

SUSTAINABLE FINANCE AND GREEN INVESTMENT STUDYING THE IMPACT OF SUSTAINABLE INVESTEMENTS ON CORPORATE AND MARKET PERFORMANCE

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ABSTRACT

The transition to a green economy has become a global priority, offering a pathway to mitigate environmental risks and promote sustainable development. By integrating economic activities with environmental preservation, the green economy minimizes ecological degradation and accelerates renewable energy adoption. This study aims to explore strategies for advancing the green economy in Egypt, focusing on promoting and financing green investments to achieve sustainable development goals. Insights are drawn from Egypt's economic and environmental priorities, with particular emphasis on implementing projects aligned with these objectives. Additionally, the study benchmarks the United Arab Emirates' successful Sustainable Development Strategy and Green Investment Program 2030.

Using a descriptive analytical methodology, the study employs data collected from 50 employees of Green Power Assiut Company via a structured questionnaire, supplemented by researcher insights. The analysis reveals a strong correlation between green investments and key dimensions of sustainable development, including economic growth and poverty reduction. The study also highlights available resources, challenges, and mechanisms for financing green investments in Egypt.

The findings underscore the need to enhance renewable energy adoption, enforce waste management and recycling policies, and attract foreign direct investment in sustainable and innovative initiatives. These recommendations aim to align Egypt's green economy efforts with global best practices, fostering a more resilient and sustainable future.

Keywords:

Sustainable - Finance - Green investment - Market performance

1. Introduction

In recent years, the intersection of environmental sustainability and economic growth has emerged as a pivotal area of research, driven by increasing global concerns over climate change, environmental degradation, and the urgent need for sustainable development practices. Within this context, green finance has been recognized as a critical mechanism for mobilizing the necessary resources to support environmentally sustainable projects and companies. Despite its growing prominence, the dynamics of green finance and its tangible effects on the financial performance of firms remain an underexplored territory, especially within the context of developing and transitional economies like China, which plays a significant role in the global environmental landscape due to its large economy and significant environmental footprint (**Yanru and Anqiang, 2024**).

The scope of countries and their prosperity expands through the levels of full growth that these countries have reached, but over time this growth has contributed in an unrealistic way parallel to the increase in damage to the ecosystem and the resulting depletion of existence and increased levels of pollution that have contributed to the

phenomenon of global warming (**Alamerew et al., 2020**). The natural problem that the world began to worry about its new consequences at the beginning of the climate, which resulted in a new rise in temperatures, desertification, drought and the impact on the discrimination tactics of organisms, which contributes to their presence on small groups that depend on providing capital income such as agriculture and fishing (**Accenture , 2017**). The green origin constitutes the original method for achieving economic development and appeared strongly after the global financial crisis of 2008 to put development tools to achieve development away from everyone and with the help of solutions to models of poverty, unemployment and resource depletion while maintaining growth levels and relying on the practices of this thought that unites corruption and maximizes electronics, which requires the solidarity of all countries (**Afshari et al., 2020**).

International Scientific Labor Conference 108th Session, 2019 It represents fully the green one of the pioneers, and the green which encourages the effects in November and resulted in the creation of new job opportunities, innovation by improving the environmental impact in the industrial future, and can contribute from industrial zones that facilitate the establishment of industries through innovative policies coupled with green investment. For example, in the field of energy, we must do our best for new and renewable floors such as solar and wind energy and green building projects to reach clean victory, and this applies to all green details in different parts of the universe. (**Chen et al., 2022**)

The past conference witnessed a tangible transition in the Arab name of diversity and green, and the United Arab Emirates is considered one of the most important Arab countries that rushed to try to apply the concept and basis of green in various fields. Diversity was established to facilitate adding diversity to providing the necessary funding sources for green investments and projects today for the green economy (**Abdelmalak et al., 2023**).

Egypt has begun to move towards interest in this type of start as one of the important and main ways in the comprehensive development plan taking place on the homeland through the implementation of many projects that are compatible with the holistic in a natural and somewhat gloomy way, and to Egypt towards the spread of laws towards the comprehensive direction towards green, where many laws were issued, including: Law No. (4) of 1994 and its necessity for work, and amended by Law No. (9) of 2009 by Law No. 105 Final 2015 for the purpose of the Environmental Protection Fund 2009. Regarding the subject, ending where the green asset is operated on reshaping and correcting the optimal use (**Barakat et al., 2024**).

So that we become more supportive of the ideal infrastructure, so that we can achieve more ways towards achieving social development, through achieving benefits, competitiveness, growth and protecting the general environment.

Research problem:

There is a lack of integral to the complete green transformation, whether these are important details, elements of social work, companies, or workers, which requires the state with all its components, universities, scientific centers, and the world to see the far-reaching importance of moving towards green and clarifying its areas in an integrated manner. According to the classification of (**Hossam Amin, 2017**).

This is why the importance of green investment has become apparent, and there is a lack of sufficient data to demonstrate its role in helping economic growth, providing new job opportunities, eliminating poverty, and achieving sustainable development. Therefore, a study was conducted on the impact of green investment on sustainable development in Egypt and how to benefit from the experience of the UAE.

Research Questions the research questions include:

1-What is the comprehensive concept of green investment?

2-To what extent the green investment considered a methods of a technological development?

3-To what extent does Egypt have the potential for green investment transformation?

4-To what extent will the trend towards green investment lead to achieving development goals?

Research aims

The study aims to find strong ways and strategies to implement the green economy in the Arab Republic of Egypt by encouraging green investments and knowing the methods of financing them in order to achieve the goals of sustainable development. It also aims to study the case of an Arab country, the UAE, which is similar to Egypt in some of its experience in sustainable development, in an effort to clarify the conditions and environmental situation to benefit from the best ways that help in sustainable development using clean energy through green investments.

