


The Green Construction Model in the Construction Industry to Support a Sustainable Green Economy

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Article Info	ABSTRACT
Keywords: Green Construction, Green Economy, Green Social Work	This research aims to test and analyze The Green Construction Model in the Construction Industry to Support a Sustainable Green Economy. The type of research used in this research is descriptive quantitative research method. This research also includes quantitative research that is correlational in nature. The population in this research is the Medan City construction management company. The sample in this research was construction projects in the city of Medan which were taken using a random sampling method with the acquisition of 50 construction projects in the city of Medan. This study consists of independent variables namely green construction while the dependent variable is green economy as well as green social work as a moderating variable. The data analysis technique used in this research is descriptive analysis, variance-based Structural Equation Modeling (SEM) analysis (Partial Least Square). The research results show that the implementation of green construction in construction companies in Medan City has an impact of 72.6% on achieving a sustainable green economy. with the involvement of social workers (Green social work) gives an increase of 18.4%. This increase can be achieved due to the various roles carried out by social workers in efforts to preserve the environment as well as with the aim of sustainable social welfare, one of which is as a facilitator, educator, motivator, mediator and initiator in environmental conservation.
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INTRODUCTION

Indonesia, as a developing country, always strives to improve infrastructure facilities as proof that the wheels of the economy continue to run in order to achieve a better life. Medan City is a city in Indonesia which is currently developing in terms of industry. With the large level of public consumption, it has become the target of investment for national and international companies. Sustainable development is a global achievement target that collectively wants to achieve through the SDGs (Sustainable Development Goals) program (Firmansyah, 2022). [1] Thus, discussing the concept and existence of the Green Economy needs to continue to be carried out in an effort to achieve sustainable development. Sustainable development means that current development does not reduce the ability of future generations to develop and meet their needs (Kasztelan, 2017) [2]. There are several parts of the green economy which are an integral part of sustainable development, namely: sustainable transportation, ecosystem conservation and

management, water resources management, waste management, sustainable construction and energy conservation, sustainable urban and soil resource management, and renewable energy.(Osspanova et al., 2022).[4].

One real form of economic development in a nation is marked by the increase in the number and type of infrastructure available to society. However, in its development, there is an imbalance between economic activities and the environment. Economic development tends to lead to the exploitation of natural resources. The development of the construction sector provides benefits for workers and professionals in the construction sector.

It is hoped that the increase in the number of construction companies in the construction industry can improve existing infrastructure to support the economy. However, in general, the construction industry still faces problems of inefficiency in the implementation stage of the construction process. There is still a lot of waste in the form of activities that use resources but do not add value. Based on the Lean Construction Institute, waste in the construction industry is 57%, while activities that provide added value are only 10%. Based on data obtained from BPS, the expenditure of all construction companies in Indonesia is IDR. 921.02 Trillion(Archia, 2013).[10].

The construction industry was identified as a sector that requires special attention in meeting the sustainable development agenda. The main reason is that construction is consistently responsible for some of the greatest negative impacts, for example the consumption of large amounts of materials, as well as its reputation as a huge generator of waste.

For more than a decade since it was introduced in Indonesia in 2007, until now there has not been much information and evidence that the concept of green construction has been successfully implemented. Based on the results of a survey of 20 buildings using the Green Construction Assessment Model (MAGC) developed by Ervianto in 2015, the results show that the average performance of private contractors does not reach 50%, in terms of 142 assessment indicators(Ervianto, 2018). This reflects that the application of the green construction concept is still not optimally implemented in construction projects in Indonesia.

This unproductivity ultimately cannot add value to the final product or better known as Non Value-Adding Activities, which in the world of construction is called waste. Factors that cause Non Value-Adding Activities are the ineffectiveness of several factors involved in project implementation (man, method, machine, material, environment), which can trigger delays in project completion.(Artika, 2014).[11]

In order to improve the implementation of green construction in Indonesia, the government through the Ministry of Public Works and Public Housing (PUPR) has issued Regulation of the Minister of Public Works and Public Housing Number 05 of 2015 concerning General Guidelines for the Implementation of Sustainable Construction in Infrastructure Implementation in the Public Works and Settlements Sector (Ministry of Public Works and Public Housing, 2015b). The purpose of issuing this regulation is to serve as a reference in the implementation of infrastructure by implementing a sustainable construction approach. The scope of this regulation regulates the stages of development which consist of the stages of programming, technical planning, construction

implementation, utilization and demolition. At the implementation stage, organizers are required to carry out developments with a green construction approach and pay attention to social and economic aspects at the location. The green construction approach in the ministerial regulation includes: green behavior and practices, green construction processes and green supply chains.

