

The impact of measurement and disclosure according to environmental sustainable development indicators on the value of Iraqi economic units

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Abstract : The current research aims to demonstrate the measures taken by economic units to measure their environmental activities and the extent of their compliance with sustainable development requirements. It also aims to identify the methods and procedures they follow to develop appropriate measurement methods, mechanisms for accounting disclosure of these activities, and the impact of measurement and disclosure on the added value of the economic unit. The research also presents a proposed model that can assist units in measuring and disclosing these indicators in accordance with sustainable development requirements.

The researchers identified the global environmental sustainable development indicators developed by the United Nations and identified measurement mechanisms by studying and analyzing the financial statements and published reports of the units in the research sample. They also analyzed the costs and benefits of responding to these indicators for each unit's activities, with the aim of presenting a proposed model that can assist them in providing information tailored to the needs of information users. The research reached a set of conclusions, including the need for units to measure the costs and benefits of their various activities on the environment, and to disclose the methods used to measure each of the environmentally related sustainable development indicators in financial reports, attached reports, and notes. The proposed model also helps units make these indicators quantifiable by determining the cost required to respond to these indicators and the expected benefits. These disclosure and measurement methods play a significant role in adding economic value to the unit through the important information they provide, which helps information users make appropriate decisions.

Keywords: measurement and disclosure, sustainable development, globally recognized sustainable development indicators, economic value added.

Introduction: Environmental sustainable development indicators are among the first sustainable development indicators addressed by organizations and bodies concerned with the environment and society, with the aim of preserving the environment. These indicators were subsequently developed in response to developments in the business environment, including social, economic, and governance indicators. As a result of the significant developments in various business sectors, the growing competition between them, and the increasing needs of users for goods and services, there has been rapid consumption of non-renewable natural resources. Consequently, the world is facing a problem of resource scarcity due to their widespread use. Therefore, it is necessary to conserve materials through optimal exploitation and recycling to preserve them and sustain life on planet Earth. Therefore, it was the duty of international bodies and organizations to develop a set of sustainable development indicators as part of their 2030 Sustainable Development Plan. Due to the lack of approved standards and the lack of accounting systems with appropriate mechanisms for measuring and disclosing the nature of these indicators, The current research attempts to find an accounting model that helps economic units determine the cost of responding to these indicators in each of the unit's activities and disclosing the benefits achieved, in order to contribute to providing useful information to users.

1- Research Methodology

1-1- Research Problem

Due to the shortcomings of current accounting systems in providing reliable models for measuring the environmental impacts of the unit, the submitted reports do not provide a clear picture to users of all the unit's activities and their role in adding value to the unit. Despite the importance of environmental activities and their significance to the unit, the shortcomings of accounting systems have made the measurement process complex due to the lack of measurement foundations that meet the requirements and indicators of sustainable development and the measurement of non-

financial indicators, despite the significant shift in the interests of information users. Therefore, the research problem is summarized in the following questions:

- 1- Does the current measurement adopted for environmental unit activities meet the needs of users?
- 2- Can measurement and disclosure mechanisms help demonstrate the impact of environmental sustainable development indicators on the unit's value?
- 3- Does measurement and disclosure, in accordance with the requirements of environmental sustainable development indicators, contribute to adding value to the unit?

1-2- Research Objective: The current research aims to:

- 1- Identify the requirements of environmental sustainable development, the currently adopted measurement methods, and the disclosure mechanisms followed by Iraqi economic units to disclose sustainable development indicators. Identify the methods and procedures followed by these units to develop appropriate measurement methods.
- 2- Explain the procedures taken by economic units to measure their environmental activities and the extent of their compliance with sustainable development requirements. Explain the impact of accounting disclosure of these activities on the added value of the economic unit.
- 3- Determine the impact of disclosure in accordance with sustainable development requirements on the market value of the units in the research sample.

1-3- Significance of the Research:

The importance of the research stems from the significant role that published reports play in raising the value of the unit in global markets. This is a result of the significant changes that have occurred in user interests. Focusing on financial returns is no longer the basis for making investment decisions, due to the significant pressures exerted by international organizations, the United Nations, and various environmental pressure groups. Given the importance of sustainable development indicators in ensuring environmental and social preservation, the impact of disclosing this information has become clear on user decisions.