Importance of the research

Scientific importance: This study contributes modestly to providing some information and presenting some recommendations to clarify the importance of green investment supporting the green economy in Egypt (environmentally friendly), which is one of the mechanisms of sustainable development.

Practical importance: Through the spread and expansion of green investment and standing on the green projects carried out by the United Arab Emirates as a model for an Arab country and projecting some of these projects on Egypt in the public and private sectors and companies specialized in new and renewable energy and also for local residents in establishing solar energy stations in homes, which helps in sustainable development and achieving its goals, the most important of which are eliminating poverty and economic development.

Research hypotheses

Research hypotheses The study is based on a set of hypotheses, which are as follows:

Hypothesis 1: There is a statistically significant relationship between green investment and economic growth and poverty reduction as a dimension of sustainable development.

Hypothesis 2: There is a statistically significant relationship between the availability of capabilities and mechanisms for financing green investment in Egypt and economic growth and poverty reduction as a dimension of sustainable development.

Hypothesis 3: There is a statistically significant relationship between Egypt's benefit from the UAE's Vision 2030 to achieve sustainable development and achieving the sustainable development goals in Egypt.

Hypothesis 4: There is a statistically significant relationship between achieving the sustainable development goals and the general culture factor, employee training, and government support for green investment.

Research terms:

Green economy: The World Bank defined the green economy as "an economy that is characterized by its effective use of natural resources, reducing the impact of air pollution and environmental impacts, and taking into account natural risks and the role of environmental management and natural capital in preventing physical disasters, and growth must be comprehensive. The Organization for Economic Cooperation and Development defined it as "economic growth that preserves the natural resources necessary to continue securing the resources and environmental services necessary for human well-being." **Mardasi (2016)** defined the green economy as an economy that results in improving human well-being, achieving social equality, and reducing environmental risks by reducing carbon emissions and greenhouse gases, improving the use and addressing the scarcity of natural resources and their erosion, in a way that preserves the right of future generations to a clean environment on the one hand and to natural resources on the other hand.

Green investment: The concept of green investment stems from the financial contribution of projects to respecting the environment Its concept is linked to the

practice of environmental ethics that inevitably leads humans and the environment around them to improve, and also to know the degree to which this investment contributes to improving environmental issues. This is done by measuring the effectiveness of investment in the environmental field and the size of the benefits that investment returns to protect the environment (**Nafadi, 2017**).

The concept of sustainable development: The Brundtland Commission defined sustainable development as development that works to meet the special needs of the present generation without harming or compromising the gains of future generations in meeting their needs (**Bakdi, 2019**).

Research Limits

Spatial Limits: This study focuses on studying the Egyptian case of Green Power Assiut Company in addition to highlighting the experience of the United Arab Emirates.

Temporal Limits: The study period (2021-2022.)

Objective Limits: The study focuses on presenting the importance of the role of green investments in supporting Sustainable Development Goals in Egypt and the possibility of benefiting from the experience of the United Arab Emirates.

2. Literature Review

Sandy Sabry et al. (2017): "Green Economy and its Impact on Sustainable Development in Light of the Experiences of Some Countries - Case Study of Egypt". This study aimed to find strong ways and strategies to implement the green economy in Egypt in order to achieve sustainable development and encourage investment. This study also aims, through comparison and case study of countries similar to Egypt in terms of conditions and environmental status, to benefit from their experiences in sustainable development in order to clarify the best ways that help achieve sustainable development using clean energy (green economy). The study concluded that the green economy is pivotal in eliminating poverty, reducing unemployment, and providing job opportunities. The use of new renewable energy is of great importance in protecting the environment as it is clean, non-polluting energy and is a goal of sustainable development.

Hossam Amin Hafez (2017): "A Proposed Strategy for Directing Financial Investments Towards the Green Economy". The study aims to develop a strategy to direct investments towards green economy by activating the role of civil society organizations in conducting research on investment opportunities in the green economy to protect the environment from the effects of environmental pollution resulting from the misuse of resources and establishing the concept of the green economy and promoting the use of clean energy as well as finding new areas for economic growth. The study concluded that the state with all its institutions, universities, scientific centers and the media must play its role in spreading the importance of investment and clarifying its areas in the trend towards the green economy, and the state must encourage and facilitate the establishment of such associations to perform their role and the importance of their role to achieve sustainable development.

Also, the study of **Muhammad Siddiq Nafady (2017):** "The Green Economy as a Mechanism for Sustainable Development to Attract Foreign Investment - A Field Study Applied to the Egyptian Environment". This study aimed to clarify the extent of the relationship between the green economy and foreign investment and that the trend towards the green economy as a tool for sustainable development will lead to attracting foreign investment and thus supporting the Egyptian economy. The study concluded that the green economy protects people from environmental risks resulting from industries that cause environmental pollution, and that foreign investments are the main source of economic growth for less developed countries such as Egypt. Egypt's ability to benefit from the experience of the United Arab Emirates in achieving sustainable development goals. The study concluded that it is possible to

benefit from and utilize the experience of the United Arab Emirates and the 2030 Agenda for Sustainable Development in solving the difficulties and challenges facing the drafters of Egypt's 2030 Strategy, as it notes that Egypt enjoys many economic components that enable it to reach its goals.