However, the implications of the issuance of this regulation have not been optimal, because implementation is still minimal. The implementation of green construction in Indonesia is still limited to certain projects, and is still dominated by large national qualification service providers owned by the government or state-owned companies.(Ervianto, 2017). Meanwhile, if you pay attention to the profile of construction services businesses nationally, up to 2018 the structure of construction services business entities in Indonesia is still dominated by small businesses (85%), 14% medium businesses and only 1% in the large category (Ministry of Public Works and Public Housing (Ministry of Public Works and Public Housing) 2018). This shows that there is a large gap among construction service providers regarding the implementation of green construction among service providers.

Green Development has been the main solution for an important step forward in most countries(Chang et al., 2021)[2]. One of the agendas proposed in the Indonesian Construction 2030 document, is to promote sustainable construction for saving materials and reducing waste/residual materials as well as facilitating post-construction building maintenance [3]. Green construction is one part of sustainable construction which is a holistic process that aims to restore and maintain balance between the natural and artificial environment(Du Plessis, 2002)[4].

The concept of green construction includes things that are grouped into several aspects of green construction that include(Ervianto, 2015)[5]:

- a. Occupational Health and Safety Aspects
- b. Air Quality Aspects
- c. Aspects of Building Environmental Management
- d. Aspects of Material Sources and Cycles
- e. Appropriate Land Use Aspects
- f. Aspects of Water Conservation
- g. Energy Conservation Aspect



Figure 1. Aspects of Green Construction

Green Construction is part of Green Finance & Green Investment where aspects of Green Construction will influence the Green Economy. In addition, other opinions also suggest that achieving Green Construction can be done through intervention Green Social Workers. This is very necessary in empowering the community, especially in encouraging environmental improvements so that it remains sustainable for the welfare of the community(Ramdani et al., 2022)[6].

Social changes that are currently taking place will continue to experience changes in the future and maybe later the changes will become even more devastating. Under these circumstances, experts suggest that we must use a new paradigm, namely the environmental paradigm.(Lucett, 2004)[7].

The role of social workers or experts in the field of social welfare actually has an important role related to environmental issues. Experts in this field can provide people with an understanding of the issue of climate change on life and how human life can damage or affect environmental conditions. Apart from that, social workers also encourage the wider community to use and consume energy or use energy in a sustainable manner. In this case, the role of experts in the field of social welfare and professional social workers can empower society to protect the environment for the sake of their own future and that of future generations. Their involvement can be done through community social work and participating in designing problem solving(Dominelli, 2018)[8].

Therefore, this research was conducted to determine the main constraints faced by the construction services industry. The obstacles identified at the initial stage will be categorized according to their weight and ranking based on the perspective of each group of respondents. This is done in order to better understand the thoughts of each party, thus making it easier to determine strategies and policies in developing future implementation. With this research, it is hoped that project implementation using green construction principles can be managed efficiently to support sustainable economic development.

Literature Reviews

Green Construction

In implementing environmentally friendly conditions in development, of course there needs to be criteria that can be used as a reference in the implementation process. Green construction is one part of sustainable development which is expected to be able to help preserve the environment and be friendly in its implementation. The difference in implementation methods between green and conventional construction will have an influence on the impact of environmental damage that will be caused.

Green Construction is the concept of creating or implementing environmentally friendly development. The goal of green construction and green building is the realization of sustainable development which has a green concept(Ervianto, 2015). The concept of "green" in development does not mean the trend of using vegetation media in the development process, but prioritizing environmentally friendly applications from the planning, procurement, implementation, operation to the process of dismantling a building. In this case, it is carried out through the process of concept design, selection of material types, work methods, selection of work equipment and management during the operation

of a building. The goal of Green Construction itself is to reduce pollution during the project, reduce material waste, use energy efficiently, and use water and other resources efficiently.

Green construction is the practice of creating structures and using processes that take into account environmental conditions and resource efficiency throughout the life cycle of a building from site to design, construction, operation, maintenance, renovation and deconstruction. This practice extends and complements classic building design with attention to economy, utility, durability and comfort. Meanwhile, the products of green construction are green buildings, which are also known as sustainable or high-performance buildings (Medina et al., 2017). Thus it can be concluded that Green construction is a new concept to fulfill the construction process of environmentally friendly buildings.

