

The Impact of the Trend Towards Applying Green Economy Standards and Its Impact on Sustainable Development from the Point of View of Project Managers for Municipalities

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Abstract

The current study aimed to identify the impact of the trend towards applying green economy standards and its impact on sustainable development from the point of view of project managers for municipalities. The study consisted of (90) municipal project managers in Jordan. The results of the study showed that the mean were high for the all domains of the study, "the importance of moving towards the application of green economy standards from the point of view of project managers for municipalities." "the obstacles of moving towards the application of green economy standards from the point of view of project managers for municipalities", "the requirements of moving towards the application of green economy standards from the point of view of project managers for municipalities", and" "the attitudes of project managers in municipalities towards implementing green economy standards" the results also showed that there were no significant differences in the mean of total domains of the study according to gender variable. Also there was no significant difference of the first domain "the importance of moving towards the application of green economy standards" based on years of experience variable, but there was a significant difference in the means of second domain "the obstacles of moving towards the application of green economy standards", and third domain "in favor of (5 – less 10 years) category, and in the requirements of moving towards the application of green economy standards" in favor of (20 years and more) category, and in the fourth domain "the attitudes of project managers in municipalities towards implementing green economy standards" according to years of experience variable, in favor of (20 years and more) category. As the results showed there was not a significant difference in the means of second domain "the obstacles of moving towards the application of green economy standards, and the third domain "the requirements of moving towards the application of green economy standards" and the forthcoming domain "the attitudes of project managers in municipalities towards implementing green economy standards" according to qualification variable, but there was a significant difference in the means of first domain "the importance of moving towards the application of green economy standards" according to variable qualification in favor of (doctor) category. In light of the results of the study, the researcher recommended the necessity of inviting municipal project managers from the public and private sectors to cooperate and to make investment in the green economy a successful way to preserve natural resources and create opportunities to create wealth and jobs.

Keywords: green economy, sustainable development, project managers for municipalities.

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Introduction

Development is one of the permanent and dynamic processes emanating from the economic structure, which includes all aspects that need to be improved, and its goal is to change the social foundations, modify the roles within them, and change their various capabilities (ILO, 2012). Sustainable development is a societal process that contains many basic, not formal, transformations in economic, technical, demographic, social and political institutions, and sustainable development enables the social system to acquire the ability to achieve selfproductivity that provides the individual with a better standard of living, eliminates poverty and unemployment, and achieves high levels of health, providing security, stimulating industrialization and fighting underdevelopment, and this leads to achieving permanent and continuous conditions of life (Kasztelan, 2017). However, due to the scientific, economic and technological revolution witnessed by the current era, which negatively affected sustainable development, such as instability in commodities, lack of global food and water & poverty that still affects the majority of countries in the world and has had its effects on achieving sustainable development achieving its development goals, and that these negative economic, social or environmental challenges represent extremely dangerous threats to future generations (Nwosu, Uhuegbulem and Ben-Chendo, 2015). And that sustainable development is not independent of the environment, but it has been affected by negative scientific and technological progress, and violation and corruption of environmental resources will negatively affect the development process, and scarcity of resources will affect development in terms of achieving its goals (Kasztelan, 2017). With the increase in economic growth in many countries, the level of damage to the ecosystem has increased, as it resulted in the violation of many natural resources, and the increase



in environmental pollution (Nwosu, Uhuegbulem and Ben-Chendo, 2015). The emergence of what is known as the black economy or the (fossil economy) as a kind of negative product of the negative scientific progress taking place in the current era and the extent of its impact on the environment and its resources (Hoinaru, et al., 2020). With the rise in negative pressures on the environment as a result of the various commitments that came to serve the economy in the major industrial countries, the emergence of what is known as the green economy has begun, which indicates access to sustainable development and economic growth and its realization, but far from violating and disrupting the ecosystem (Okonkwo & Uwazie, 2015). Dlimbetova, et al., (2016) indicates that the interest in the green economy, as it is an economic effort that supports the environment, is one of the methods of sustainable development, as its beginnings emerged from the Earth Summit (Rio de Janeiro) in 1992, which warned against falling into the environmental crises prevalent at the present time, and it came at the United Nations Conference RIO+20 for sustainable development, a manifesto for new horizons for sustainable development, and the Rio+20 conference, which recognizes governments of countries to fulfill their promises of equitable economic growth and sustainable development. The green economy also contributes to reducing the black economy and the environmental risks resulting from it and combating environmental pollution by reducing the adverse effects of global warming and pollution, stimulating agriculture and protecting forests, and this helps in the balanced structural reconstruction of ecosystems (Okonkwo & Uwazie, 2015; Bina, 2013). (Loan, 2017; UNEP, 2011) stress that the green economy has a prominent role in achieving sustainable development, as the United Nations considered that the green economy is an economy that is closely related to the economy, society and the environment, and is witnessing clear transformations in production processes, production and consumption patterns, green economy approach also contributes to drawing an organizational structure for sustainable development, as the focus should be on the participatory approach to development, and the green economy can only be achieved through a common vision that stimulates creativity and innovation, and receives a wide range of attention and support from all elements of society. Since municipality project managers are closely linked to the environment and its protection and requirements are constantly taken into account, it is their responsibility to preserve the environment and promote the green economy. Hence, this study will proceed through its importance in moving towards achieving a green economy and its adoption in industry and investment and its role in achieving sustainable development followed by the effects of technology and a clean environment that are far from negative and harmful to society in order to achieve environmental adaptation and reduce poverty, and this will be studied from the point of view of the project managers for municipalities.