Hatem Reda's study (2021) "Maximizing Egypt's benefit from solar energy in light of Vision 2020-2030." The study dealt with the definition of solar energy, its importance, methods of generating electricity, and the experience of some Arab countries in benefiting from solar energy, namely Morocco and the United Arab Emirates. The study dealt with the experience of the Arab Republic of Egypt in benefiting from solar energy within the framework of Vision 2020-2030, with a study of the capabilities that Egypt enjoys in solar energy and the challenges facing achieving the goals of the strategy, and finally a comparison between Egypt, Morocco and the United Arab Emirates. The study concluded that Egypt enjoys natural and geographical capabilities, which makes it a major source of three sources of new and renewable energy, namely wind, solar energy and biomass. Egypt can also benefit from the experiences of Morocco and the Emirates in achieving sustainable development goals. Negin vaghefi Chamhum Siwar Sarah Aziz Abdul Aziz, Green Economy. Issues approach in Muslim Countries institute for environment and development (LETARI) University Kebon9saan Malaysia 30 January 2015, The study aimed to identify the extent of the ability of the green economy to develop economic life in Islamic countries by creating job opportunities and reducing poverty. The researcher concluded that the green economy contributed to improving the economic situation of the countries that adopted it, whether they were developed or developing, and recommended the necessity of adopting integrated strategies for the green economy in Islamic countries to contribute to addressing many of the problems facing these countries.

Erice Novian Tilukas, Green Economy for Sustainable Development and Poverty eradication Mediterranean Journal of Social, Vol 6 No 6, December 2015 The study addressed the role of the green economy in achieving more economic growth, providing job opportunities, and reducing unemployment and poverty. The researcher concluded the importance of the green economy in increasing individuals' incomes and reducing poverty, and that it does not have a significant impact on unemployment. The researcher also recommended that both the public and private sectors support the green economy in the future in order to achieve development and eliminate poverty.

Rasha Abdel Wahab Ahmed's study (2021): "The impact of economic challenges on sustainable development goals in Egypt's 2030 development program." This study addressed the most important features of sustainable development in general, then addressed the current economic challenges facing the Arab Republic of Egypt and the most important components of the Egyptian economy that help achieve the sustainable development goals of the 2030 strategy, and the extent to which

Chowdhury & Mollah (2015) found a positive relationship between corporate social responsibility (CSR) and financial performance. Regression analysis showed that a company's financial success is influenced by CSR efforts. The study included 527 companies on the Dhaka Stock Exchange and 131 firms with annual reports from 2008-2012, using Tobin's Q, ROA, and ROE analysis.

Furthermore, a positive correlation between sustainable investment and financial performance was postulated by **Friede et al. (2015)**. This is done by utilizing 2,271 businesses in Europe between 2004 and 2009. Rating agencies' ESG scores were used to gauge sustainable investment. Tobin's Q and other market-based metrics were used to gauge financial success in addition to return on asset (ROA).

Similarly, Partners' (2015) study on sustainability practices and financial performance found a strong correlation between diligent practices and economic performance. 88% of studies showed robust sustainability practices improved operational performance, cash flows, investment performance, and lower capital costs. The analysis covers risk, performance, reputation, cost of capital, operational

performance, and stock prices, suggesting responsibility and profitability are complementary.

According to Lin et al. (2017), corporate social responsibility (CSR) and firm value do, in fact, positively correlate. Using 2,107 US businesses between 2009 and 2014. The Corporate Social Responsibility Index (CSRI) was utilized to measure corporate social responsibility (CSR) during the study's execution in the United States.

Stock returns and company worth were measured by Tobin's Q.

Moreover, Rahi et al. (2020) found a positive relationship between sustainability practices and financial performance in the Nordic financial industry. They used ESG scores and the Thomson Reuters Eikon database to extract information on 258 financial companies from 2015-2019. The study measured sustainability practices using return on asset, return on invested capital, return on equity, and earnings per share. The final sample included 152 firm years of observations for 39 companies, controlling for systematic risk, unsystematic risk, and firm leverage.

Phan et al. (2021) found a positive relationship between Sustainable Development Practices (SDPs) and financial performance, demonstrating increased profitability and growth. The study measured SDPs using environmental practices, workplace practices, and community practices. Firm financial performance was measured using profitability and growth indicators. Firm representatives were asked to compare their financial performance with the sector average over the past three years, using subjective measures of financial performance.

Meanwhile, Girón et al. (2021) then concentrated on the favorable correlation between firms' economic performance and sustainability reporting. The sustainable development goals (SDGs), external assurance, Tobin's q, and a sample of 366 large Asian and African companies that addressed the SDGs in their 2017, sustainability reports were used to measure sustainability reporting. The firms' economic performance was measured by total assets, number of employees (EMP), market capitalization (CAP), taxation (TAX), earnings before interest, taxes, depreciation and amortization (EBITDA), profit margins (PM), leverage (LEV), return on equity (ROE), and return on asset (ROA).

Mohamed et al. (2021) found a positive relationship between sustainability practice and financial performance of Egyptian banks. They found that sustainable development helps banks recognize risks, access new markets, and increase investments. The study used annual reports and sustainability reports to measure financial performance and sustainability practices.

Simultaneously, Budsaratragoon and Jitmaneeeroji (2021) found a positive relationship between corporate sustainability and stock value in emerging markets in the Asia-Pacific region. They used the constant growth dividend discount model and grouped sustainability measures into 15 categories. Financial performance and stock value were measured using Tobin's q, return on asset, return on equity, cost of capital, and debt to equity ratio.

Moreover, Constantinescu et al. (2021) study found a significant association between environmental, social, and governance (ESG) disclosure and firm value in the energy industry. The study used data from Thomson Reuters' Top 100 Global Energy Leaders list and two linear regression models. The findings suggest that companies should incorporate non-financial information, particularly ESG factors, in their corporate reporting to attract new capital and improve their value.

Koundouri et al. (2021) also noted that there is a positive correlation between EGS performance and financial performance. Using the STOXX Europe ESG Leaders 50 Index over the previous three years as a sample, they measured EGS performance using Sustainalytics, a high-quality analytical ESG rating, and financial performance using average beta, debt to equity, return on assets, return on equity, and profit margin.