Green Economy

In general, the green economy has several definitions, namely as a sustainable economy in society by consuming all naturally renewable resources and without containing carbon emissions. The basic statement contained therein is low carbon, resource efficient and socially inclusive. Thus the main thing is that the green economy can increase the value of natural capital / earth, several sectors in the green economy are clean technology, improving fresh water infrastructure, increasing sustainable energy, low-carbon transportation with energy-efficient designs, clean waste management technology, the agricultural sector and sustainable forestry, changes in national investment sector policies that are supported by developments in international policies and infrastructure (Kristianto Day, 2020).

The idea of green economics is an integration of the environment, policy and economic and social innovation that enables society to use resources efficiently so as to increase human welfare inclusively while maintaining natural ecosystems. (Li et al., 2020). Green economic growth is needed in an inclusive, efficient and affordable way considering that sustainable economic development cannot be achieved without it. The efficiency of green economic growth is considered capable of overcoming market and governance failures that can disrupt a country's economic system (Lin & Zhu, 2019).

Green economy is a condition in which the environment, economic and social policies and innovations enable society to use resources efficiently, so as to increase people's welfare in an inclusive manner while maintaining natural ecosystems. The contradiction between socio-economic development and environmental preservation will always occur (Wang et al., 2019). The strategy for greening the economy can start from the process of greening the structure and process of economic development accompanied by greening to determine fiscal and monetary policies and mechanisms as well as greening financial instruments and capital markets, business and corporations as well as greening education, mass media and the public. (Lin & Zhu, 2019). Changes in the pattern of economic growth and increased trading activity will of course increase the need for production that uses resources and waste which is often overlooked. (Tang, 2020).

Green Social Work

A social worker is a profession that provides assistance or assistance in the form of services to individuals, groups or communities in need. With this development, social workers and experts in the field of social welfare must study environmental sciences in order to be able to carry

out their social work practices well. Such a social worker model can be referred to as a 'green social worker' or 'green social worker'. Green Social Work is a holistic approach for social workers involved in ecological and environmental issues. This approach combines a structural analysis centered on social institutions and social relations with its role in responding to the welfare needs of individuals, groups and communities as well as caring for the environment.(Dominelli, 2018).

Green Social Work is stated as a form of professional social work practice that focuses on interdependence between individuals and individuals, social organizations and relationships between people and even flora and fauna in their physical habitat, interactions between crises of the socio-economic and physical environment and interpersonal behavior that damages human welfare. and planet earth. This overcomes the problem by conceptualizing the social basis of local communities that are interconnected with one another. Social workers in environmental preservation also involve service users in a holistic approach that brings people together to protect the physical, social, political, economic and cultural environment of the local community. In the context of community development,(Ramdani, 2020).

Conceptual framework

Based on the description above, it can be built research framework as follows:

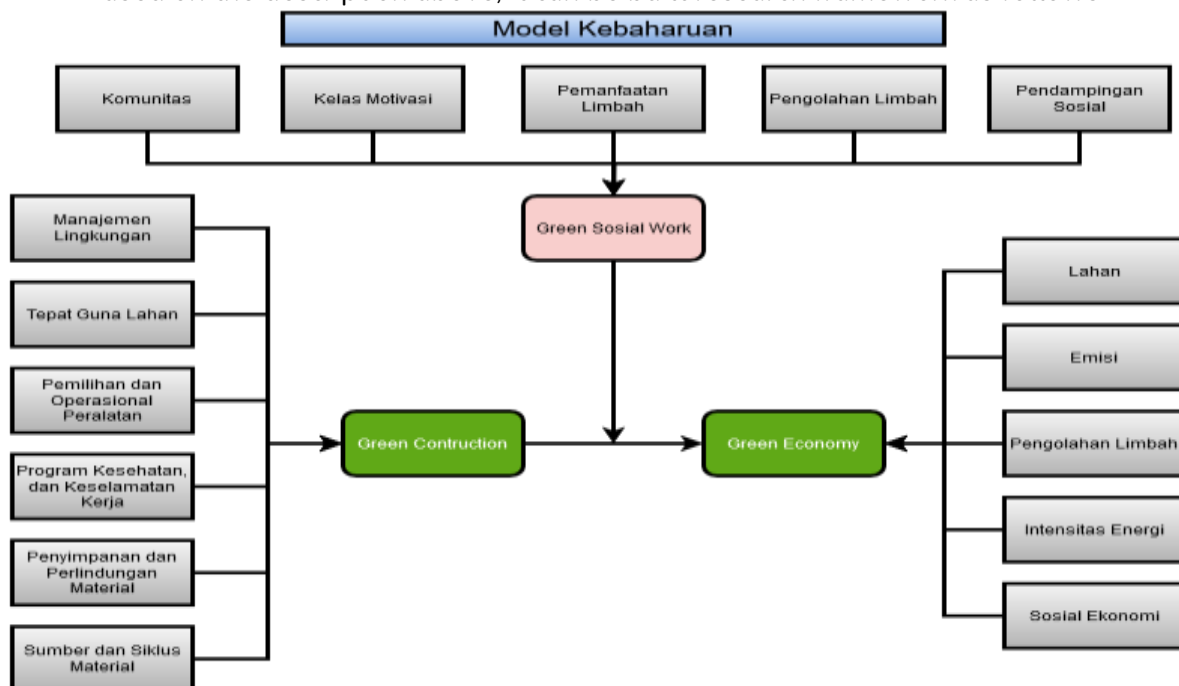


Figure 2. Conceptual framework

Research Hypothesis

Based on the problem formulation and conceptual framework above, the research hypothesis put forward by the researcher is as follows:

1. Green Construction influences a sustainable Green Economy
2. Green Social Work moderates the effect of Green Construction on a Sustainable Green Economy.

METHOD

Types of research

The research method used in this research is descriptive quantitative research method. This research also includes quantitative research that is correlational.

Location and Time of Research

This research was conducted to examine The Green Construction Model in the Construction Industry to Support a Sustainable Green Economy. The time of the research started in April 2023 to August 2023 at 50 construction management companies in the Medan city area.

Sampling techniques

The population in this research is the Medan City construction management company. The sample in this research was construction projects in the city of Medan which were taken using a random sampling method with the acquisition of 50 construction projects in the city of Medan.

Types of Research Data

The data used in this research is primary data, namely data obtained directly by researchers from research objects through distributing questionnaires. The measurement scale used to measure the short length of the interval in the measuring instrument is the Likert scale. The data analysis technique used in this research is a quantitative data analysis technique using statistical methods. The statistical method used is Partial Least Square (PLS). Partial least squares is a powerful analysis method because it is not based on many assumptions [9]. As a data analysis technique, PLS uses SmartPLS version 2.0.M3 software.

Table 1. Operational definition

Variables	Definitions	Indicators	Size
Green Construction (X)	Green Construction is the concept of creating or implementing environmentally friendly development. The goal of green construction and green building is the realization of sustainable development which has a green concept(Ervianto, 2015)	<ol style="list-style-type: none"> 1. Environmental Management 2. Appropriate use of land 3. Election and operations 4. Occupational health and safety program 5. Material storage and protection 6. Material sources and cycles. (Ervianto, 2013) 	Likert
Green Economy (Y)	Green economy is a condition in which the environment, economic and social policies and innovations enable society to use resources efficiently, so as to increase people's welfare in an inclusive manner while maintaining natural ecosystems.(Wang et al., 2019).	<ol style="list-style-type: none"> 1. Land 2. Emission 3. Waste Management 4. energy intensity 5. Socioeconomic (Loiseau et al., 2016) 	Likert

Green Social Work (Z)	Social Green Social Work (Social Work in the field of Environmental Conservation) is a holistic approach for social workers involved in ecological and environmental issues. This approach combines structural analysis that focuses on social institutions and social relations with their role in responding to the welfare needs of individuals, groups and communities as well as caring for the environment.(Dominelli, 2018).	<ol style="list-style-type: none"> 1. Community 2. Motivation Class 3. Waste Utilization 4. Waste Management 5. Social Assistance (Ramdani, 2020).
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Measurement Scales

The scale used in this measurement is the Likert scale. To reduce the impact of bias and the occurrence of concentration of data during analysis, the scale used can be seen in the following table:

Table 2. Measurement Scale

No	Questions	score
1	Strongly Agree (SS)	1
2	Agree (S)	2
3	Disagree (KS)	3
4	Disagree (TS)	4
5	Strongly Disagree (STS)	5

Data Analysis Techniques

The data analysis technique used in this research is a quantitative data analysis technique using statistical methods. The statistical method used is Partial Least Square (PLS). Partial least squares is a powerful analysis method because it is not based on many assumptions(Juliandi, 2018). As a data analysis technique, PLS uses SmartPLS software version 2.0.M3.