Study problem

The clear marginalization and pollution of the fossil economies produced in the composition of the environment created for us an urgent need to create a peaceful alternative that is reconciled with the components of nature and the environment in which we live while ensuring an environmental balance that achieves a sustainable environment. The results of the study (Nwosu, Uhuegbulem and Ben-Chendo, 2015) confirm that the green economy includes a large part of sustainable development, and the required sustainable development will only be achieved by providing the requirements for the transition to a green economy as a tool for solving environmental crises and their problems. The results of the study (Hoinaru, et al., 2020) also confirmed that the black economy is an unjust economy that threatens resources and the implementation of black economy projects are implemented at the expense of the environment without considering it or thinking about preserving it, which calls for finding new faces for the modern economy aimed at preserving the environment resources and the goals of sustainable development, and the problem of the study is the need to achieve many of the recommendations advocated by previous studies and many international conferences stressing the need to study the issue of the sustainable environment and to stand on the escalation of the effects resulting from environmental problems, which need new solutions to reflect positively on the issue of the sustainable environment, which is considered the green economy the most important needs necessary to reach We approach the concept of sustainable development, and the most important of these studies and conferences are (United Nation Economic And Social Council and Economic Commission For Africa, 2011, p.2) and the United Nations Rio +20 Conference on Sustainable Development (UN Rio+20 Conference, 2012, p.14) and the First Global Conference on Partnership For Action on the Green Economy in Dubai (1st Global Conference on Partnership for Action on Green Economy, 2014, p.1). And since municipality project managers are strictly related to the environment and its protection and requirements are continually taken into account, it is their responsibility to reserve the environment and endorse the green economy, therefore, the research problem is to answer the following main question: what is the impact of the trend towards applying green economy standards and its impact on sustainable development from the point of view of project managers for municipalities?

Study questions:

From the main question, the following sub-questions emerge:

1. What is the importance of moving towards the application of green economy standards from the point of view



of project managers for municipalities?

- 2. What are the obstacles of moving towards the application of green economy standards from the point of view of project managers for municipalities?
- 3. What are the requirements of moving towards the application of green economy standards from the point of view of project managers for municipalities?
- 4. What are the attitudes of project managers in municipalities towards implementing green economy standards?

Study aims

The study aims to identify:

- 1. The importance of moving towards the application of green economy standards from the point of view of project managers for municipalities.
- 2. The obstacles of moving towards the application of green economy standards from the point of view of project managers for municipalities.
- 3. The impact of the trend towards applying green economy standards and its impact on sustainable development from the point of view of project managers for municipalities.
- 4. The attitudes of project managers in municipalities towards implementing green economy standards.

Study significance

The significance of the study is as follows: the significance of the current study comes from the lack of studies interested in the green economy in Jordan. Most of the studies dealt with environmental aspects without addressing the environmental economy, as far as the researcher knows. The significance of this study stems from its treatment of many problems experienced by the environment in Jordanian society, such as energy, water, poverty...etc. also this study can benefit the Jordanian library in particular and the Arab library in general by adding new knowledge, and it seeks to present a scientific study clarifying the impact of the trend towards applying green economy standards and its impact on sustainable development from the point of view of project managers for municipalities by making use of the results and recommendations that the study will come out with.

Study limits:

- **Objective limits:** The study will address the impact of the trend towards applying green economy standards and its impact on sustainable development from the point of view of project managers for municipalities. - Spatial boundaries: The study will be applied in Jordan. - Human boundaries: the study will be applied to project managers for municipalities in Jordan. - Time limits: The study will be implemented during 2022/2021.

Terminology of study:

- The green economy: The United Nations Environment Program (UNEP) defined the green economy as: an economy that results in a remarkable development in human life and enjoyment of well-being, achieving social equality, and reducing environmental risks and challenges by reducing carbon emissions, increasing the efficiency of resource use, and including all social groups. The researcher defines the green economy procedurally as: a new pattern of development that adapts to the fields of environment, economy and society in order to reach the compatibility between the present and the future, based on clean technologies to achieve sustainable economic development.
- Sustainable Development: (Kasztelan, 2017, p.492) defines sustainable development as: development that is concerned with meeting all the main requirements of all individuals, and works to increase awareness of the opportunities available to society to achieve satisfaction for members of society and achieve their future aspirations in order to live in a better life, and work to spread the values that stimulate consumer types according to the limits of environmental capabilities that society desires to achieve. The researcher defines sustainable development procedurally as: the means that is used in order to reach sustainability, and to preserve and improve society's resources in order to protect the environmental processes on which all life's requirements are based, in order to achieve a green economy.

Theoretical framework and related previous studies

1. The theoretical framework

In this part, the researcher deals with the theoretical framework related to the subjects of the study as follows:

First: Green economy Green economy concept

The emergence of protracted and interconnected global crises during the past four decades has resulted in to conduct an in-depth analysis of current economic models and their ability to increase economic well-being and social justice, as well as the unsustainability inherent in the way of thinking is to leave things as they are and traditional measures of performance economy, which places great emphasis on gross domestic product, and does



not show the increasing social inequality and environmental risks and responsibilities associated with current consumption and production (Dlimbetova, et al., 2016; UNEP, 2009). Where economic activity consumes at the same time there is an amount of biomass that exceeds the earth's ability to produce it in a way sustainable, reducing ecosystem services that are a key component of the necessities of life for the poor, and consequently leads to the continuation and exacerbation of inequalities this activity also causes external effects, such as pollution and climate change the scarcity of natural resources threatens the land's productive capacity to generate wealth and ensuring human well-being (Okonkwo & Uwazie, 2015). The concept of "green economy" emerged in response to these multiple crises in an effort to transform the drivers of economic growth, in order to transfer areas on which, public and private, local and international, focus towards emerging green sectors, greening existing sectors, and changing patterns unsustainable consumption, and this shift is expected to generate economic growth the continuous needed to create job opportunities and reduce poverty, as well as reduce the intensity of energy use, resource consumption and production (Nwosu, Uhuegbulem & Ben-Chendo, 2015). Kasztelan, (2017) defined the green economy as an economy that improves human well-being and social equity, while at the same time paying attention to significantly reducing environmental risks. As for Loan (2017) defined the green economy as an economy in which growth in income and employment is directed by investments in the public and private sectors that will lead to enhancing the efficiency of resource use, reducing carbon emissions, waste and pollution and preventing the loss of biodiversity and the deterioration of the system ecological. Barbara (2012) believes that there is a new concept related to technology information green, and it means the contribution of information technology to reducing carbon emissions, sustainability and compliance with the regulations and requirements to reduce those emissions through the following: Adhering to the regulations and requirements to reduce such emissions by: Managing energy use using a technological infrastructure, managing and wastes managing consumables using IT methods, adopt environmentally friendly practices, providing facilities to companies so that they can obtain internal reports and the Ministry of Foreign Affairs and government agencies (gas and carbon emissions data), integration and alignment with emission levels management objectives, initiatives and systems. Accordingly, the researcher believes that the trend towards a green economy is not a superior decision, but rather a long and arduous process and an intense effort for all parties from the top to the bottom, policies, legislation, infrastructure, education, training, awareness and