Rose and Winther (2021) found a positive relationship between ESG scores and non-financial reporting of financial performance in public companies in the EU from 2015

to 2019. They used average stock price, return on assets, Tobin's q , and annual EPS to measure financial performance and ESG scores to measure non-financial performance. **Additionally, Phan et al. (2021)** found a positive correlation between financial performance and sustainability initiatives, supported by the managerial advantage hypothesis and fixed resource theory. They used 116 Swedish firms in 2019 and various metrics to measure financial performance.

On the other hand, Murata and Hamori (2021) found a negative correlation between ESG Disclosures and stock price crash risk, primarily in Europe, the United States, and Japan. They used regression models to examine the impact of ESG disclosures on major market indices using firm-specific weekly returns and down-to-up volatility measures.

Likewise, Wong and Zhang (2021) studied the negative relationship between stock market reactions and adverse ESG disclosure in publicly traded U.S. companies from 2007 to 2008. The study used media channels and ESG disclosure to examine investor reactions to increased Cash Reserve Ratio due to negative ESG media coverage.

The research found that firm characteristics like size, stock liquidity, S&P 500 constituents, corporate reputation status, and industry classifications explain significant differences in investors' reactions to increased CRR from negative ESG media coverage.

Li et al. (2022) study found a positive correlation between stock prices and ESG performance in Chinese non-financial enterprises during the COVID-19 outbreak. They used CAR, AR, and ER measures, ESG performance averages, and control variables to measure the impact of a company's ESG performance.

Furthermore, Ekström and Malmström (2022) found a positive relationship between return on investment (ROIC) performance and environmental, social, and governance (ESG) performance. They collected secondary data from 44 companies in the European and North American textile industries and examined the data using SPSS, OLS estimation, and Tobin's q .

Hamdy et al. (2022) also found a positive relationship between corporate social performance (CSP) and corporate financial performance (CFP). This study examined the profitability levels of Egyptian listed companies using the ESG composite score of the 100 most active listed companies. The sustainability score data was sourced from the Egyptian Stock Exchange based on the ESG composite score.

Furthermore, Zhang and BI (2022) examined the positive correlation between Corporate Social Responsibility and Financial Performance of 30 chemical companies from 2016-2021, using metrics like salary growth, operating cost to revenue ratio, and Return On Total Assets.

Kubal et al. (2023) found a positive relationship between ESG factors and stock performance in Indian publicly traded companies. Companies with strong institutional strength achieved better results in ESG aspects and stock performance, highlighting the importance of social activities in investing in stocks. Focusing on long-term ESG performance helps companies manage risks and regulatory changes.

Abdelmalak (2023) study found a positive relationship between ESG factors and company performance, particularly in developing countries. The study analysed 600 companies in 24 markets from 2014-2018, using ROS, ROA, and ROE metrics. The findings suggest that ESG factors significantly improve financial performance and attract investors.

In addition, Fu and Li (2023) found a positive relationship between ESG and financial performance in top-listed Chinese companies. They found that transparent ESG information helps avoid information asymmetry, reduces financing costs, strengthens stakeholder relationships, and enhances reputation and social image. The study used various control variables and return on assets to measure financial performance.

Whelan et al. (2023) analysed over 1,000 studies from 2015 to 2020, using risk-adjusted characteristics and operating metrics like return on equity and return on asset to measure financial performance.

Moreover, **Marzuki et al. (2023)** studied the link between ESG, SRI, ethical, and impact investing activities and portfolio and financial performance.

They analysed 260 articles from 2013 to 2022, identifying four themes:

niche, motor, emerging/decreasing, and basic/transversal. Socially responsible investing, engagement, and ESG were positioned between niche and highly developed themes. The study highlights the importance of these themes for promoting sustainability and sustainable development in an efficient capital market.

Theoretical Framework Green investment is one of the components of sustainable development based on the economy, through dealing with society and the environment in a way that leads to achieving the green life, i.e. the best for contemporary man, and ensuring the best life for future generations, and preserving the environmental balance in all its various forms. In this investment, investors tend to deal with renewable energy, green markets and green banks, through these establishments partnering with the public sector, the private sector and government institutions to increase investment in This system, although it is a relatively new phenomenon, is a major indicator of development, and this investment monitors the achievement of the highest growth rates, especially in dealing with the environment and protecting it from the dangers of pollution. This investment has been found strongly in developed countries, through the adoption of economic development policies within those foreign countries, which Arab countries have recently turned to and adopted as part of their own policies; in order to reduce environmental risks and work to reduce the poverty rate among the population. **(Ministry of Environmental Affairs website, 2022)** Potentials, components and mechanisms for financing green investment in Egypt to implement the goals of the 2030 Sustainable Development Strategy: Egypt has economic components that enable it to achieve the goals of the 2030 Sustainable Development Strategy. We can mention the most important of these components and mechanisms for financing green investment:

1- Egypt's geographical location: Egypt is located in the northeastern part of the African continent, and has an Asian extension, as the Sinai Peninsula is located within the Asian continent, so it is a transcontinental country. This geographical location is considered one of the most important global trade corridors between the East and the West, as the Egyptian port authorities have about 15 commercial ports, the most important of which is the port of Alexandria and many specialized ports, divided into 11 petroleum ports, the most important of which is the port of Ras Gharib, 7 mining ports, the most important of which is the Safaga mining port (Abu Tartour), and 5 tourist ports, the most important of which is the port of Port Ghalib and the ports of Fishing, and its number is 4, the most important of which is the fishing port of Port Said. There are also 17 saddle points in Egypt, the most important of which are Anfoushi, Abu Qir, and Matrouh Port. Egypt's ports also achieved trades worth 156 million tons of goods in 2020. **(Fouad, 2020.)**

2- Renewable energy resources: Egypt enjoys a suitable climate, moderate weather and a distinguished location that helps Egypt to be at the top of the promising countries in the production of renewable energy such as solar energy, wind energy, energy generated from water, and that generated from biomass (biological).

