products, encourage repair and reuse, promote recycling, and responsibly dispose when necessary.

ECO-CAMPUS Project helped to enhance capacity for HUST in building a green and clean campus, a healthy and convenient working/ studying environment for staff and students. Accordingly, ECO CAMPUS has increased HUST's community engagement and contributions towards its strategic goals of sustainable development. In fact, HUST was selected as Finalist for the 2023 International Green Gown Awards, in association with Allianz Global Investors, the category "SUSTAINABILITY INSTITUTION OF THE YEAR" with the implementation of the GREENUS ECO-CAMPUS Pilot Project.

In Vietnam, recycling is in early stages, and ECOCAMPUS Project is indeed to enlighten the university community and especially the young generation, about the importance of waste classification and recycling towards environmental responsibility. **Imagine your campus as an environmental hub, managing waste strategically. Adopt ECOCAMPUS, make it replicated in your institution, enhance your environmental impact, and instil eco-consciousness in future leaders.**

4. SHORT SUMMARY OF GREENUS ECOCAMPUS EXPERIENCE

Can Tho University

Several key steps that CTU has implemented for the Eco campus project are listed out as follows:

Step 1: Forming the action team members for the Eco-campus project

This step aims to establish a dedicated team of students focused on building a sustainable environment within the CTU campus.

Step 2: Developing the action plan for the Eco-campus project

This step not only outlines specific activities to be implemented, but also outlines objectives, target groups, and timeline for the implementation and completion of the Eco-campus.

Step 3: Presenting the action plan to the Greenus project experts and Waste Management Unit of the CTU campus.

This step aims to seek approval from the Greenus project experts and the Waste Management Unit of the CTU campus by presenting the action plan.

Step 4: Implementing the proposed action plan at the CTU campus.

This step allows the Action team to implement the approved action plan into practice at the CTU campus.

Step 5: Long-term commitment with the Waste management unit for maintaining the action plan.



This step ensures the ongoing maintenance and success of the implemented action plan from the Action team and Waste management unit at the CTU campus.

CTU has implemented several activities as part of the Eco campus project with an aim to move towards a more sustainable environment within our campus.

Activity	Purpose	Contents	Target group	Results
<p>Activity 1: Raising environmental awareness among the community</p>	<p>This activity focuses on educating staff and students about the harmful effects and serious consequences of waste on the environment.</p>	<ul style="list-style-type: none"> - Designing color-coded labels and posters to promote waste separation. - Delivering labels and posters for cleaning staff and students on the campus. - Delivering labels and posters for cleaning staff and students outside the campus (high schools, primary schools in Can Tho city) to attract more people involved in the project. - Designing a Facebook fan page to raise awareness among the community about environmental protection - Hosting the Greenus Info-day to introduce the action plan for the Eco-campus to students and staff. - Hosting activities such as planting trees, sweeping, and picking up trash around the campus. 	<p>Action team members, students, and staff.</p>	<ul style="list-style-type: none"> - A Facebook fan page is created to promote environmental protection in the community (Link). - Hundreds of students and staff in and outside the CTU campus acknowledged the importance of environmental protection and waste separation practices.


<p>Activity 2: Waste separation implementation inside the campus</p>	<p>This activity aims to promote and encourage proper waste management practices among the campus community.</p>	<ul style="list-style-type: none"> - Conducting surveys among students and staff to identify suitable locations for placing dust bins on the campus. - Contacting the facility department and Waste Management Unit to ask for permission to place dust bins in their designed locations. - Attaching the color-coded labels to four separated dust bins with an aim to encourage proper waste disposal. - Installing these dust bins into designed locations. 	<p>Action team members, students, and staff</p>	<ul style="list-style-type: none"> - 50 sets of dust bins with color-coded labels are properly installed in 50 locations on the CTU campus.
<p>Activity 3: Establishment of a second-hand store at the CTU campus.</p>	<p>This activity aims to encourage students to take an active part in reducing waste and protecting the environment.</p>	<ul style="list-style-type: none"> - Contacting the facility department and Waste Management Unit for permission to establish a second-hand store. - Promoting the second-hand store event on Facebook or other social media to encourage repairable and reusable products, and to attract more people to visit the event. - Preparing gifts for those who exchange reusable products - All repairable and reusable products after the event are delivered to collector units for recycling. 	<p>Action teams, students, and staff.</p>	<ul style="list-style-type: none"> - Hundreds of students and staff on the CTU campus visited the event. - Various recyclable products such as old notebooks, books, electronic devices, and bottles are collected during the event.