Second: Sustainable development

The concept and dimensions of sustainable development

The concept of the environment has changed significantly during the last three decades of the twentieth century and the first decade of the twenty-first century, and the problems of the environment have a global impact, which is what all concerned with the environment turned to (Kasztelan, 2017; EEA, 2012; Meltzer, Steven & Langley, 2013). In this regard, the United Nations Conference on Environment and Development was held in 2002 to present the development from the human environment in 1972 to the period of environment and development in 1992 and then the concept of sustainable development in 2002 (Library, 2021). The relationship between man and the environment is not limited to the state of the environment on human health, but the relationship has another facet, which is that the environment is the property of the human being, effectively by effort to convert it into wealth, and this is the essence of development, hence the idea of sustainable development and its main objective is to meet human needs and reduce environmental degradation, managing resources and shifting to green policies: the green economy, green architecture, eco-friendly cities, and green capitals (Krstić, Ilić & Avramović, 2018; Barbier, 2012; Nellemann & Corcoran, 2010). In addition to environmental concepts in the field of manufacturing and production, such as environmental impact assessment, clean production, energy rationalization, reuse and recycling, the concepts of commitment and obligation support for environmental management systems and activating the sustainable development policy (Nwosu, Uhuegbulem and Ben-Chendo, 2015; Spangenberg, 2010). The researcher believes that sustainable development in its entirety depends on the integration of social, economic and environmental goals, where companies must strike a balance between economic and social progress on the environmental side on the other hand, so that the current economic progress does not affect the right of future generations to use the same resources for development. The World Summit on Sustainable Development in Johannesburg in the year 2000 identified the main dimensions of the term sustainable development with three main dimensions (Krstić, Ilić & Avramović, 2018; Backhaus, et al., 2012):-First dimension: The Economic Dimension: It depends on improving the level of well-being of the individual through his share in goods and services necessary; this requires not only the use of natural resources; but its optimal use is achieved so that the best possible return is achieved at the lowest possible costs. - Second dimension: The Social Dimension: It includes the components and human traits, individual, collective and institutional relations and the problems they contribute to cooperative efforts or pose the needs, demands and pressures on the economic, political and security systems. - Third dimension: The Environmental Dimension: It is based on the protection and safety of the environment and the proper handling of natural resources, and their utilization for the benefit of man. Without causing disruption to the environmental components that include land,



water, air, and the possible natural resources in them that contribute to the survival, perpetuation and progress of human, animal and plant life, and prevent their depletion, pollution and loss.

2. Previous studies:

The researcher reviewed many previous studies related to the subject of the study, in order to give an adequate background to it, and to take advantage of the topics raised by the researchers in their studies to form some premises that can be built upon, and from these studies that were presented according to their chronology from the newest to the oldest as follows:

Kasztelan (2017) conducted a study entitled "Green Growth, Green Economy and Sustainable Development: Terminological and Relational Discourse". The survey aimed to identify the relationship between green growth, green economy and sustainable development. To achieve the goal of the study, previous literature was used and the method of comparison and deductive reasoning was used. The results of the study concluded that there is an interrelationship between the green economy and green growth and sustainable development due to the complementary and synergistic nature between these concepts, as the activities of the green economy and green growth open the door to creating opportunities to revitalize the global goal, i.e. sustainable development by supporting economic development and increasing investment in the fields of Economic activity based on increasing the natural capital of the Earth, at the same time reducing environmental problems and improving general social welfare.

Loan (2017) conducted a study entitled "The policy of green economy in developing countries and Policy implications for Vietnam". The study aimed to clarify the concept of green economy in developing countries, especially in Vietnam, and to identify the role of the green economy in addressing the main challenges related to environmental issues, poverty reduction, social justice and sustainable development goals. The qualitative method was used. The study is conducted by collecting documents on the implementation of the green economy internationally and in Vietnam, and conducting five interviews with experts in the field. The results of the study showed that the green economy is used as a green economic growth strategy, as it creates new job opportunities related to ecosystems, environment, and renewable energy. It has also contributed to reducing poverty, promoting social justice, and directly contributing to national energy security and thus achieving sustainable development. The study recommends setting policies to promote the green economy, and economic restructuring to achieve economic growth.

(Dlimbetova, et al., 2016) conducted a study entitled "Green Skills for Green Economy: Case of The Environmental Education Role in Kazakhstan's Economy". The study aimed to identify the green skills developed to move towards a green economy in sectors such as restaurants, car services and waste management. The descriptive survey method was used. Questionnaire method and social observation were used in order to know the extent of the spread of knowledge, skills, opinions and behaviors related to green skills among the respondents. The study sample consisted of (26) employees in (6) Kazakhstani companies. The results showed that the application of environmentally friendly operating procedures in institutions in the formal and informal sectors is uneven, and many employees consider green skills as environmentally friendly, but they do not have a sound understanding of the role of these green skills. In addition, the results indicated the need to implement ideas to protect nature from for sustainable development.

Okonkwo & Uwazie (2015) conducted a study entitled "Green Economy and Its Implications for Economic Growth in Nigeria". The study aimed to identify the impact of the green economy on growth and sustainable development in the Nigerian economy. A number of sectors have been analyzed in terms of green growth policies to see the economic benefits that Nigeria will reap from moving towards a green economy. The results of the study concluded that the green economy holds many opportunities because it is able to harmonize income and generate job opportunities while eliminating poverty and preserving natural capital. This contributes to achieving sustainable development in various agricultural and industrial sectors. The study recommends the need to develop the institutional capacity to integrate environmental policies with economic and other policies.

Nwosu, Uhuegbulem and Ben-Chendo (2015) conducted a study entitled: "Green Economy: A Tool for Achieving Sustainable Development and Poverty Reduction in Nigeria". The study aimed to identify the importance of the green economy as a tool for achieving sustainable development in developing countries such as Nigeria. The study used the analytical method. The study concluded that the trend towards a green economy contributes to achieving development that meets the needs of the present through a plan to promote growth. In order for countries to be economically developed, they must focus on programs that focus on the green economy.

Method and Procedure Study Methodology

In order to achieve the objectives of the study, the descriptive survey method was used, which is the scientific method that meets the purposes of this study.



Study community

The study population consisted of municipal project managers in Jordan.