3- Tourism: Egypt is considered one of the most important tourist countries in the world, as Egypt has all the elements of tourist attraction. In addition to the magic of nature and the splendor of the climate, Egypt includes about a third of the world's antiquities and a rich heritage. It is also distinguished by the diversity of the tourism product between religious, historical, cultural and archaeological. Tourism types in Egypt vary from archaeological, historical, religious, cultural and coastal tourism, in addition to conference tourism, international exhibitions, safaris, yachts, nature

reserves, medical tourism, sports and rural tourism, and other types of tourism that Egypt enjoys.

4- Human resources: Egypt is one of the most populous countries in the Middle East, and is characterized by the fact that most of its population is young. Egypt is a country Young, where the population is under about 61% of the total population, and the human element is one of the most important elements 30 years of productivity that can contribute to achieving development, and this element will not play its role without education as education contributes to the accumulation of human capital.

5- Mineral wealth: Egypt has huge amounts of mineral wealth and precious metals, which in turn contribute significantly to the advancement of the Egyptian economy, and the most important of these wealth are: (Iron - Gold - Manganese - Black Sand - Chromium - Zinc - Lead - Tin - Phosphate - Quartz - Kaolin - Copper - Talc - Sulfur - Gypsum - Sodium salts and potassium - Precious stones - Feldspar - Marble of all kinds).

6- Diversity of the Egyptian economy: The Egyptian economy is not limited to one field, but is characterized by diversity as the Egyptian economy depends on many fields such as agriculture, industry and trade the services sector, revenues from the oil sector, tourism, ports, transportation, the Suez Canal, and other economic fields.

7- The large unexploited area in Egypt: The area of the Arab Republic of Egypt is about 000,002.1 square kilometers, and the inhabited area is 78990 km², representing 8.7% of the total area, meaning that about 90% of Egypt's area is unexploited, and all of this area needs to be rehabilitated and optimally exploited in various fields such as agriculture, industry, and the discovery of resources and mineral wealth that help develop Egypt's economy and thus achieve the goals of sustainable development 2030.

8- The large size of the consumer market: Due to the large population in Egypt, as Egypt is considered one of the most populous countries in the Middle East, it is one of the largest consumer markets in the Middle East due to the high size of its population and the high volume of demand. Egypt also enjoys a huge and distinctive network of international trade agreements that can help it to trade in the Middle East if these agreements are exploited to be a center for exploitation

9- Services Sector: The tourism, travel, transportation, technology and communications sectors are among the most prominent sectors that contribute to achieving continuous leaps in Egyptian services exports. Egypt has also been able to develop the electricity sector through its agreement with the German company Siemens to develop this sector and build three giant power stations in Prince, the administrative capital and Beni Suef, which the German company completed in record time in less than three years at a contractual value of about 6 billion euros to produce 400.14 megawatts, with each station producing 800.4 megawatts. With its completion, Egypt now has a surplus of electricity in addition to what is already It has electricity and has enabled Egypt to save \$3.1 billion annually as a result of saving in fuel consumption. (Adel Shabib, 2021)

The goals of Egypt's Vision 2030 and the most important government initiatives to achieve them: Egypt's Vision 2030 seeks to improve the quality of life of the Egyptian citizen and improve his standard of living in various aspects of life by emphasizing the consolidation of the principles of justice and social integration and the participation of all citizens in political and social life. This comes alongside achieving high and sustainable economic growth and enhancing investment in human development and building their creative capabilities by urging the increase of knowledge, innovation and scientific research in all fields. The goals are as follows: 1- Improving the quality of life of the Egyptian citizen and improving his standard of living 2- Justice, social integration and participation 3- A competitive and diversified economy 4- Knowledge, innovation and scientific research 5- An integrated and sustainable ecosystem 6- Governance of state and community institutions 7- Egyptian peace and security 8- Enhancing Egyptian leadership How Egypt can benefit from the UAE's experience in green investment: It is clear that the Emirati experience is the

most effective experience in implementing the Sustainable Development and Green Investment Strategy 2030 program. **From this standpoint, the Egyptian economy can benefit from the Emirati experience in order to achieve growth and achieve sustainable development goals through Achieving the highest global competitiveness indicators in sustainable development indicators by benefiting from the following:**

1- Transforming the UAE into a diversified economy based on science and innovation: The UAE is building solid foundations that enable the growth and prosperity of the sectors of the knowledge-based future economy, and is looking forward to strengthening its position as a global destination for establishing businesses based on innovation, artificial intelligence, and entrepreneurship. It has launched strategies that will push towards a smarter future economy, and achieve sustainable economic growth based on advanced science and technology, and depends on high capabilities, competencies, and distinguished talents.

2- Enhancing the role of foreign direct investment: Foreign direct investment aims to develop, advance, and exploit available economic resources effectively and efficiently to achieve the highest growth rates. According to the 2021 "UNCTAD" World Foreign Direct Investment Report, the UAE ranked first in the Arab world and 15th globally in terms of its ability to attract foreign investment Direct. **(Vision - Abu Dhabi, 2021.)**

3- UAE Strategy for Digital Transactions | Blockchain: The UAE Strategy for Digital Transactions (Blockchain) was launched in 2018 with the aim of harnessing advanced technologies, benefiting from them and employing them in serving the community and enhancing the efficiency of government performance, by transforming government transactions at the federal level to Blockchain platforms. This strategy is based on four main axes: citizen and resident happiness, raising the level of government efficiency, advanced legislation to bring about a qualitative shift in federal government work, and the UAE's leading position globally (position in the field of information security and transfer. **(Ministry of Economy, United Arab Emirates, 2022)**