<p>Activity 4: On-site composting of organic waste</p>	<p>Rather than transporting organic waste to landfills or incineration plants, this activity aims to reduce waste generation while utilizing it for making compost.</p>	<ul style="list-style-type: none"> - Contacting to the facility department for permission to determine the suitable area for a compost bin. - Having a close connection with coffee shops and canteen on the campus to collect kitchen waste regularly. - Transporting organic waste to the composting area for making compost. - Using high-quality compost for planting vegetables on campus. 	<p>Action team members, students, and staff.</p>	<ul style="list-style-type: none"> - About 1.5 tons of kitchen waste in CTU are used for making compost - Hundreds of kilograms of high-quality compost are used for planting vegetables - Hundreds of kilograms of vegetables are collected.
<p>Activity 5: Attending the Green Gown Award International</p>	<p>This activity provides an opportunity to enhance the visibility of CTU following the successful implementation of the action plan</p>	<ul style="list-style-type: none"> - Completing a form that addresses the implemented activities for sustainable development. - Submitting the form on the Green Gown Award's website. 	<p>Action team members</p>	<ul style="list-style-type: none"> - CTU is awarded for sustainability institution of the year.


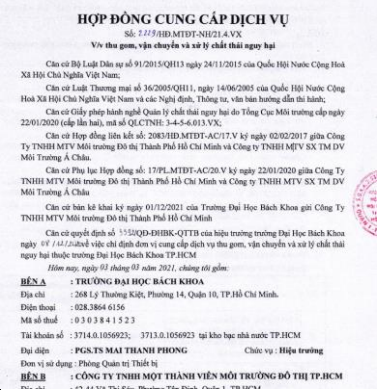
Ho Chi Minh City University of Technology

HCMUT is trying to promote the following sustainable procurement practices at our campus with these activities as below:


NO	OBJECTIVES	TASKS	DESCRIPTION	TARGET GROUPS	DATE TO START	DUE DATE
1	RAISING AWARENESS OF WASTE MANAGEMENT	1.1. Preparing promotional documents on waste classification and management	All wastes produced will have corresponding labels. It is a legal requirement that any waste produced sent for recycling, or disposal must be correctly classified using recycling/nonrecycling bins.	project members teaching staff	01/12/2021	30/03/2022
		1.2. Circulate the documents on waste classification to the university's staff and students	<p>1. Promote for students/teachers in university to reduce the use of nylon bags, plastic bottles (transparent chat, pet, cans), plastic straws, etc. to replace them with environmental packaging, stainless steel straws, and drinking bottles. Media with poster design. Posters are posted at self-study areas of students, libraries, canteens, ...</p> <p>2. Launching a video contest about Green Campus for school students to raise students'/teacher's awareness in waste classification.</p>	<ul style="list-style-type: none"> - Teaching staff - Researcher - Administrative staff - Technical staff - Librarians - Supporting staff - Students 	01/12/2021	30/03/2022