The study sample

The study sample consisted of (90) managers, who were chosen by random method. Table (1) shows the frequencies and percentages according to the demographic study variables, and Table (1) shows this.

Table (1)
Frequencies and percentages according to demographic study variables

Variable	Category	Frequency (%)
Gender	Male	39(43.3%)
	Female	51(56.7%)
Years of experience	Less from 5 years	25(27.8%)
	From 5 – less 10 years	21(23.3%)
	From 10 –less 20 years	26(28.9%)
	20 years and more	18(20%)
qualification	BCs	58(64.4%)
	master	18(20%)
	doctor	14(15.6%)

Looking at table (1), the above table show that more than half of the study sample were women (56.7%), while the number of men was (43.3%) of the total sample of (90) samples.

The above table show that more of the study sample From 10 –less 20 years (28.9%), while less of number was 20 years and more (20%) of the total sample of (90) samples.

The above table show that more than half of the study sample were BCs category (64.4%), while less of number was doctor category (15.6%) of the total sample of (90) samples.

Study tool

For the purposes of achieving the objectives of the study, a data collection tool was developed based on theoretical literature and some relevant previous studies, as well as the opinions of some specialized educators. Some studies were referred to, such as: Kasztelan (2017) and Loan (2017) study, which were divided into three sections; (the importance of moving towards the application of green economy standards), (the obstacles of moving towards the application of green economy standards) (the requirements of moving towards the application of green economy standards). In order for the researcher to make sure of the questionnaire's ability to measure what it was designed to measure, it will be presented to a number of specialized university professors and in light of the arbitrators' opinions, the researcher will modify the questionnaire according to the directions of the referee's professors.

Validity of the content of the study tool

The validity of the content of the study tool was verified, and it was presented in its initial form to (8) university professors who are specialized, to determine the suitability of the paragraphs, areas, clarity of phrases, their formulation and linguistic integrity. The proposed amendments that you will obtain will be taken into consideration with an agreement of 80% of the arbitrators to reach the study tool in its final form. It consists of (30) items, the numbers are given the following values: ("1" Strongly disagree, "2" Disagree, "3" Undecided, "4" Agree, "5" strongly agree).

The construction validity of the study tool

To verify the validity of the construction of the study tool, the Pearson correlation coefficient was calculated between the paragraph and the domain to which it belongs, as shown in Table (2).



Table (2)
Pearson's Correlation Coefficients for the items of the questionnaire with their domains, and with the total score

No.	orrelation of The nportance of moving towards the application of green economy standards" paragraphs with the domain	The	No.	Correlation of "the obstacles of moving towards the application of green economy standards" paragraphs with the domain	With the total score	No.	Correlation of "the requirements of moving towards the application of green econom standards" paragraphs with the doma	with the total score		Correlation "the attitudes of project managers in municipalities towards implementing green economy ith standards" the domain	with the total score
1	*0.50	*0.50	1	**0.49	*0.56	1	*0.51	**0.47	1	**0.53	**0.42
2	**0.42	**0.42	2	**0.44	*0.50	2	**0.48	**0.43	2	**0.58	**0.46
3	**0.44	**0.44	3	*0.52	**0.44	3	**0.45	**0.43	3	**0.48	**0.48
4	**0.52	**0.52	4	**0.52	*0.52	4	**0.47	**0.48	4	**0.49	**0.49
5	*0.60	*0.60	5	**0.46	**0.43	5	**0.47	**0.42	5	**0.51	**0.41
6	**0.57	**0.57	6	**0.41	*0.58	6	*0.54	**0.40	6	**0.48	**0.48
7	**0.45	**0.45	7	**0.38	**0.45	7	**0.42	**0.44	7	**0.47	**0.44
8	*0.52	*0.52	-	-	-	-	-	-	-	-	-
9	*0.51	*0.51		-	-	_	-	-	-	-	-

^{*} Acceptable and significant correlation coefficients at the significance level ($\alpha = 0.01$).

It is clear from the table (2) that the values of the correlation coefficients of the questionnaire items ranged between (0.38-0.60), and between (0.41-0.58) with the total tool, and the values of the items' correlation coefficients ranged, and the value of the correlation coefficient (0.30) was adopted as a criterion for accepting items within The study tool, which indicates the presence of a strong correlation coefficient for the items of the study tool and the total tool.

Study tool stability

To verify the stability of the study tool, the Cronbach alpha method was used for the internal consistency between the paragraphs, where the equation was applied to the survey sample drawn previously to measure the internal validity, which consists of a number (30), and the table (3) shows the values of the stability coefficients for the fields by the return method and the Cronbach alpha method for internal consistency.

Table (3)
The values of the invariance coefficients of the fields by the return method and Cronbach's alpha method for internal consistency

Domains	N. of	Chronbach
	paragraph	Alpha
the importance of moving towards the application of green economy standards	9	0.73
the obstacles of moving towards the application of green economy standards	7	0.80
the requirements of moving towards the application of green economy standards	7	0.85
the attitudes of project managers in municipalities towards implementing green	7	0.92
economy standards		
Total	30	0.93

The above table shows that Cronbach's alpha values ranged between "0.73 - 0.92" while the total value came "0.93", which are high values and suitable for scientific research purposes.

Study Variables:

First, the independent variables: 1. Gender and has two levels: (male & female). 2. Qualification It has three levels: (Bachelor, Master & Doctorate). 3. Years of Experience It has four levels: (less than 5 years), (5-10 years), (10-20 years) (more than 20 years).

^{**} Acceptable and significant correlation coefficients at the significance level ($\alpha = 0.05$).



Second, the dependent variables

- The study sample's estimates of the importance of moving towards the application of green economy standards.
- The study sample's estimates of the obstacles of moving towards the application of green economy standards The study sample's estimates of the requirements of moving towards the application of green economy standards.

Study procedures

1. Review of the theoretical literature and previous published studies related to the topic. 2. Developing the study tool after referring to the theoretical literature and previous studies, presenting it to the arbitrators and specialists to ensure its authenticity, and amending the paragraphs that contained spelling errors or required reformulation, in light of the arbitration results. 3. Carrying out the stability process, using the Pearson correlation coefficient and Cronbach's alpha coefficient. 4. Distribution of the study tool to the study sample members. 5. After the responses were completed, the responses and data unloaded into the Statistical Package for Social Sciences (SPSS) and analyzed statistically according to the methods specified in the study. 6. Discuss the results, and draw conclusions and recommendations.