4- UAE Green Development Strategy: The initiative includes a set of programs and policies in the fields of energy, agriculture, investment, and sustainable transportation, in addition to new environmental and urban policies that will improve the quality of life in the country. It includes six main tracks: Green energy, government policies aimed at encouraging investments in the fields of the green economy, the green city, dealing with the effects of climate change, green living, technology, and green technology. **(UAE Ministry of Economy website, 2022)**

5- UAE Strategy for the Fourth Industrial Revolution: This strategy focuses on several main axes, including adopting plans and strategies in the field of genomic medicine and genomic medical tourism, enhancing economic security by adopting the digital economy, and developing and adapting advanced technologies, starting with things from artificial intelligence and nanotechnology to Internet of Things solutions and 3D printing, with the aim of enhancing their use in supporting economic growth. **(UAE Ministry of Economy website, 2022)**

6- UAE National Strategy for Artificial Intelligence 2031: This strategy is the first of its kind in the region and the world, and includes eight strategic objectives, five axes, and a set of initiatives and directions aimed at employing artificial intelligence and its contribution to developing vital areas in the country such as education, economy, government development, and community happiness, and creating a promising new market in the region with high economic value in addition to supporting private sector initiatives and increasing productivity. Targeted sectors: transportation, health, space, renewable energy, water, technology, education, environment, traffic. 7- Education development: Developing the education sector is one of the most important goals of sustainable development. In this context, the Ministry of Education seeks to anticipate

the future of education to create a generation aware of the requirements of life To keep pace with its developments, the UAE has allocated 41.10 billion dirhams to the education sector in the general budget, equivalent to 8.14% of the state's general budget, in order to develop the educational process, while the allocation in 2016 was about 52.6 billion dirhams. **(UAE Ministry of Education, 2024).**

8-Transportation and Logistics: The UAE has proven its strategic position as a global hub for transportation and logistics services, as it has expanded and developed ports, airports and road networks, in addition to taking measures to increase the capacity of its transportation systems, in order to reduce reliance on private vehicles and reduce traffic congestion on roads, thus reducing the carbon footprint. In this context, the Department of Transport in Abu Dhabi launched the comprehensive transport plan in 2009 in response to the goals of “**Abu Dhabi Vision 2030**”, while the “**Roads and Transport Authority in Dubai**” is proceeding according to the “**Dubai Strategic Plan 2015.**”

9-Waste Management (National Report on the Status of the Green Economy in the UAE, 2015): The Waste Management Department in Dubai Municipality prepared the “**Master Plan for Integrated Waste Management In the Emirate of Dubai**, to reduce the amount of waste sent to landfills to zero within 20 years, the Emirate of Sharjah established the waste management company "Bee'ah" as part of a public-private partnership program with the aim of diverting 100 percent of waste from landfills by 2015. Wastewater in the Emirates is treated by electricity and water authorities. Following unprecedented levels of urban development, the government is paying great attention to investing extensively in modernizing, developing and expanding sewage systems.

The most important initiatives include:

- No more non-biodegradable plastic bags. - No waste of sewage water.
- Converting waste into a source of energy in the future. - Automation of waste collection
- Extending the life of the product through e-commerce.

10- Tourism development: The tourism and hospitality sector in the UAE has been of great importance in supporting the country over the past two decades of economic development plans that have been adopted by the country. In a report issued by the World Travel and Tourism Council (WTTC), the UAE ranked 31st globally in 2012, ahead of Egypt in terms of the size of hotel and travel revenues, which amounted to 10 billion US dollars at the time. During the same year, local tourism and travel recorded direct and indirect revenues amounting to a total value of AED 6.193 billion (US\$ 8.52 billion), equivalent to 3.14 percent of the country's GDP at the time. The World Travel and Tourism Council report expects the UAE to receive 26 million international tourists by 2023, compared to about 16 million tourists in 2012.

Materials and methods

Methodology: It was used in preparing the applied part of this study jointly, and the descriptive analytical application provides that and then it is considered from the general application point of view between all the descriptive structure analyzing an amount of important information for researchers about the case subject of the study, and then to be comprehensive all In addition to that, all of its objectives, location, systems, nature of its work and production were described, and it was also deleted.

Research community and sample: The study community consisted of employees of Green Eagle White Sohag Company in Sohag Governorate. A sample of 55 employees in the job grades was selected.

55 questionnaires were distributed to the employees and some explanations were provided by the researchers.

There were 5 questionnaires that were not retrieved, so the total number of questionnaires subject to the study was 50 questionnaires.

Research tool: The researchers prepared a questionnaire consisting of several areas that included 39 questions, which were designed using previous studies related to the

study topic. It was designed accordingly in a simplified manner, and contained easy and clear questions, with some modifications and paragraphs made to suit the nature of the study. The questions were answered according to the closed-ended response method in order to facilitate the analysis of the results.

Questionnaire content: The questionnaire included an introduction to introduce the study topic to the respondents, to familiarize them with its academic objective, and to encourage them to participate in the topic. The researchers also indicated that all data that will be obtained will only be used for scientific research purposes. The questionnaire was divided into six sections:

- 1- General information.
- 2- The company's commitment to training employees on the importance of green investment.
- 3- Green investment and environmental protection.
- 4- Government support for green investment.
- 5- Egypt has the potential to transition to green investment.
- 6- Egypt can benefit from the UAE experience in transitioning to green.
- 7- Goals and dimensions of sustainable development.

Most of the questions had specific and closed answers in order to facilitate statistical processing. The questionnaire contained three pages, and the questions were prepared on the basis of the "Likert Scale" (which has five possible answers. Research procedures: The questionnaire was prepared as follows: - Preparing a preliminary questionnaire to collect information. - Initially modifying the questionnaire. - Presenting the questionnaire to a group of arbitrators who in turn provided advice and guidance and modified and deleted what was necessary. - Distributing the questionnaire to the sample members to collect the data necessary for the study. Measuring the stability of the questionnaire: The researchers examined the questionnaire before distributing it to the study sample to ensure its validity and stability as follows:

Reliability of the questionnaire: Psychometric properties of the questionnaire: The researchers calculated the psychometric properties of the questionnaire by identifying the extent of internal consistency of the questionnaire, and identifying the stability of the questionnaire through the Cronbach's alpha coefficient, as follows: Reliability: The researchers used Cronbach's alpha coefficient to calculate the reliability after applying the questionnaire to 50 individuals.