<p>SHORT REPORT OF ACTIVITIES IMPLEMENTED</p>	<p>The implementation of the Eco-Campus initiative at HCMUT involved the creation and distribution of promotional materials on waste classification and management. These materials aimed to raise awareness and promote sustainable waste disposal practices among staff and students. Through online and offline channels, the initiative sought to foster an environmentally responsible culture inside and outside the campus community. Some important activities for Eco-campus at HCMUT can be summarised as follows:</p> <ul style="list-style-type: none"> • Design a brochure, leaflets and labels for waste classification. • Raising people’s awareness and training on-campus staff and students about waste classification: (1) GREENUS Team visited the university’s offices, student centre, canteen etc. to explain directly to staff and students about the important of waste segregation and how to classify wastes; (2) Circulate the training materials to HCMUT staff and students and hang out posters to promote the waste classification practices: (3) Organise “Bin it right” Game at the GREENUS Exhibition to get local staff & students of HCM city and employees of partner companies play the games and instruct them on waste classification’ (4) Organise Technical Days: “<i>Online Technical day 2022_Zero Waste in My Campus and Green Life</i>” and “<i>Offline Technical Day_Only One Earth</i>” in which students presented their ideas and initiative projects on environmental protection. 					
<p>PICTURES</p>						
<p>LINK TO DRIVE FOLDER WITH ADDITIONAL MATERIAL (Agenda, posters, invitations, signatures, etc)</p>	<p>https://docs.google.com/presentation/d/19q5aGqb5V6pRXXNFYfXnH5rpaUwSGLK0/edit#slide=id.p1</p> <p>https://drive.google.com/drive/u/0/folders/1lhoiHXJXq707jbnci7GCYgK2hXGbhMST</p>					
<p>NO</p>	<p>OBJECTIVES</p>	<p>TASKS</p>	<p>DESCRIPTION</p>	<p>TARGET GROUPS</p>	<p>DATE TO START</p>	<p>DUE DATE</p>

2	IMPLEMENTING THE WASTE CLASSIFICATION IN THE CAMPUS	Installation of different colour garbage bins in campus locations	Organize the recycling bin decal design competition. Promote students creative and spread awareness about recycling rights. Show students ideas for recycling bin decals in this contest and stand to win attractive prizes.		01/10/2022	30/12/2022
SHORT REPORT OF ACTIVITIES IMPLEMENTED		The installation of colour-coded garbage bins in the FERN site at HCMUT campus is a vital step in implementing the Eco-Campus initiative. By providing clear visual cues and promoting waste segregation, these bins encourage staff and students to adopt responsible waste disposal practices. Coupled with awareness campaigns and regular maintenance, the initiative fosters a culture of sustainability and environmental stewardship within the HCMUT community, contributing to a greener and more eco-friendly campus environment.				
PICTURES						
LINK TO DRIVE FOLDER WITH ADDITIONAL MATERIAL (Agenda, posters, invitations, signatures, etc)		https://drive.google.com/drive/u/0/folders/1mQWGcioSIEHb9Lw2JFLWnH5oImWLQnLn				
NO	OBJECTIVES	TASKS	DESCRIPTION	TARGET GROUPS	DATE TO START	DUE DATE
3	Establishing cooperation to improve waste management and recycles	3.1. Meetings with the local/regional recycling industry to establish cooperation forwarding recyclables	Organize a workshop to exchange information of stakeholders, and propose solutions for sustainable solid waste management at the university	<ul style="list-style-type: none"> - Teaching and administrative staff - Industry - Governmental offices/departments 	15/03/2022	30/04/2022

		3.2. Collaborating with CITENCO in waste collection and disposal process	Sign the contract with the company. The waste transportation and waste treatment is done by CITENCO (Ho Chi Minh City Urban Environment Company Limited).	- Teaching and administrative staff - Company	done	done
SHORT REPORT OF ACTIVITIES IMPLEMENTED		<p>HCMUT also engaged with the local industry to discuss career opportunities in environmental management and partnering with CITENCO (https://www.citenco.com.vn/) for waste collection and disposal processes:</p> <ul style="list-style-type: none"> In 2022, HCMUT organised a “GREENUS Talk Show” for students with representatives from INSEE Vietnam and CITENCO specialising in environmental management. These discussions aimed to raise awareness about career opportunities in this field, providing insights into the industry's demands and future prospects. The University signed a contract with CITENCO, a reputable waste management company. This partnership ensures a systematic waste collection and disposal process on campus, promoting efficient and sustainable waste management practices. 				
PICTURES		 				
LINK TO DRIVE FOLDER WITH ADDITIONAL MATERIAL (Agenda, posters, invitations, signatures, etc)		<p>https://drive.google.com/drive/u/0/folders/17SBzcWxY8BhNoKkoq4mDJE2hV1Nd4PVQ</p>				
NO	OBJECTIVES	TASKS	DESCRIPTION	TARGET GROUPS	DATE TO START	DUE DATE
4	Promoting recycling activities	4.1. Developing the entrepreneurship club to promote the repair and reuse of products	Launching a university competition on "Green Waste Initiatives at school in the direction of Zero Waste".	Staff and students	02/09/2022	30/12/2022