Statistical processing

- Extracting the Pearson correlation coefficient and the Cronbach-Alpha method to find the stability of the study tool. - Extracting frequencies and percentages. - Extracting arithmetic means (means) and standard deviations to calculate the value given by the study sample members to each phrase or group of phrases, and the general arithmetic mean for each axis. - Extracting the results of the Pearson correlation coefficient. - Extracting the results of one-way multiple variance analysis (MANOVA) to measure the degree of difference according to the study variables (Gender, Years of Experience & Qualification).

Results

Results for the first question: What is the importance of moving towards the application of green economy standards from the point of view of project managers for municipalities?

To answer the first question presented above, means and standard deviations were calculated, as shown in table (4).

Table (4)

Means, standard deviations (SD), rank and degree for the importance of moving towards the application of green economy standards from the point of view of project managers for municipalities domain

N.	paragraph	Means <u>+</u> (SD)	rank	degree
1	The green economy improves the state of human well-being by mitigating environmental risks	4.42+0.76	1	Very high
8	The green economy contributes to reducing the amounts of energy and resources consumed in traditional production processes.	4.16+0.82	2	high
2	The green economy reduces ecological scarcity by enhancing the efficient use of natural resources.	3.97+0.80	3	high
7	The green economy allows for the adoption of sustainable consumption and production processes.	3.94+0.60	4	high
6	The green economy contributes to reshaping the business sector in the areas of trade, infrastructure and institutions.	3.94+0.72	5	high
3	The green economy contributes to reducing greenhouse gas emissions.	3.76+0.79	6	high
9	The green economy promotes the reduction of greenhouse gas emissions.	3.68+0.94	7	high
4	The green economy promotes the reduction of waste production.	3.63+0.77	8	moderate
5	The green economy contributes to limiting the degradation of vital systems by preserving biodiversity.	3.57 <u>+</u> 0.74	9	moderate
	Total	3.89 <u>+</u> 0.44		high

The above table shows that the mean were very high, high and moderate for the domain of "the importance of moving towards the application of green economy standards from the point of view of project managers for municipalities" as well as the total mean+ SD"3.89+0.44", In the first degree, the paragraph "1"" The green economy improves the state of human well-being by mitigating environmental risks " came with an means+ SD "4.42+0.76" a very high degree, while in the last degree the paragraph "5"" The green economy contributes to limiting the degradation of vital systems by preserving biodiversity." came with an mean with a moderate degree. Results for the second question: What are the obstacles of moving towards the application of green economy standards from the point of view of project managers for municipalities?

To answer the scond question presented above, the Mean and SD were calculated, as shown in table (5).



Table (5) Means, standard deviations (SD), rank and degree for the obstacles of moving towards the application of green economy standards from the point of view of project managers for municipalities domain

N.	paragraph	Mean <u>+</u> (SD)	rank	degree
1	Delayed arrangement of environmental issues on the agenda of national priorities	4.29 <u>+</u> 0.59	1	Very high
5	Lack of water and agricultural land.	3.99 <u>+</u> 0.97	2	high
4			3	high
2	Weak awareness of societal sectors of greening policies.	3.82 <u>+</u> 1.14	4	high
3	Intensification of internal conflicts.	3.60 <u>+</u> 0.97	5	moderate
7	Weak coordination of relations between research institutions and the private sector.	3.60 <u>+</u> 0.82	6	moderate
6	The weak role of civil society and partnerships in promoting the concept of a green economy.	3.42 <u>+</u> 0.99	7	moderate
	Total	3.80 <u>+</u> 0.62		high

The above table shows that the mean were very high, high and moderate for the domain of "the obstacles of moving towards the application of green economy standards from the point of view of project managers for municipalities" as well as the total mean+ SD"3.80+0.62", In the first degree, the paragraph "1"" Delayed arrangement of environmental issues on the agenda of national priorities "came with an means+ SD "4.29+0.59" with a very high degree, while in the last degree the paragraph "6"" The weak role of civil society and partnerships in promoting the concept of a green economy" came with an mean+ SD "3.29+0.59" with a moderate degree.

Results for the third question: What are the requirements of moving towards the application of green economy standards from the point of view of project managers for municipalities?

To answer the third question presented above, the Mean and SD were calculated, as shown in table (6).

Table (6)

Means, standard deviations (SD), rank and degree for the requirements of moving towards the application of green economy standards from the point of view of project managers for municipalities domain

N.	paragraph	Mean±	rank	degree
		(SD)		
1	Change in the mechanisms of labor markets, training and rehabilitation.	4.12 <u>+</u> 0.59	1	high
2	Reviewing policies and improving legislation, laws and regulations governing	4.00 <u>+</u> 0.73	2	high
	the green economy.			
6	Capacity building through training and qualification in various fields.	3.92 <u>+</u> 0.97	3	high
5	Providing encouraging incentives for foreign investments (tax incentives, credit	3.92 <u>+</u> 0.73	4	high
	facilities and customs exemptions).			
7	Encouraging foreign investments to enter the green economy sectors.	3.89 <u>+</u> 0.81	5	high
3	Revision of job descriptions.	3.82 <u>+</u> 0.74	6	high
4	Green jobs have to be subject to some criteria in order to be more sophisticated	3.77 <u>+</u> 0.69	7	high
	and relevant to achieve quality work.			
	Total	3.92 <u>+</u> 0.55		high

The above table shows that the mean were high for the domain of "the requirements of moving towards the application of green economy standards from the point of view of project managers for municipalities "as well as the total mean+ SD"3.92+0.55", In the first degree, the paragraph "1"" Change in the mechanisms of labor markets, training and rehabilitation "came with an means+ SD "4.12+0.59" with a high degree, while in the last degree the paragraph "4"" Green jobs have to be subject to some criteria in order to be more sophisticated and relevant to achieve quality work "came with an mean + SD"3.77+0.69" with a moderate degree.

Results for the fourth question: What are the attitudes of project managers in municipalities towards implementing green economy standards from the point of view of project managers for municipalities? To answer the fourth question presented above, the Mean and SD were calculated, as shown in table (7).