Table 1 shows the reliability coefficient for each sub-component of the questionnaire.

Table 1: Reliability coefficients for the sub-components and the total score of the questionnaire (n=50)

	Dimensions	Number of answers	Fixed factor
1	The company's commitment to training employees on the importance of green investment	6	0.70
2	Green investment and environmental protection	7	0.61
3	Government support for green investment	6	0.80
4	Egypt has the potential to transition to green investment	5	0.71
5	The possibility of Egypt benefiting from the Emirati experience in the transition towards green	6	0.85
6	Goals and dimensions of sustainable development	9	0.76
7	Total degree	39	0.74

Source: Authors' own calculations based on survey data.

Table 1 shows that the stability coefficients for the dimensions and the total score ranged between (0.61-0.85), all of which are greater than (60%), indicating that there is internal consistency between the paragraphs of each field, and thus this indicates that the questionnaire paragraphs had internal consistency, and all of these

values are appropriate, which confirms the validity and significance of the questionnaire in testing the hypotheses. The researchers also calculated the stability of the questionnaire through the half-split of the questionnaire phrases, where the correlation coefficient between the two halves of the questionnaire reached (798.0), and using the Spearman and Barron correction equation, the stability coefficient for the questionnaire as a whole reached (742.0), which is a high percentage indicating that the questionnaire has a high degree of stability. Data presentation and analysis: Description of the characteristics of the study sample Demographic variables: In the following, we present the demographic characteristics of the study sample members in terms of gender, age group, academic qualification, job position, and number of years of experience. Based on this, the study sample was described as follows:

Table 2: Demographic variables of the study sample members

No	Item	Number	%
Sex	Male	35	70
	Female	15	30
Total		50	100 %
Age	Less than 30 years	33	66
	30 to 40 years	10	20
	40 to 50 years	5	10
	More than 50 years	2	4
Total		50	100
Academic qualification	Less than secondary	10	20
	Secondary or Diploma	25	50
	Bachelor's	15	30
	Master's	0	0
	Doctorate	0	0
	Total	50	50
	Less than 5 years	30	60
	From 5 years and less than 10	12	24
	From 10 years and less than 15	3	6
	From 15 years and less than 20	3	6
	From 20 years and more	2	4
Total		50	100

Source: Authors' own calculations based on survey data.

For type: It is clear from Table No. 2 that 35% of the study sample individuals represent 70% of the total sample individuals, and they are the most male category of the study individuals, while 15% represent 30% of the females.

Age: It is clear from Table No. 2 that the sample members for the age group less than 30 years is the largest group of the study sample members, as it reached 33 (66%), while the smallest number of sample members is 2 (over 50 years) with a percentage of 4%).

Educational qualification: It is clear from Table No. 2 that those who have obtained a technical diploma and secondary school degree are the largest group of the study sample members, as it reached 25 (50%), while there is no one from the sample members who have a master's degree or doctorate with a percentage of 4%. Number of years of experience: It is clear from Table No. 2 that those with less than 5 years of experience are the largest group of the study sample members, as it reached 30 (60%), while the smallest number of sample members is 2 (20 years of experience or more) with a percentage of 4%.

Analysis of the opinions of the study members on the study axes:

Table 3: Analysis of the opinions of the responses on the axes and sections of the questionnaire

No	Item	Standard deviation	Mean	Arrangement	Degree
1	The company's commitment to training employees on the importance of green investment	0.859	4.521	1	Very agree
2	Green investment and environment protection	0.877	3.512	5	Agree
3	Government support for green investment	0.932	3.210	6	Agree
4	Egypt has the potential to transform to green investment	0.712	4.441	2	Very agree
5	The possibility of Egypt benefiting from the Emirati experience in green towards transformation	0.808	3.516	4	Agree
6	Sustainable development and its dimensions	0.654	3.919	3	Agree

Source: Authors' own calculations based on survey data.

Table No. 3 shows that the arithmetic averages ranged between 521.4-210.3. The first section, entitled "The company's commitment to training employees on the importance of green investment," came in first place with an arithmetic average of 521.4 and a standard deviation of 859.0. The fourth section, entitled "Egypt's possession of the components for transitioning to green investment," came in second place with an arithmetic average of 441.4 and a standard deviation of 712.0. The third section, entitled "Government support for green investment," came in last place with an arithmetic average of 210.3 and a standard deviation of 0.932.

Study results and interpretation

Results of the first main hypothesis: "There is a statistically significant relationship between green investment and economic growth and poverty reduction as one of the dimensions of sustainable development." To verify this hypothesis, the researchers used the correlation coefficient to detect the existence of a relationship between the two variables. Table 4 shows the value of the correlation coefficient between sections one to five and between section six.

Table 4: Correlation coefficient between the total score in the technical study (n=50).

No	Item	Standard deviation
1	The company's commitment to training employees on the importance of green investment.	0.815**
2	Green investment and environment protection	0.655**
3	Government support for green investment	0.602**
4	Egypt has the potential to transform to green investment	0.711**
5	The possibility of Egypt benefiting from the Emirati experience in green towards transformation	0.675**
6	Total score for the questionnaire, sections one to five	0.827**

Source: Authors' own calculations based on survey data.