		<p>4.2. On-site, pilot-scale composting of food and "green" campus residues</p>	<p>Students have opportunities to do experiments in lab, the pilot-scale for composting of foodwaste.</p>	<p>Staff and students</p>	<p>02/09/2022</p>	<p>30/12/2022</p>
		<p>4.3. Detailed electronic waste and chemical waste audit</p>	<p>At HCMUT, the controlling hazardous waste are identified by the Sustainability Team and applied to by the appointed contractor to all Duty of Care documentation. For chemical and electronic waste disposal, the waste is determined by the contractor-appointed chemist prior to disposal. University staff are not permitted to coordinate waste disposals independently outside of the remit of the current contract. Staff must contact CITENCO for guidance.</p>	<p>Staff and students</p>	<p>01/09/2022</p>	<p>01/09/2022</p>
<p>SHORT REPORT OF ACTIVITIES IMPLEMENTED</p>	<ul style="list-style-type: none"> • HCMUT developed an entrepreneurship club aimed at promoting the repair and reuse of products. The Bach Khoa Green Innovation (BKGI) Club was founded with an aim to create a dynamic environment for science-enthusiasts and innovative creativity. This club was especially dedicated to many social and sustainable values. It also provided a platform for students to exchange knowledge and skills related to repairing and repurposing items, fostering a culture of sustainable consumption. • A pilot-scale composting project was implemented on campus to process food waste and other "green" residues. This initiative aimed to reduce organic waste sent to landfills and instead produce nutrient-rich compost for campus landscaping or community gardening projects, contributing to a circular economy and waste reduction. • Two handbooks on electronic waste and hazardous waste management were prepared to educate and guide the campus community. These handbooks provided information on proper disposal methods, potential environmental impacts, and the importance of responsible handling of electronic and hazardous waste. 					

<p>PICTURES</p>	
<p>LINK TO DRIVE FOLDER WITH ADDITIONAL MATERIAL (Agenda, posters, invitations, signatures, etc)</p>	<p>https://drive.google.com/drive/u/0/folders/1lhoiHXJXq707jbnci7GCYgK2hXGbhMST</p>

Hanoi University of Science and Technology

The Eco-Campus approach is based on the latest version of the Greening Universities Toolkit - Transforming Universities into Green and Sustainable Campuses, developed by the United Nations Environment Programme (UNEP). This Greening Universities Toolkit is designed to provide universities with the basic strategies and tactics necessary to transform themselves into green, low carbon institutions with the capacity to address climate change, increase resource efficiency, enhance ecosystem management and minimize waste and pollution.

The Eco-Campus project has been carried out at HUST during the Erasmus+ GREENUS Project (2021-2024) following steps and results below:

1. Mission statement from the University (completed 10/2021)

The Mission Statement and development of Eco-Campus policy strategy are the first step and main tasks of the Eco-Campus pilot project. A mission statement has been adopted by each involving university as a statement of their vision for the future, as a mission is more realistic than a vision. The mission statement is about what the university plans to do rather than what it wants to be. It helps explain the motivation for the vision, and it should answer (in general terms) the questions who, what, and why, and lay the foundation for future action.

In the case of campus sustainability and waste management, a commitment to an external agreement can provide the basis for a University to develop its own internal sustainability vision and policy. In this view, a clear and realistic mission statement has been successfully elaborated by HUST with respect to waste management on campus by October 2021.

2. Identification and engagement of University stakeholders

A stakeholder map was developed for the university, based on the following aspects, a) who needs to be involved, b) why do they need to be involved, c) how they should be involved d) what resources are required to involve them.

3. Establishing an ECOCAMPUS Committee and Action Team

The ECOCAMPUS Committee (responsible for developing and updating Campus regulations with respect to waste management, performing the SWOT analysis) and an ECOCAMPUS Action Team (volunteer students responsible for developing and implementing the Action Plan) were established under the supervision of the ERASMUS+ GREENUS. The ECOCAMPUS Action Team has performed a qualitative and quantitative assessment of waste management in the Campus by developing its Action Plan for building a Eco-Campus. This assessment is also used by the Committee to perform a SWOT analysis, set measurable targets and establish specific monitoring indicators.