Table (7) Means, standard deviations (SD), rank and degree for the attitudes of project managers in municipalities towards implementing green economy standards domain

N.	paragraph	Mean <u>+</u>	rank	degree
5	Project managers in municipalities are keen to build and enhance consumer awareness about the environment.	(SD) 3.97 <u>+</u> 0.83	1	high
2	Project managers in municipalities seek to review and update environmental laws and clarify implementation mechanisms.	3.85 <u>+</u> 1.02	2	high
1	Municipal project managers are encouraged to use natural resources within the total cost of goods and services.	3.75 <u>+</u> 0.96	3	high
7	Project managers in municipalities encourage promoting a culture of sustainable production and consumption patterns.	3.66 <u>+</u> 1.04	4	moderate
6	Project managers in municipalities seek to adopt incentives for environmental activities and technology transfer.	3.59 <u>+</u> 0.90	5	moderate
4	Project managers in municipalities seek to integrate environmental considerations within the frameworks of sustainable development plans and strategies.	3.53 <u>+</u> 1.12	6	moderate
3	Municipal project managers seek to participate in research in priority sectors that can be transformed into a green economy.	3.35 <u>+</u> 0.99	7	moderate
	Total	3.67+0.80		high

The above table shows that the mean were high and moderate for the domain of " the attitudes of project managers in municipalities towards implementing green economy standards " as well as the total mean+SD"3.67+0.80", In the first degree, the paragraph "5"" Project managers in municipalities are keen to build and enhance consumer awareness about the environment. " came with an means+SD "3.97+0.83" with a high degree, while in the last degree the paragraph "3" "Municipal project managers seek to participate in research in priority sectors that can be transformed into a green economy." came with an mean + SD"3.35+0.99" with a moderate degree.

Results for the fifth question: Are there statistically significant differences for the impact of the trend towards applying green economy standards and its impact on sustainable development from the point of view of project managers for municipalities due to the following gender, years of experience and qualification variables? To answer the fifth question presented above, independent sample T test and one-way ANOVA were used.

First: gender variable

Independent sample T test was used for gender variable because it contains two categories (male and female), as shown in table (8).

Table (8)
One-Way ANOVA test of variance to find the differences between the arithmetic averages of the answers of the study sample for gender variable

Domain	categories	N	Mean+SD	F	P
				value	value
the importance of moving towards the application of green	male	39	3.81 <u>+</u> 0.42	1.41	0.160
economy standards	female	51	3.94 <u>+</u> 0.44		
the obstacles of moving towards the application of green	male	39	3.60 <u>+</u> 0.43	3.19	0.002*
economy standards	female	51	3.99 <u>+</u> 0.66		
the requirements of moving towards the application of green	male	39	3.61 <u>+</u> 0.27	5.58	0.000*
economy standards	female	51	4.17 <u>+</u> 0.57		
the attitudes of project managers in municipalities towards	male	39	3.28 <u>+</u> 0.63	4.43	0.000*
implementing green economy standards	female	51	3.97 <u>+</u> 0.80		
Total	male	39	3.57 <u>+</u> 0.33	4.65	0.000*
	female	51	4.02 <u>+</u> 0.51		

As presented in table (8), results showed that there were no significant differences in the mean of total domains of the study according gender variable.

Second: years of experience variable

One way ANOVA was used for years of experience variables because it contains four categories (less 5 years, from 5 – less 10 years, from 10 – less 20 years and 20 years and more) as shown in table (9).



Table (9)
One-Way ANOVA test of variance to find the differences between the arithmetic averages of the answers of the study sample for years of experience variable

Domain	and a series	N	Mean+SD	F value	Dwalna
					P value
the importance of moving	less 5 years	25	3.78 <u>+</u> 0.46	1.58	0.198
towards the application of	from 5 – less 10 years	21	3.97 <u>+</u> 0.35		
green economy standards	from 10 – less 20 years	26	3.85 <u>+</u> 0.54		
	20 years and more	18	4.03 <u>+</u> 0.25		
the obstacles of moving	less 5 years	25	3.76 <u>+</u> 0.46	2.80	0.04*
towards the application of	from 5 – less 10 years	21	4.00 <u>+</u> 0.38		
green economy standards	from 10 – less 20 years	26	3.57 <u>+</u> 0.94		
	20 years and more	18	3.97 <u>+</u> 0.16		
the requirements of moving	less 5 years	25	3.86 <u>+</u> 0.58	3.55	0.02*
towards the application of	from 5 – less 10 years	21	4.00 <u>+</u> 0.41		
green economy standards	from 10 – less 20 years	26	3.71 <u>+</u> 0.67		
	20 years and more	18	4.21 <u>+</u> 0.20		
the attitudes of project	less 5 years	25	3.58 <u>+</u> 0.84	8.13	0.00*
managers in municipalities	from 5 – less 10 years	21	3.09 <u>+</u> 0.52		
towards implementing green	from 10 – less 20 years	26	3.97 <u>+</u> 0.92		
economy standards	20 years and more	18	4.04 <u>+</u> 0.34		
Total	less 5 years	25	3.75 <u>+</u> 0.52	1.87	0.140
	from 5 – less 10 years	21	3.76 <u>+</u> 0.21		
	from 10 – less 20 years	26	3.77 <u>+</u> 0.71		
	20 years and more	18	4.06 <u>+</u> 0.22		

As presented in table (9), the result of one-way ANOVA indicated that the mean of first domain "the importance of moving towards the application of green economy standards" and total domain did not significantly difference based on years of experience variable of the participant p value more than 0.05. also as presented in table (9), the result of one-way ANOVA indicated that there was a significant difference in the means of second domain "the obstacles of moving towards the application of green economy standards", t=5.27, p=0.04; third domain " the requirements of moving towards the application of green economy standards" (t=3.55, p=0.02), and forth domain " the attitudes of project managers in municipalities towards implementing green economy standards", (t=8.13, p=0.00). Shafee test was used to find the difference between domains which had a significant difference in the study, as shown in table (10).