RESULTS AND DISCUSSION

Analysis of the measurement model (Outer Model) aims to evaluate the construct variables studied, the validity (accuracy), and reliability (reliability) of a variable.

1. Measurement model analysis (Outer Model)

Measurement model analysis (outer model) aims to evaluate the construct variables studied, the validity (accuracy), and profitability (reliability) of a variable(Ghozali & Latan, 2012)[11].Another opinion states that measurement model analysis (Outer Model) can be carried out by comparing the test result values with the following provisions(Abdillah & Hartono, 2015)[12].

a. Construct Reliabilityand Validity

Construct reliability and validity is a test to measure the reliability of a construct. The reliability of construct scores must be high enough. Reliability and validity criteria can be seen from Cronbach Alpha > 0.7, Rho_A > 0.7, Composite Reliability > 0.6, Average Variance Extracted (AVE) > 0.5.

Table 3. Construct Validity and Reliability

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
GC*GSW	0.933	1,000	0.933	0.825
GC	0.951	0.952	0.961	0.804
GE	0.955	0.955	0.965	0.848
GSW	0.946	0.947	0.959	0.823

(Source SmartPls V-2.0)

The results of the Construct Validity and Reliability tests in the table show that the Competency of Human Resources, Information Technology, and Business Development variables have Cronbach Alpha and Rho_A values > 0.7, Composite Reliability values > 0.6 and Average Variance Extracted (AVE) values > 0.5. So all variables have good construct Validity and Reliability.

b. Discriminant Validity

Discriminant Validity (discriminant validity) is the extent to which a construct is truly different from other constructs (the construct is unique). To measure discriminant validity it can be seen from, *Fornell-Larcker Cirteiron, Cross Loading, Heretroit-Monotrait Ratio* (HTMT). However, on the SmartPLS website, the best recent measurement is to look at the Heretroit-Monotrait Ratio (HTM) value. If the value of HTMT < 0.90 then a construct has good discriminant validity.

Table 4. Discriminant Validity (Heroit-Monotrait Ratio / HTMT)

	GC*GSW	GC	GE	GSW
GC*GSW				
GC	0.875			
GE	0.876	0891		
GSW	0.800	0.564	0.863	

(Source SmartPls V-2.0)

Based on the picture in the table above, the results show that all construct variables for Human Resources Competence, Information Technology, Business Development have a Heroic-Monotrait Ratio (HTMT) value of < 0.90. Thus all construct variable values are valid.

2. Structural Model Analysis (Inner Model)

Structural model analysis or (inner model) aims to test the research hypothesis. The parts that need to be analyzed in the structural model are (f-Square), the coefficient of determination (R-Square) and hypothesis testing. F-Square is a measure used to assess the relative impact of an influencing variable (exogenous) on an affected variable (endogenous).

Table 5. F Square

	GC*GSW	GC	GE	GSW
GC*GSW			0.933	
GC			1,483	
GE				
GSW				1,559

Changes in the F-Square value when certain exogenous variables are removed from the model can be used to evaluate whether the omitted variables have a substantive impact on the endogenous construct. The criteria are if $f^2 = 0.02$ indicates a small effect of the exogenous variable on the endogenous variable, if $f^2 = 0.15$ indicates a moderate effect of the exogenous variable on the endogenous variable, if $f^2 = 0.35$ indicates a large effect of the exogenous variable on the endogenous variable. Based on the table above, it can be seen that the influence of the f-square of each exogenous variable will provide a large change to the endogenous variable where the f-square value is > 0.35 . For more details, see the following image