4. Elaboration of Dissemination materials:

Information about the pilot Eco-campus project is available at the website <http://greenus-project.eu/>, facebook of the GREENUS projects as well as in related news and articles of the University. Labels for bins, newsletters were designed by Action Teams and used to label waste separation bins located in public and crowded places in the campus to approach and raise the awareness of university staff and students.

5. Raising people awareness about waste management (starting from 11/2021)

- The GREENUS project organized an Info Day event (blended) at School of Environmental Science and Technology (INEST), HUST with the participation of nearly 300 staff and students and some industry stakeholders to present the initiative of building a pilot Eco-campus at HUST, the importance of a green campus and also highlighted the activities to be taken to create a more environmentally friendly campus.
- Training Staff and students in the Eco-Campus Committee and Action Team through various seminar on waste management coordinated by Sapienza University of Roma, Jagiellonian University, Hellenic Mediterranean University with the participation of many big EU companies working in the field of waste management and collection;
- Under the support of EU partners of GREENUS project, The university has successfully taken an active approach towards waste management education by organizing numerous courses on green policies, waste management, recycling processes, treatment of urban solid waste, and energy from waste conducted by lecturers of the university. These courses are offered for free to all students and are held every semester for added convenience. Through these courses, not only action team members but also other students are encouraged to gain awareness and understanding of waste management. Lecturers provide practical and valuable knowledge on the detrimental effects of waste on the environment and public health, as well as the utilization of waste to recycle new products or generate green energy. Visual aids such as videos, pictures, and charts are also used to provide meaningful insights into waste management. Therefore, many students are willing to attend and share their thoughts about waste through their presentation.
- Organizing a campaign to share information among staffs, students and family members (with posters or pictures) at the university: the annual university event of the 2022 named “The BK family Day” with the theme “GREEN HUST – DREAM EARTH” was organized on September 11th, 2022 with the participation of more than 1000 university staff their family at HUST with the purpose of disseminating the importance of surrounding environment protection & working environment at HUST, waste recycling and waste separation in schools and households to young children, main objectives of ECO-CAMPUS Project. The Event attracted the participation of more than 1000 HUST staff and around 1500 staff children. Many activities including jogging march,



go green, group dancing, DIY competitions for children and their family members...were held during the event

- Set up a second - hand store operated by the Action Team in campus to promote repair and reuse of products;
- Launching a video contest about Green Campus for school students to raise students'/teacher's awareness in waste classification.

6. Implementing pilot waste separation inside and outside the campus:

About 50 recycling bins with *informative labels in different colors, guiding students and staff on waste separation* were newly installed in various areas throughout the campus. Each location was carefully chosen based on the level of waste concentration and the population of students in each area. With the proper labelling and strategic placement, the dust bins have supported in a proper way to promote waste management and build a more sustainable campus environment.

5. CONCLUSIONS

The ECOCAMPUS experience in the three Vietnamese universities has shown how the project has been able to implement a series of activities with great benefit for awareness on proper waste management, education, stakeholder involvement and to a small extent also on environmental impact.

The activities involved several levels, that of the policies, with the adoption or improvement of the sustainability plan by the university bodies that committed themselves, by signing a letter of commitment to maintain the activities implemented with good feedback on the sustainability of the project.

Another very important plan was the involvement of people outside the universities, such as the families at the Family Day organised by HUST, the training days at schools organised by CTU or the Meetings with the local/regional recycling industry organised by HCMUT, which brought knowledge outside the universities, to the private and public sector, ensuring a multiplier effect and bringing people without specific technical skills closer to a more sustainable way of considering waste.

Participation in ECOCAMPUS also brought excellent results in terms of international visibility as all three Vietnamese universities were invited to present their activities and apply for the International Green Gown Awards 2023, which recognize the exceptional sustainability initiatives undertaken by the universities and universities around the world and have positioned themselves as finalists.

The GREENUS project team hopes that this example can be replicated not only by other Vietnamese universities but in all countries where there is still a need to spread knowledge, awareness and good practices on correct waste management in order to contribute to avoiding waste, promoting recycling and making our cities increasingly better environments to live in.