

# Towards Environmentally-Friendly Educational Institutions

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## Abstract

*Resource over-exploitation in order to achieve development often leads to companies ignoring environmental factors as a part of the development process. The environmental damage that continues to happen nowadays can no longer be tolerated; therefore, there needs to be a collaborative effort to preserve the environment as a natural resource. The role of education is very important in increasing the people's awareness and concern for environmental preservation. Since 2007, the Open University has begun to implement a sustainable environment management program with the Go Green Open University motto. However, in practice, the Open University Green Metric ranking as one of the university environmental performance measures has not increased much and has remained in the 429th place. Therefore, there needs to be acceleration by first conducting an evaluation as an effort to improve the future working program. The study revealed that the implementation of the Open University Go Green program has not been running well because a planned and measured environmental management program involving all the organic elements and the stakeholders does not yet exist. On the other hand, the executing organization of the Open University Go Green program is still an ad hoc committee and is not yet accommodated in the Open University's organizational structure and has not made the Open University Go Green program a performance measurement of the unit itself and other units.*

**Keywords: environmental conservation, performance, Open University Green Metric**

## Introduction

Nowadays, the environment is no longer simply an object for development. In the development concept by the United Nations, it is stated that one of the aspects that need to be given priority in development is fulfilling the needs and wants of all the communities in the world with consideration of the diversity in culture and the balance between the environment and the human race. On the other hand, the population growth will accelerate and increase human needs. In order to fulfill these needs, production needs to be increased by increasing either the production capacity or by encouraging the establishment of new companies. The rapid growth of companies will accelerate the competition between companies in obtaining resources and access to consumers.

Over-exploitation of resources in the effort to achieve growth cause companies to often overlook the environmental factor as a part of the growth process. This condition leads to the decrease in the environment's capacity to regenerate itself naturally. As a result, environmental damage is inevitable if the behavior of treating the environment as an object of growth is continued. Changes in the natural environment or natural resources signified by the extensive damage to the environment such as flooding, landslides, drought, and the decreased environmental capacity and the increased consumption needs of the global community requires a change of paradigm from consumption to the sustainable growth of a green economy (Trica and Papuc, 2013).

UNESCO (2006) in its report stated that at the moment, many groups have become aware that the current economy is not sustainable. Community awareness, education, and training are the keys to driving the people towards sustainability. Littledyke, Manolas *et al.* (2012) state that one of the important roles of higher education is for the conservation of the environment. The role of universities in both education and research can encourage the implementation of sustainability in various sectors. Galang (2010) stated that many aspects of university life enable universities to point the direction of their students' development in increasing their awareness and concern for the environment. Moreover, various components of universities both directly and indirectly can have active roles in becoming a driving force of awareness and concern for the environment. Environmental management is a long-term effort that requires hard work. Therefore, the success in preservation and conservation will be strongly determined by how adolescents can receive different forms of education which could increase their concern for the environment. This condition requires a new and productive relationship between multiple components, including the community, teachers, students, and also the teaching and learning system. On the other hand, the high operational cost for education has continued to increase in many countries (Comm and Mathaisel 2005). Therefore, there need to be efforts to decrease the operational cost of education without compromising the quality. One of the efforts to increase the efficiency and decrease the environmental impact is through green management or environmental management (Behson S, 2011).

Since 2010, Open University has launched an environmental management program in the Open University campus with the slogan "Open University Go Green". Open University Go Green is a realization of green management and is the Open University's actualization of one of the national education roles, being responsible for the environment. At present, Open University Go Green has become a part of the Open University's strategic plan in the Open University's effort to become a World Class University. One of the requirements of a World Class University is the higher education's role in Education for Sustainable Development (ESD).