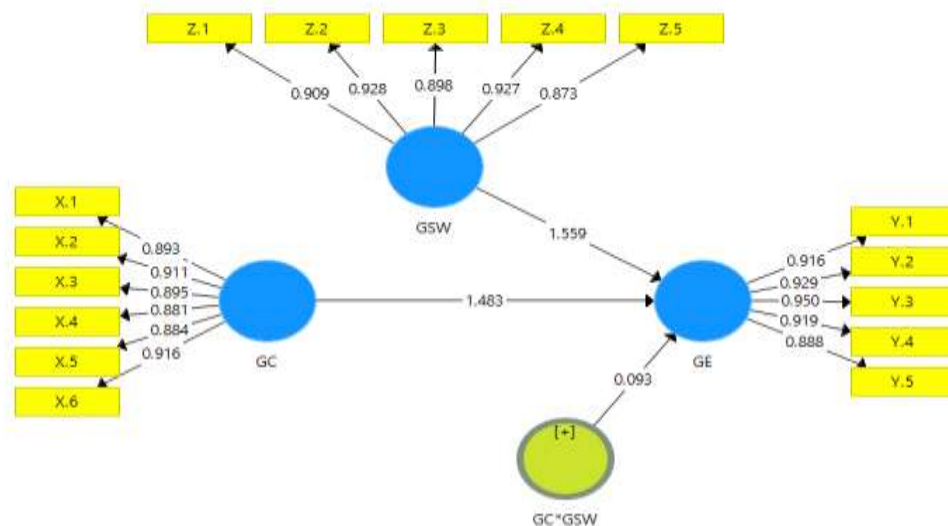


Figure 3. F. Square

The coefficient of determination (R-Square) aims to evaluate the accuracy of the predictions of a model. In other words, to evaluate how variations in the value of the dependent variable are influenced by variations in the value of the independent variable in a path model. If the R^2 value = 0.75 then the model is substantial (strong), if $R^2 = 0.50$ then the model is moderate, if $R^2 = 0.25$ then the model is weak.

Table 6. Coefficient of Determination (R-Square)

	R-Square	Adjust R-Square
GE	0.916	0.910

(Source SmartPls V-2.0)

The R-Square test results from the construct variable variable are 0.916 or 91.6%. Thus the exogenous variables in the test construct have a large or strong impact in

influencing the endogenous variables. The results of this test can also be seen in the following figure:

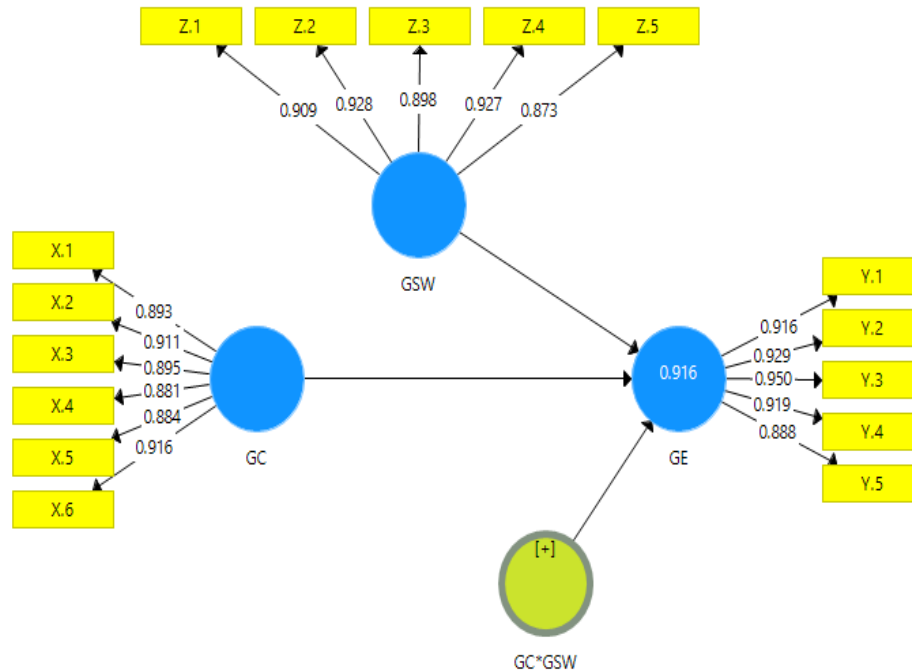


Figure 4. R-Square

Direct effect analysis is useful for testing the hypothesis of the direct influence of an influencing variable (exogenous) on the affected variable (endogenous). Criteria for measuring direct influence can use the value of the path coefficient (Path Coefficient). If the path coefficient value is positive, then the value of one variable relative to another variable is unidirectional so that if the value of an exogenous variable increases, the value of the endogenous variable will increase. If the path coefficient value is negative, the influence of one variable on the other variable is in the opposite direction, so that if the value of the exogenous variable increases, the value of the endogenous variable will decrease.