1-4- Research Hypothesis:

In order to achieve the research objectives and find solutions to the problems identified, the following two hypotheses were formulated:

- 1- Measurement according to environmental sustainable development indicators contributes to adding value to the unit.
- 2- There is a statistically significant effect of measurement and disclosure according to environmental sustainable development indicators on the added value of the unit.

1-5- Research Boundaries and Methodology:

The research sample included five companies listed on the Iraq Stock Exchange from various sectors: (Ashur Bank, Pepsi Baghdad Company, Al-Mansour Pharmaceutical Industries, National Chemical and Plastic Industries, and Fallujah Construction Materials Production).

2- Disclosure and Accounting Measurement in Light of the Application of Environmental Sustainable Development Indicators

2-1- Accounting Disclosure Procedures in Light of the Adoption of Sustainable Development Indicators

Viewpoints differ regarding the concept and limits of disclosure of accounting information that must be provided in published reports. This difference stems from the differing interests of information users. Therefore, defining a clear and specific concept of disclosure in light of sustainable development indicators that meets various requirements is important for stakeholders (Abdullah, Hassan, 2024: 830). In order to achieve the dimensions of environmental sustainable development, economic units must disclose environmental sustainability in separate reports. This is the first step towards achieving compliance with global sustainability requirements in accordance with the requirements of the Global Integrated Reporting Initiative. These reports contribute to enhancing mutual trust and the exchange of culture and social values among leading units in the field of culture and values. Social and sharing it with other environments contributes to the formation of a global environmental culture (Al-Sharif, Hamid, 2025: 225).

Accounting disclosure is defined as the provision of reports that reflect economic events that have an impact on the entity and meet the information needs of users (Manini, 2023: 42).

Environmental disclosure is defined as the presentation and display of information related to the entity's environmental activities in financial reports, facilitating the decision-making process. Disclosure of sustainable development is disclosure that contributes to increasing the transparency of measures to reduce pollutants and emissions and conserve natural resources, which helps provide information on contributions to environmental sustainable development. Disclosure of sustainable development achieves numerous benefits for the entity, including transparency, creating

financial value, supporting goods, continuous improvement, risk management, encouraging innovation, supporting decisions, attracting capital, increasing awareness, and motivating employees. Accounting disclosure of sustainable development is consistent with the theory of the enterprise, which is based on the premise that the economic project and social organization have a humanitarian role and social responsibilities that the entity must fulfill towards society in order to achieve the interests of all parties. The individual theory, on the other hand, focuses on strategies. Environmental organizations are concerned with providing more disclosures about the importance of sustainable development to meet needs (Jazia, 2018: 13).

Researchers believe that disclosure of environmental sustainable development is tantamount to disclosure of environmental contributions that have a direct or indirect impact on humans and the continuation of life on planet Earth in general. The information provided contributes to increasing transparency and confidence in the reports submitted. This is among the most important disclosure requirements at the present time and in the long term, due to the scarcity of natural resources and the increasing interest of parties in this type of information, whether external or internal.

2-1-1- The Importance and Objectives of Environmental Accounting Disclosure

The importance of environmental accounting disclosure has emerged as a result of the growing need for information users, both inside and outside the entity. These needs have created significant pressure on entities to disclose the impact of their various activities on the environment. Hence, we can observe the growing interest of governments and international organizations, which have sought to establish laws, regulations, and guidelines to reduce these pollutants and optimize the use of natural resources. The importance of accounting disclosure of environmental performance is highlighted as follows: (Abdullah, Hassan, 2024: 833)

1- Increasing community confidence in economic entities that fulfill their duty towards the environment, which contributes to preserving the environment and developing and advancing their activities.

2- Reducing production costs through optimal utilization of resources.

3- Meeting users' needs for information related to the entity's environmental obligations.

The most important objectives of environmental disclosure are of two types: internal, represented by maintaining a competitive position by improving the entity's reputation, and external, which aims to demonstrate the entities' commitment to their environmental responsibility requirements.

Despite the importance and benefits of accounting disclosure of environmental activities, there are shortcomings in current disclosure systems regarding environmental disclosure. This is due to the lack of a clear definition of most environmental issues and the lack of clarity in disclosure procedures, given the complexity of these issues and their variation from one sector to another, in addition to their variation within a single sector. Therefore, entities disclose environmental information out of a sense of responsibility toward the environment and society, and the growing needs of information users for information related to their environmental activities. 2-1-2- Mechanisms and procedures for accounting measurement in light of the application of sustainable development indicators

Environmental sustainable development indicators include a focus on the environment, its development, and its preservation through the conservation and optimal exploitation of natural resources, the enhancement and protection of ecosystems, and the reduction of pollution, waste, and loss of natural resources, given their importance to the continuity of life on planet Earth (Al-Sharif, Hamid, 2025: 225).