The Open University Go Green program is not only related to environmental management but is also aimed to increase the efficiency of managing long-distance higher education. Therefore, the Open University Go Green program must be able to change the behavior of its employees and the entire academic community to behavior that reflects the sustainable development principle and environmentally friendly development. The early phases of the implementation of the Open University Go Green program were focused on the physical environment of the office buildings in the Open University Head Office. In the long and medium term, the Open University Go Green program will include the all Open University and Open University long distance teaching and learning units all over Indonesia. The end goal is to implement Open University Go Green in all the academic activities such as research, teaching, and community services. The effect of the Open University Go Green program will mobilize the community and all of Open University's stakeholders to apply living principles which are concerned with environmental and natural resource conservation. Consequently, the Open University will play a role in conserving the environment and decrease global warming and make the Open University a World Class University. However, since the launching of the Open University Go Green program, there have been very few benefits for the Open University civitas akademika. This condition was mentioned by Mader, Scott *et al.* (2013), observing that only a little attention was given to ensure that the entire program development that had been planned could run well or could be successfully implemented in continuously. To guarantee the successful implementation of a new program, 3 things need to be considered:

- A brilliant idea that is not supported by an idea of how to implement it will be useless;
- Change does not happen on its own; change can happen if there is leadership;
- It is not only where we want to go, but how can we get there

So, the Open University's success in changing through Open University Go Green will be strongly influenced by how the Open University integrates the Open University Go Green target-reaching plan in its future working plans and its efforts to improve the current Open University Go Green program. Fadeeva and Mochizuki (2010) also asserted that the success in implementing sustainable development is determined by how much the sustainable development program is integrated into the system and not simply running the program partially or separately.

## **Methodology**

This study is an evaluative study with a qualitative approach. Evaluative studies are studies which aim to assess how much an implemented program has achieved. Based on its purposes and the study scope, this evaluative study is a formative evaluative study. In evaluating the program, three instruments were employed: a comparative study of a different educational institution (ITS), interviews with the unit responsible for

implementing the Open University Go Green program, and a literature review of environmental management assessment methods. The interview respondents were determined using a snowball method, by determining one or more informant, in this case, the person(s) who formulated the Open University Green Management policy, and then based on this person's information, other informants were determined.

## **Results and Discussion**

### **Open University Go Green at Present**

The Universitas Terbuka (Open University)'s concern for environmental conservation basically began under the leadership of the fourth Rektor Open University, Prof. Dr. Atwi Suparman, M.Sc. However, the realization of Open University Go Green only began in 2010 when the Open University was under the leadership of the fifth Rektor, Prof. Ir. Tian Belawati, M.Ed., Ph.D. In the 8 years of the fourth Rektor Open University, Open University started to build a clean culture through the "Clean Desk" program. Clean Desk is a program where employees are expected to complete their tasks as quickly and as well as possible. This working culture encouraged the employees to create a clean environment and also improved their productivity. Once all the tasks are completed, there are no more piles of work on their desks and their working environment becomes clean and comfortable without piles of work and clutter. All the clutter is cleared, trash is disposed of and everything else is returned to filing cabinets. The head of the Open University's concern for the environment was also shown in the replanting program which was related to rare plant conservation. This was conducted as an annual event through the Open University's anniversary event every September. In this event, the Head of the Open University planted rare plants from various place in Indonesia on the grounds of the Open University. This was not only to replant the Open University campus and conserve rare plants but also to reflect the diversity and range of the Open University's services which is seen in the presence of the Open University in every province in Indonesia.

Before 2010, the Open University's environmental management program (PPL-UT) was not yet conducted continuously. It was only a part of the community services program or a Corporate Social Responsibility program of the Open University (CSR-UT). This made the purposes of the PPL-UT in building an environmentally friendly organizational culture and community difficult to achieve. To build such a culture, a program which is run continuous and involves all the stakeholders of the Open University is required. Moreover, the program must be part of the Open University system so that it could be run regularly and purposefully with measurable goals which could provide added value for the Open University socially, culturally, and economically. In many cases, it has been proven that one of the failures in applying sustainable environmental management is the incentives or benefits that are not obtained/enjoyed by all the elements involved in the program. Sustainability can only be reached when the three

pillars of sustainability are implemented: environment, economy, and social aspects. Reliantoro (2012) believed that no matter how great a concept might be it would not run smoothly if an intensification system which could encourage the stakeholders to implement it seriously is not applied.