It is clear from Table 4 that all values of the correlation coefficient, at a statistically significant level, have values of (0.01), which means accepting the hypothesis, i.e. "There is a statistically significant relationship between green investment and economic growth and poverty reduction as one of the dimensions of sustainable development." It is also clear from the following table:

1 - There is a statistically significant positive correlation between training workers on the importance of green investment and achieving the sustainable development goals.

2 - There is a statistically significant positive correlation between government support for green investment and achieving the sustainable development goals.

3 - Egypt possesses the elements of a statistically significant positive correlation between the transition to green investment and achieving the sustainable development goals.

4- There is a statistically significant positive correlation between Egypt's benefit from the Emirati experience in the transition to green and achieving the sustainable development goals. 5- The second hypothesis: "There is a statistically significant relationship between the availability of capabilities and mechanisms for financing green investment in Egypt and economic growth and poverty reduction as one of the dimensions of sustainable development." 6- The third hypothesis: "There is a statistically significant relationship between Egypt's benefit from the UAE's Vision 2030 to achieve sustainable development and achieving the sustainable development goals in Egypt."

The fourth hypothesis: "There is a statistically significant relationship between achieving development and cooperation goals and the factor of general culture, employee training, and government support for green investment." The results of the fourth hypothesis: "There is a company specialized in statistically significant relationship between achieving development and cooperation goals and the factor of general culture, employee training, and government support for green investment." To verify this hypothesis, a stepwise multiple regression analysis was implemented.

Table 5: Significance of predicting the achievement of sustainable development goals through the total degree of disparity and its dimensions in the study sample (n = 400):

Dependent variable	Source	Sum of squares	DF	Mean squares	F-value	Probability
Goals and dimensions of sustainable development	Regression	3088.91	3	1029.64	402.07	0.01
	Error	1014.09	396	2.561		
	Total	4102.99	399			

Source: Authors' own calculations based on survey data.

*Degrees of freedom for the number of studied variables that entered the regression equation

It is clear from Table 5 that the value of (F) to know the significance of predicting the achievement of sustainable development goals with the knowledge of the total score of the questionnaire sections and their dimensions reached (071.402) which is a statistically significant value at the level of (01.0), which indicates the acceptance of the hypothesis, i.e. "the achievement of sustainable development goals can be predicted through the total score of the questionnaire sections and their dimensions in the study sample."

The researchers present the results of the current study, by using the inductive and deductive approach to collect, analyze and interpret information related to the main elements of the research, by following the historical (indirect) source as well as The comparative approach to benefit from identifying one of the leading countries in the field of green investment and renewable energy sources, which is the United Arab Emirates, and discussing it. First: The first hypothesis: After using the aforementioned study methodology, the validity of the first hypothesis was proven, which states that "there is a statistically significant relationship between green investment, economic growth, and poverty reduction as one of the dimensions of sustainable development", meaning that the green investment increases, the more economic growth increases at the same time, as well as poverty reduction. Second: The second hypothesis: Through the previous study and the study methodology followed, it became clear that the

validity of the second hypothesis was proven, which states that "there is a statistically significant relationship between the availability of capabilities and mechanisms for financing green investment in Egypt and economic growth and poverty reduction as one of the dimensions of sustainable development". The most important of these components are: Egypt's geographical location, renewable energy resources, tourism, the diversity of the Egyptian economy, human resources, mineral wealth, the large unexploited area in Egypt, the large size of the consumer market, and the services sector. This study is consistent with the study of **Rashad Abdel Wahab Ahmed (2021)**. The impact of economic challenges on sustainable development in the Egypt 2030 Development Program, and the study of Hatem Reda (2021) entitled: "Maximizing Egypt's benefit from solar energy in light of Vision 2020-2030", that Egypt has many components that help it achieve the goals of the Sustainable Development Strategy 2030 if the focus is on exploiting them in the best possible way. A Third: The third hypothesis: Through the previous study and the study methodology followed, the validity of the third hypothesis was proven: "There is a statistically significant relationship between Egypt's benefit from the UAE Vision 2030 to achieve sustainable development and achieve the sustainable development goals in Egypt." This is to help find unconventional solutions to the difficulties and challenges facing Egypt's strategy.

Due to the similarity of some components of the Egyptian economy with the Emirati economy, such as economic diversity, interest in training and education. This study is consistent with the study of **Rashad Abdel Wahab Ahmed (2021)** The impact of economic challenges on sustainable development in the Egypt 2030 Development Program, and the study of **Hatem Reda (2021)**, entitled: "Maximizing Egypt's benefit from solar energy in light of Vision 2020-2030." Fourth: The fourth hypothesis: Through the above study and the study methodology followed, it was shown that the fourth hypothesis was proven "There is a statistically significant relationship between achieving sustainable development goals and the factor of general culture, training of workers, and government support for green investment." Recommendations The researchers proposed many recommendations that aim to benefit from the outputs of this study, including:

- **Enhance Renewable Energy and Recycling:**

Maximize the utilization of renewable energy sources and adopt policies for waste management and product recycling to support sustainable development.

- **Promote Foreign Direct Investment (FDI):**

Encourage foreign direct investment in smart, sustainable, and green projects to strengthen Egypt's green economy initiatives.

- **Expand Green Financing Options:**

Increase the issuance of green bonds and provide discounted loans for green investment projects aimed at reducing harmful emissions, including carbon dioxide.

- **Engage the Private Sector:**

Motivate the private sector to enhance global competitiveness by participating in renewable energy projects and green investments in Egypt.

- **Leverage International Best Practices:**

Draw insights from successful experiences in transitioning to a green economy, such as the UAE, focusing on environmental conservation, mitigating climate change effects, promoting green eco-tourism, and utilizing new and renewable energy sources.

- **Develop Green Manufacturing Industries:**

Support the establishment of specialized factories for manufacturing photovoltaic cells, leveraging Egypt's abundant silica sand resources as a key input in production.

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