Table 7. Direct Effects

	Path Coefficient	Sample Mean	Standard Deviation	T Statistics	P Values
GC*GSW → GE	0.184	0.180	0.089	2,072	0.043
GC → GE	0.726	0.723	0.076	9,569	0,000
GSW → GE	0.617	0.619	0.082	7,556	0,000

Based on the table above, it is obtained that the direct effect of green construction on the Green Economy has a path coefficient of 0.726 (positive) which indicates that every change in the value of one in green construction will be followed by a unidirectional change in the green economy value of 72.6%. Then the influence of green construction on the green economy has a P-value of $0.000 < 0.05$. so the influence of green construction on the green economy is significant.

Then the results of testing the moderating effect of green social work on the influence of green construction on the green economy obtained a path coefficient value of 0.184 and a p-value of $0.043 < 0.05$. This indicates that green social work can strengthen the impact of green construction on the green economy by 18.4%, which can be further seen in the following figure.

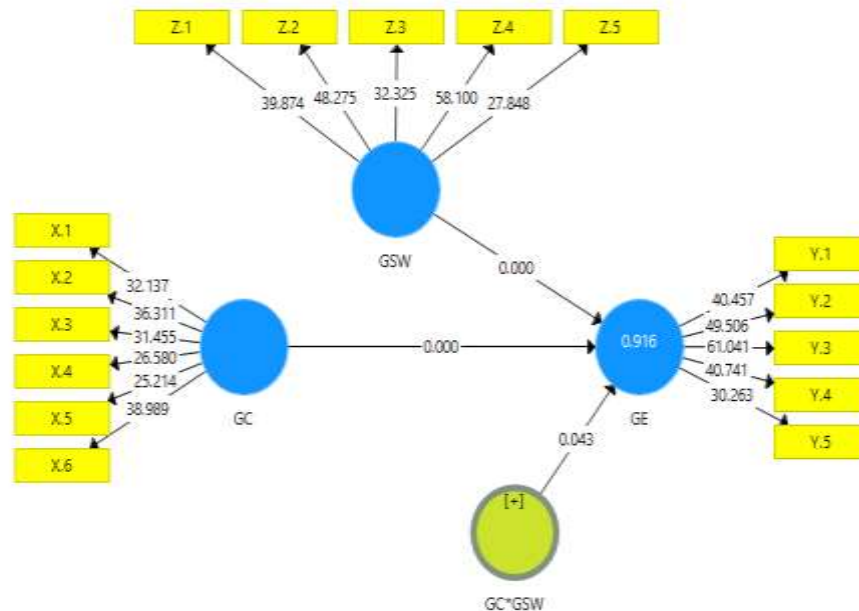


Figure 5. Direct Effects

Green Economy is an economic concept that has different implications from the economy in general because it prioritizes the future of natural resources, environmental welfare, and reducing the risk of using natural resources (Loiseau et al., 2016) [13]. Thus it can be said that the Green Economy or green economy is an economic idea that aims to improve the welfare and social equality of society, while significantly reducing the risk of environmental damage.

Green economic practice is said to be an economic practice that emphasizes long-term planning because this economic practice can reduce poverty, carbon dioxide emissions, and ecosystem degradation. The analysis carried out in the construction industry in Medan City on the aspects of green economy implementation obtained an average implementation result that was capable of being carried out by the industry of 75%. The aspects referred to are appropriate use of land, emission control, waste processing, energy intensity and social economics.

In accordance with PUPR Ministerial Regulation Number 9 of 2021 concerning Guidelines for Implementing Sustainable Construction. The fulfillment of green criteria for the construction services sector includes appropriate land use, energy conservation, water conservation, use of environmentally friendly materials, maintaining air and noise quality, waste management, disaster adaptation, community empowerment, gender responsive development, supporting community interaction and local businesses. and protection of protected areas and cultural heritage.

Green construction is a planning and implementation of the construction process based on contract documents to minimize the negative impact of the construction process on the environment so that there is a balance between environmental capabilities and human needs for present and future generations.(Ervianto, 2013)[14]. However, this concept must also be followed by other communities and also the community's sensitivity to efforts to protect and preserve the environment. This green construction is a very good breakthrough to reduce the impact of the effects of global warming but it also needs real application from the parties concerned in carrying out this movement and also government support in implementing this concept, so that there will be a balance between one and the other. other.