Table (10) Shafee test

Domains	category		Less 5	5 – less	10 – less	20 years
			years	10 years	20 years	and more
		means	3.76	4.00	3.57	3.97
the obstacles of moving	Less 5 years	3.76		0.581	0.691	0.697
towards the application of	5 – less 10 years	4.00			0.050*	1.000
green economy standards	10 – less 20 years	3.57				0.166
	20 years and more	3.97				
domains	category		Less 5	5 – less	10 – less	20 years
			years	10 years	20 years	and more
		means	3.86	4.00	3.71	4.21
the requirements of moving	Less 5 years	3.86		0.848	0.771	0.193
towards the application of	5 – less 10 years	4.00			0.315	0.652
green economy standards	10 – less 20 years	3.71				0.024*
	20 years and more	4.21				
domains	category		Less 5	5 – less	10 – less	20 years
			years	10 years	20 years	and more
		means	3.58	3.09	3.67	4.04
the attitudes of project	Less 5 years	3.58		0.131	0.271	0.221
managers in municipalities	5 – less 10 years	3.09			0.081	0.001*
towards implementing green	10 – less 20 years	3.67				0.989
economy standards	20 years and more	4.04			, 1 ,1	

Table (10) shows that statistic significant less than (0.05) in the obstacles of moving towards the application



of green economy standards domain of the variable years of experience between (5 - less 10 years) category and (10 - less 20 years) categories, if we compare between means of (5 - less 10 years) category and (10 - less 20 years) categories, we find that mean of (5 – less 10 years) categories (4.00), was more than mean of (10 – less 20 years) (3.57), this suggest that (5 – less 10 years) categories more the impact of the trend towards applying green economy standards and its impact on sustainable development from the point of view of project managers for municipalities from (10 – less 20 years) category. Table (10) also shows that statistic significant less than (0.05) in the requirements of moving towards the application of green economy standards domain of the variable years of experience between (10 – less 20 years) category and (20 years and more) categories, if we compare between means of (10 - less 20 years) category and (20 years and more) categories, we find that mean of (20 years and more) categories (4.21), was more than mean of (10 – less 20 years) (3.71), this suggest that (20 years and more) categories more the impact of the trend towards applying green economy standards and its impact on sustainable development from the point of view of project managers for municipalities from (10 – less 20 years) category. Also Table (10) shows that statistic significant less than (0.05) in the attitudes of project managers in municipalities towards implementing green economy standards domain of the variable years of experience between (5 – less 10 years) category and (20 years and more) categories, if we compare between means of (5 – less 10 years) category and (20 years and more) category, we find that mean of (20 years and more) category (4.04), was more than mean of (5 - less 10 years) (3.09), this suggest that (20 years) and more category more the impact of the trend towards applying green economy standards and its impact on sustainable development from the point of view of project managers for municipalities from (5 – less 10 years) category.

Third: qualification variable

One-way ANOVA was used for qualification variables because contain three categories (BCs, master and doctor), as shown in table (11).

Table (11)
One-Way ANOVA test of variance to find the differences between the arithmetic averages of the answers of the study sample for qualification variable

Domain	categories	N	Mean+SD	F	P value
the importance of moving towards the application	BCs	58	3.84+0.49	7.45	0.00*
of green economy standards	master	18	3.78 <u>+</u> 0.21		
	doctor	14	4.27 <u>+</u> 0.06		
the obstacles of moving towards the application	BCs	58	3.76 <u>+</u> 0.66	0.546	0.581
of green economy standards	master	18	3.83 <u>+</u> 0.67		
	doctor	14	3.94 <u>+</u> 0.22		
the requirements of moving towards the	BCs	58	3.89 <u>+</u> 0.57	0.895	0.412
application of green economy standards	master	18	3.87 <u>+</u> 0.56		
	doctor	14	4.09 <u>+</u> 0.36		
the attitudes of project managers in	BCs	58	3.64 <u>+</u> 0.92	1.26	0.28
municipalities towards implementing green	master	18	3.54 <u>+</u> 0.49		
economy standards	doctor	14	3.96 <u>+</u> 0.51		
Total	BCs	58	3.78 <u>+</u> 0.58	2.13	0.12
	master	18	3.76 <u>+</u> 0.22		
	doctor	14	4.06 <u>+</u> 0.26		

As presented in table (11), the result of one-way ANOVA indicated that the mean of first domain "the importance of moving towards the application of green economy standards" was a significantly difference based on qualification variables of the participant t=7.45, p=0.00. Also as presented in table (11), the result of one-way ANOVA indicated that there was not a significant difference in the means of second domain "the obstacles of moving towards the application of green economy standards", t=0.546, p=0.581; third domain " the requirements of moving towards the application of green economy standards" (t=0.895, t=0.412), and forth domain " the attitudes of project managers in municipalities towards implementing green economy standards", (t=1.26, t=0.28). Shafee test was used for find of the difference between domains which had a significant difference in study, as shown in table (12).

Table (12) Shafee test

Domains	category		BCs	master	doctor
		means	3.84	3.78	4.27
the importance of moving towards the	BCs	3.84		0.889	0.002*
application of green economy standards	master	3.78			0.004*
	doctor	4.27			

Table (12) shows that statistic significant less than (0.05) in the importance of moving towards the



application of green economy standards domain of the variable qualification between (BCs) category and (doctor) categories, if we compare between them, we find that mean of (doctor) categories (4.27), was more than mean of (BCs) (3.84), this suggest that (doctor) categories more the impact of the trend towards applying green economy standards and its impact on sustainable development from the point of view of project managers for municipalities from (BCs) category. Table (12) also shows that statistic significant less than (0.05) in the importance of moving towards the application of green economy standards domain of the variable qualification between (master) category and (doctor) categories, if we compare between them, we find that mean of (doctor) category (4.27), was more than mean of (master) (3.78), this suggest that (doctor) category more the impact of the trend towards applying green economy standards and its impact on sustainable development from the point of view of project managers for municipalities from (master) category.

Discussion

Discussing the results related to the first question: What is the importance of moving towards the application of green economy standards from the point of view of project managers for municipalities?

The results related to the first question showed that the mean were high for the "importance of moving towards the application of green economy standards from the point of view of project managers for municipalities" domain. This is due to the awareness of municipality project managers about the importance of moving towards a green economy, including improving human well-being and social equity through mitigating environmental risks and ecological scarcity by enhancing the efficiency of the use of natural resources, reducing greenhouse gas emissions, reducing waste production, preserving biodiversity, and enhancing the sustainable development. This is confirmed by the fact that the paragraph "1"" The green economy improves the state of human well-being by mitigating environmental risks" came in the first rank, with a very high degree.

Discussing the results related to the second question: What are the obstacles of moving towards the application of green economy standards from the point of view of project managers for municipalities?