Measurement of environmental sustainable development aims to define principles and rules that can be applied to align with environmental sustainable development indicators. This is achieved by determining the cost of each environmental activity and the returns generated from these activities, as they are important for the continuation of the relationship with users (Giang, 2022: 13). That is, measuring them through the internal and external impacts of these contributions and the benefits obtained (Awotomilusi, et al.: 322).

Given the importance of these activities, it is important for economic units to measure them. Despite the lack of an approved measurement system for measuring the environmental contributions of units and the shortcomings of the current accounting system, Providing such information (Tyteca, 2022: 287) has made economic units and accounting regulatory bodies face a major challenge in finding ways to measure and disclose it, given its importance to information users as a result of the growing demand for it by regulatory, legislative and oversight bodies (Staszkiewicz & Werner, 2021: 4). Therefore, all global systems and researchers have focused on environmental sustainable development indicators to find widely accepted measurement bases that will be the basis for future application and comparison to overcome shortcomings in accounting systems (Al-Qassab, 2024: 24). This is because interest in measuring environmental sustainability will have an impact on current accounting systems, and since the goal of sustainable development is to reduce information asymmetry and assess risks by including financial and non-financial measures of the performance of economic units and disclosing them, units must find measurement methods that suit the nature of their activities and adapt the accounting systems used to the requirements of the business environment and the needs of information users. Therefore, they must provide information on environmental activities

in order to be able to measure the costs that will be required to respond to each indicator. Sustainable development indicators and the material and financial benefits expected from this application, as the unit's good reputation contributes to increasing its value.

2-1-2-1- The Importance and Objectives of Measuring Environmental Contributions According to Sustainable Development Indicators

The importance of measuring the environmental impacts of economic units' activities stems from the growing needs of information users, in addition to the large volume of these expenditures currently. The importance of measurement can be determined through the following: (Tyteca, 2022: 291)

1- Determining the total expenditures for the activities, plans, and programs developed by the unit to reduce the environmental impacts of its activities.

2- Measurement contributes to providing verifiable assessments by users.

3- Measurement provides a specific and clear assessment of the response requirements for each indicator by identifying the expected costs and benefits.

4- Measurement contributes to transforming some non-financial information into quantitative information that can be measured and verified accurately, by studying and analyzing the response requirements for these indicators and determining the expenditures necessary to respond to them.

The objectives of measuring the unit's value under the application of sustainability indicators can be defined as follows: (Akinleye, 2022:99)

1. Establishing specific rules and procedures that enable the unit to measure and communicate information to users.

2. Measuring what can be measured from these indicators, and attempting to find appropriate measurement methods for indicators that are difficult to measure through analysis and comparison of costs and benefits.

3. Developing a generally accepted measure for measuring environmental sustainability that can measure the costs and benefits achieved from implementing each environmental sustainability indicator.

2-3. Environmental Sustainable Development Indicators

There is a set of indicators developed by the Global Reporting Initiative, the United Nations, and the Sustainability Standards Board that economic units are responsible for implementing in order to preserve the environment. These indicators include (good health and well-being, clean water and sanitation, clean and affordable energy, industry, innovation, and infrastructure, sustainable cities and communities, consumption and production, climate action, life below water, and life on land) (Wiraputra, ed. at. 2024:481)

2-4- The Importance of Accounting Measurement and Disclosure in Adding Value to the Unit

In light of current developments and the diversity of users' interests, these uses are no longer limited to the amount of capital, fixed assets, and return on investment alone. We can observe that there are units whose value is much greater than the assets (Wiraputra & Sisdianto, 2024: 487). This difference in value stems from the unit's reputation, and this reputation depends largely on the degree of trust that can be gained through the information the unit provides in its reports. Given that information users have become interested not only in financial information, but also in all information related to the unit's activity (Cismaş, et al. 2023: 6). Given the importance of environmental information due to the significant role played by environmental protection associations and organizations and the community, environmental information has become a major factor in decision-making by users, which significantly impacts the unit's value. The decisions made by investors and shareholders to invest in the unit have a clear impact on its future investments by providing sufficient funds to cover these investment projects, in addition to the facilities it obtains. The government pays for these investments in the environment. The importance of accounting measurement and disclosure in adding value to the unit can be determined through the following: (Awotomilusi, et al. 2025:324)

1- Measurement provides the ability to measure the unit's value over successive periods.