Since 2010, PPL-UT has begun to be organized in a single program the “Open University Go Green” under the initiative of the head of the Open University and a group of environmentalists in the Open University. As with other environmental management programs, Open University Go Green is an environmental management program in the working scope of Open University where all the working activities in the Open University environment are always attentive to the effectiveness and efficiency of resource utilization and the sustainable development and environmentally friendly principles (sustainable and environmentally friendly development). The Open University Go Green concept would increase the awareness and concern of all the members of the Open University, both the Open University Head Office and Long Distance Learning Units, to be involved and be responsible for saving the environment by conserving energy and natural resources, applying Working Safety and Health (*Keselamatan dan Kesehatan Kerja* (K3)), and having concern for replanting and aesthetics.

To date, the Open University Go Green program that has been implemented by the Open University is energy saving through an energy saving campaign to all the members of the Open University. Forms of energy saving that have been applied include saving electricity, water, and paper. In addition, the Open University Go Green program has also created an open space that is green, clean, and comfortable as an effort to promote workplace safety and health. In waste management, the Open University has provided a number of facilities and infrastructure to process liquid and solid waste. For liquid waste, the Open University has a liquid waste processing installation, even though it no longer works. As for solid waste, a waste bin divided into three categories, plastic waste, waste food, and waste paper, has been established in each unit. However, the waste classification into these categories is not yet well executed. The trash from each unit is still mixed between plastic, food scraps, and paper (Wahono, 2010).

To encourage the environmentally friendly behavior in the members of the Open University, a cleanliness competition is held annually at both the individual level and unit level. In addition, since 2015, the Open University has become part of the UI Green metric, a Green Campus assessment method initiated by the University of Indonesia which is applied worldwide based on conditional criteria and higher education institutional policies related to the sustainability issue and Green Campus measurements for all the higher education institutions in the world. In 2016, the Open University was in the 429th place out of 516 educational institutions assessed. The 2017 rank is still under assessment.

## Discussion

The Environmental Management Program (Open University Go Green) has covered the three environmental management categories: liquid and solid waste processing, energy saving (solar system), and green building, which includes architecture, spatial planning, and green open spaces in the Open University which has covered more than 30% of the area of the Open University Head Office. Nevertheless, the Open University Go Green has not yet improved the ranking of the Open University in the UI Green metric and has yet to encourage environmentally friendly behavior in all the members of the Open University.

The limited achievements of the Open University Go Green program are due to the limited involvement of the members of the Open University in this program. At the moment, the executor or party in charge of the Open University Go Green program is only a team appointed by the Head of the Open University LPPM. As a team under the Head of the LPPM, the team's power or ability to mobilize all the elements in the Open University in executing the Open University Go Green program would be severely limited. Moreover, the focus of the team members to be actively involved in this activity would also be limited, because all the team members have main responsibilities in their own units. This condition will become apparent when there is an invitation to the team members for working on a work plan or a team activity; only a few of the team members would be present. The team members' sense of belonging is still poor. A similar problem was experienced by UP4 ITS at the beginning of their environmental management program. The following are their statements pertaining to the situation.

*“Smart Eco Campus was initiated in 2011. Back then, the Rektor created a strategy or future work plan. Smart Eco Campus was one of the strategic programs in the previous Rektor's period. So, the priority program was the eco-campus program; therefore, a new unit, which was called BKPKP in the past, was created to handle the eco-campus issues. One of the members was Ms. Dian. Being part of the organizational structure is a bit different from not being part of the organizational structure. By being part of the organizational structure, eco-campus could become a priority program”*

As part of the organizational structure, UP4 had specific tasks and targets which were stated in the work plan that had been agreed upon collectively. The working plan was then included as part of the institution's working plan.

In the Open University, the weakness in the delegation of responsibilities to the team in executing the strategic programs was also admitted by the Head of LPPM- UT. The limited human resources and regulations are obstacles for organization development. The following is the statement from the Head of LPPM:

*“If we are talking about which unit is the most suitable, it might be PPM. However, it is about passion. If it is treated like a task, you won't be enthusiastic. While in order*

to go green you need to care, enjoy it .... So, probably PPM needs to form a TEAM that really cares about the environment for maybe when they need a budget *it could be accommodated by PPM*. But the people themselves probably won't be from PPM only, because, to be honest, we are understaffed. We don't have enough people who care about the environment. For instance, our program where we classified trash in the units is no longer working. It should be revived."