The concept of green construction is a popular concept in the field of construction in response to global warming. The most important benefit of applying this concept is not just protecting natural resources, but also realizing efficient use of energy and minimizing environmental damage. Green construction is defined as planning and implementing a construction process based on contract documents to minimize the negative impact of the construction process on the environment so that there is a balance between environmental capabilities and human needs for present and future generations.

Obstacles in green construction are, higher costs, lack of education and experience, materials are still difficult, to get a certificate that can ensure that the materials used are environmentally friendly materials, and project owners who are reluctant to prepare costs and do not pay attention to the importance of green costs. construction(Hankinson & Breytenbach, 2012).

The results of the analysis carried out in several construction management industries in the city of Medan obtained results indicating that the average implementation of the green construction concept that had been applied was 69.3%. The implementation of this concept is seen from the implementation of aspects consisting of aspects of environmental management, land use efficiency, equipment selection and operation, occupational health and safety programs, material storage and protection, and material sources and cycles. Of the six aspects, the biggest obstacles experienced by construction managers were in the aspect of selecting operational equipment, and sources or material cycles. This is in accordance with the results of a study regarding the barriers to implementing green construction that the selection of environmentally friendly building materials is one of the problems(Sinulingga, 2012)[16].

To overcome the obstacles in implementing green construction, a strategy is needed to encourage the implementation of green construction. To overcome obstacles to implementing green construction, tools are needed during the design process to compare the economic and environmental impacts of alternative materials and systems(Griffin et al., 2010). A better understanding of stakeholders is also needed by providing education to stakeholders involved in green construction. Developing a strategy for implementing green construction means that stakeholders must increase knowledge about green construction, increase motivation from the government, adjust regulations and continue green construction practices in projects that will be implemented.(AZIZ & Utomo, 2011).[18]

Social workers in the current era are a profession that is very relevant to the dynamics of social and ecological problems, where social workers not only focus on handling social welfare problems but also environmental problems. In accordance with the principles of social work, namely helping people to be able to help themselves, community development pays great attention to the importance of social participation and community empowerment approaches. In this context, and indeed in almost all social work practices, the role of a community worker is often realized in the capacity of a companion, not as a healer or problem solver directly.

The main theory used in this research is that Green Social Work is a holistic approach for social workers involved in ecological and environmental issues. This approach combines a structural analysis centered on social institutions and social relations with its role in responding to the welfare needs of individuals, groups and communities as well as caring for the environment.(Dominelli, 2018). Green Social Work is said to be a form of professional social work practice that focuses on interdependence between individuals, social organizations and relationships between people and even flora and fauna in their physical habitats, interactions between socio-economic and physical environmental crises and interpersonal behavior that damages human welfare. and planet earth.

The involvement of social workers in construction industry activities has a positive impact. This is proven by the results of the analysis that the presence, involvement or intervention of social workers (green social work) is able to increase the influence of green construction in supporting a sustainable green economy. The results of the tests carried out showed that the implementation of green construction in construction companies in Medan City had an impact of 72.6% on achieving a sustainable green economy. Then with the involvement of social workers (Green social work) it gives an increase of 18.4%. This increase in impact is made possible by the existence of community building activities, providing training and counseling, and mentoring.

This increase can be achieved due to the various roles carried out by social workers in efforts to preserve the environment as well as with the aim of sustainable social welfare, one of which is as a facilitator, educator, motivator, mediator and initiator in environmental conservation. This approach in the social work profession encourages mutual cooperation between scientific disciplines and professions to strengthen interventions in society. An indicator that a society can be prosperous is that it is able to carry out its role in society in carrying out social functions.

CONCLUSION

The implementation of green construction in construction companies in Medan City has had an impact of 72.6% on achieving a sustainable green economy. with the involvement of social workers (Green social work) provided an increase of 18.4%. This increase can be achieved due to the various roles carried out by social workers in efforts to preserve the environment as well as with the aim of sustainable social welfare, one of which is as a facilitator, educator, motivator, mediator and initiator in environmental conservation. Based on the results of the research conducted, it was found that there were several weaknesses in the implementation of green construction in the construction industry in Medan City in

the form of selection of operational equipment, and material sources or cycles. This will also have an impact on emission levels and waste management in efforts to achieve a green economy. One of the appropriate countermeasures is to involve various social environmental institutions (green social work) in the industry.

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