The results related to the second question showed that the mean were high for the "the obstacles of moving towards the application of green economy standards from the point of view of project managers for municipalities" domain. This is due to the fact that the green economy is one of the topics that need many policies and strategies to implement it effectively on the ground. Therefore, municipal projects may face many obstacles that can prevent its realization. This is confirmed by the fact that the paragraph "1" "Delayed arrangement of environmental issues on the agenda of national priorities" came in the first rank, with a very high degree.

Discussing the results related to the third question: What are the requirements of moving towards the application of green economy standards from the point of view of project managers for municipalities?

The results related to the third question showed that the mean were high for the "the requirements of moving towards the application of green economy standards from the point of view of project managers for municipalities" domain .This is due to the fact that the green economy is an issue that has many aspects and needs to follow many policies, strategies and requirements that municipal project managers need to achieve effectively on the ground. This is confirmed by the fact that the paragraph "1"" Change in the mechanisms of labor markets, training and rehabilitation" came in the first rank, with a high degree. This result agreed with Kasztelan (2017) study, which concluded that there is an interrelationship between the green economy and green growth and sustainable development due to the complementary and synergistic nature between these concepts. Aslo this result agreed with Loan (2017) study, which concluded that the green economy is used as a green economic growth strategy, as it creates new job opportunities related to ecosystems, environment, and renewable energy.

Discussing the results related to the fourth question: What are the attitudes of project managers in municipalities towards implementing green economy standards from the point of view of project managers for municipalities?

The results related to the fourth question showed that the mean were high for "the attitudes of project managers in municipalities towards implementing green economy standards from the point of view of project managers for municipalities" domain. This is due to the awareness of municipal project managers about the importance of moving towards a green economy, as it contributes to increasing the share of green sectors in the economy, increasing the number of decent, productive and remunerative green jobs, decreasing amounts of energy and resources consumed in traditional production processes, reducing waste and pollution, and a significant decline in greenhouse gas emissions and enhancing the sustainable development. This is confirmed by the fact that the paragraph "5" "Project managers in municipalities are keen to build and enhance consumer awareness about the environment" came in the first rank, with a high degree. This result agreed with Kasztelan (2017) study, which concluded that there is an interrelationship between the green economy and green growth and sustainable development due to the complementary and synergistic nature between these concepts. Aslo this result agreed with Loan (2017) study, which concluded that the green economy is used as a green economic growth strategy,



as it creates new job opportunities related to ecosystems, environment, and renewable energy.

Discussing the results related to the fifth question: Are there statistically significant differences for the impact of the trend towards applying green economy standards and its impact on sustainable development from the point of view of project managers for municipalities due to the following gender, years of experience and qualification variables?

First: gender variable

The results related to the fifth question showed that there were no significant differences in the mean of total domains of the study according to gender variable. This is due to the fact that the concept of green economy is one of the important topics for all segments, all ages and all genders, as it is related to the environment and how to preserve it. Therefore, it was found that there is no difference in all dimensions of the study according to the gender variable.

Second: years of experience variable

The results related to the fifth question also showed that there was no significant difference of the first domain "the importance of moving towards the application of green economy standards" based on years of experience variable, This is due to the fact that the years of experience of municipal project managers do not affect the importance of focusing attention on the application of the green economy, as municipal project managers consider the green economy as one of the most important means of reviving growth, promoting economic competitiveness and creating green industrial areas, thus achieving harmony between the economic, social and environmental policies that in turn, it contributes to achieving sustainable development. But the results showed there was a significant difference in the means of second domain "the obstacles of moving towards the application of green economy standards", and third domain "in favor of (5 - less 10 years) category. This is due to the fact that a number of municipal project managers whose years of experience ranged between 5-10 years see the obstacles facing the implementation of the green economy from another angle, as they see that there is a significant weakness in allocating part of the investments in the green economy, and a decline in public and private financing mechanisms by economic sectors to support green economy projects. The results also showed that there was a significant difference in the means of the third domain"the requirements of moving towards the application of green economy standards", and the fourth domain "the attitudes of project managers in municipalities towards implementing green economy standards" according to years of experience variable, in favor of (20 years and more) category. This is due to the fact that a number of municipal project managers whose years of experience ranged from 20 years or more see the requirements facing the implementation of the green economy from another angle, as their possession of a large number of years expanded their perceptions and cultural backgrounds about various aspects related to the environment, especially the green economy.

Third: qualification variable

The results related to the fifth question also showed there was not a significant difference in the means of second domain "the obstacles of moving towards the application of green economy standards, and the third domain "the requirements of moving towards the application of green economy standards" and the forthcoming domain "the attitudes of project managers in municipalities towards implementing green economy standards" according to qualification variable, This is due to the fact that the study sample of various academic qualifications had a similar level about obstacles, requirements and attitudes towards the trend towards implementing the green economy, as it is one of the topics that pertain to all and different segments because it is associated with the environment around us. The results also showed that there was a significant difference in the means of first domain "the importance of moving towards the application of green economy standards" according to variable qualification in favor of (doctor) category. This is due to the fact that the concept of green economy is one of the topics that bear many aspects of issues related to it, and its realization requires the presence of a great cultural background in the environmental field, so it was found that project managers with a doctorate qualification had a greater level of awareness of the importance of moving towards the application of green economy.

Conclusion

Moving towards a green economy has the potential to achieve sustainable development and rapid poverty eradication unbelievable before. This ability depends mainly on the change of the scene; this ability depends primarily on a changing landscape: our factor and the risks we face may change significantly, necessitating a radical rethinking of our approach to economics.

Recommendations

In light of the results that have been reached, the researcher recommends the following:

- 1. The necessity of inviting municipal project managers from the public and private sectors to cooperate, and to make investment in the green economy a successful way to preserve natural resources and create opportunities to create wealth and jobs.
- 2. The necessity of allocating part of the investments in the fields of rehabilitation, innovation and scientific



research, given that the future of the green economy will not be promising without relying on good information and constantly evolving knowledge.

- 3. Strengthening public and private financing mechanisms through preferential formulas to green the various economic sectors.
- 4. Establishing favorable institutional and regulatory frameworks for low-carbon industries.
- 5. Taking effective regulatory measures equipped with supervisory mechanisms, which constitute a strong ground for the inclusion of economic and social actors to move towards a green economy.

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