*"Ideally, there should be a special division for that, but we must be realistic, I mean we don't have that many lecturers, all LPPMs anywhere in Indonesia should have a HAKI division. It's huge, but we don't have one, so it is simply a part of the LPPM guideline. But because we don't have enough people to take care of it, we prioritized it. As with the go green program, if we only had enough staff, we could design 1 division that focuses solely on it so that the program could run optimally in a more structured way."*

Basically, the formation of a team in supporting the implementation of a certain program is common. Sobirin (2015) stated that a team performance will be influenced by external and internal factors. The external factors that could influence a team include organizational strategies, organizational structure, formal regulations in the organization, and task evaluation and the reward system in that organization. For teamwork, external factors are inevitable as teamwork is part of an organization. On the other hand, internal factors which have an impact on team performance are resources, structure, activities within the team, and the responsibilities entrusted to that team.

As contained in the statement by the Head of the LPPM above, other issues that need to be given attention in the implementation of the Open University Go Green program are the sustainability of the program and the planning of the program to be implemented. Reliantoro (2012) stated that the sustainability of the implementation of a program will be determined by the incentive received by the program. Meanwhile, another factor that is no less important is the involvement of various elements within the organization. There needs to be an awareness that the environmental management program is not only the responsibility of one unit in an organization but is also connected to how other units implement the program. For example, the waste classification in each unit which is a part of the solid-waste-management program. Even though facilities to classify trash have been provided in each unit, in reality, this program is not running well. Participation of all the community members is indispensable. For this, an awareness building program is required. A continuous program in building the community's awareness and concern is needed. The following is the statement from Ms. Agnes, ITS's corporate secretary, pertaining to the involvement, incentives, and intensity in community awareness building.

"Obstacles will always be present whenever we want to implement an activity, of course, *there will be pros and cons* related to the *go green program at the*

*beginning. We involved the students, too, so we invited all the student himpunan<sup>2</sup> in implementing the go green program. Usually, students have levels they need to go through, for example, they have to go through the Public Relations. Then there are delegations from each unit to be involved in this activity and they are divided into zones. So, the public zone we usually distribute, but the zone belonging to a department will have a person in charge. Or control from ITS.*

*We have what is known as the eco-campus bolo. Bolo means friend, we don't have many people, only a few technicians, how could we ensure the behavior and program run as they should, not for us but for everybody. In the eco-campus bolo (friends in implementing the eco-campus), all the environmental communities within the campus are involved, for example, ITS cycling community, ITS gardening society, there is gastro from architecture, bird watchers from biology, kalpataru, the mountain climbers, all become eco-campus bolo. Then the rest of the bolo are students from each study program or delegations. They are our extensions.*

*Building behavior takes a lot of time, but we did it. For instance, in the go green, there is homework for the students, we don't give them scores based on their success, but they must plant trees, such as in the year they are admitted. Each group has a report card; the plants need to be taken care of for at least 6 months. There are seniors. And social media is quite effective, for example, the environmental engineering study program has a clean-up movement. They upload the activity to the ITS leaders and they spread it. A characteristic of Surabayans in that they can't stand losing. This is a great potential and culture of Surabayans.*

*The scheme where new students must have a certain number of credit points for student activities which will become a prerequisite for graduation. The prerequisites for graduating are divided into academic, English competence (TOEFL), and student activity. So the students don't only study or only be involved in activities. Students must be involved in different activities. The eco-campus program is backed by a Decree and is accepted as an extracurricular activity for students which is a prerequisite for graduation.*

## **Conclusion**

Up to this moment, the environmental management in the Open University has included waste management, energy saving, and green buildings. The presence of long-term and intermediate-term working plans related to the Open University Go Green program with the involvement of all the stakeholders is a key factor for the success of this program. In addition, it also needs to be supported by a permanent Open University Go Green program implementing unit which is responsible for implementing the program that has been decided upon. The support and involvement of the Head of the Open University in this program would motivate all the units in the Open University to continuously

implement the environmental management. Quantitative assessments and consistency in the implementation of the Open University Go Green program will become the key to developing an environmentally friendly organizational culture.

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