2- Measurement helps users with analytical expertise identify the unit's strengths and weaknesses.

3- Measurement provides the ability to determine the value of financial and non-financial activities by identifying their costs and benefits and making non-financial indicators financially measurable. This facilitates comparison and analysis, providing accurate information about the unit's value. Providing information in a timely manner enables users to make appropriate investment decisions, which is reflected in its value.

4- Disclosure in financial statements, notes, appendices, and explanations contributes to accurately determining the unit's value.

5- Disclosure helps determine the unit's compliance with laws, regulations, guidelines, and standards, which is reflected in the continued confidence of users. This confidence plays a significant role in raising the unit's value.

From the above, we note that measurement is considered an important tool for analysts and users to measure the activities of the environmental unit and other activities, as it contributes to determining comparable quantitative and

financial values. It also helps in clarifying the foundations and rules followed for measurement and disclosing them according to accounting requirements and procedures, standards, laws, instructions and accounting systems followed, which makes the reports presented include information that serves decision-makers and helps them make investment decisions that have a financial return on the economic unit, which leads to adding value to it.

2-5- Economic Value Added

It is defined as a measure of unit performance by measuring wealth calculated by deducting the cost of capital from operating profits (Qu Xinjiang, 2024).

It is also the value that management can add to shareholders, which helps predict and exploit investment opportunities and reduce waste (Abdul Amir, 2019: 35).

It can be noted that the most important advantage of economic value added is the optimal allocation of resources, which creates value for the unit and increases shareholder wealth. This depends on management efficiency, as it is considered an important analytical tool for evaluating performance (Abdul Amir, 2019: 35). It enables the link between economic value added measures and operational measures and strategic objectives. Researchers have relied on economic value added to measure the value of economic units due to the numerous advantages of this measure, the importance of the information it provides, the ease of application, its proximity to the true value, and its strong correlation with market value. Economic value added can be calculated using the following equation (Mullage, 2017: 245):

$$\text{Economic value added} = \text{Rate of return} - \text{Cost of capital} * \text{Invested capital.}$$

Represents the difference between total assets and short-term liabilities = Invested capital.

Cost of capital = a cost deducted from the return on invested capital. The weighted cost of capital is usually used, which includes (the debt ratio to the market value of capital and the market value of all assets).

Economic value added represents the profit or loss that remains after subtracting the cost of all types of capital used. It is one of the methods for measuring economic profit, as economic profit is the most difficult method for measuring the rate of profit performance of any enterprise. It tends to show the true economic profit by looking at the returns generated above the required rate of return, going beyond traditional accounting systems. By including the cost of capital used in its calculations, it is not merely a measure of achievement, but rather a guide that assists management in making decisions that improve the working environment for everyone in the organization and help increase shareholder wealth.

The importance of economic value added stems from its being the correct method for calculating shareholder profits. It is a financial metric that executives understand, achieving consistency between management decisions and shareholder wealth, and helping to eliminate the confusion of diverse objectives.

5-1 - Hypothesis Testing and Results Analysis

5-1-1 - Testing the First Hypothesis: Measurement according to environmental sustainable development indicators contributes to adding value to the unit.

The equation shown below was used to measure added value, as it is among the most appropriate and accurate measures.

$$\text{Economic Value Added} = \text{Rate of Return} - \text{Cost of Capital} * \text{Invested Capital}$$

To meet environmental sustainable development requirements, total assets were included, including assets that use clean and affordable energy. Short-term liabilities include short-term liabilities that the unit must provide periodically as part of its activities related to addressing climate requirements, as part of the cost of invested capital.

The cost of capital, which represents part of the calculation of the economic added value in light of the application of sustainability indicators, can include the return on environmental investments, the debt ratio for industry, innovation and infrastructure, the weighted cost of capital, and the inclusion of production consumption as part of the costs of capital invested to preserve life at sea and on land. Table (1) below includes the added value of banks according to the previous equation with the addition of costs and revenues required by environmental sustainability standards.

Table (1) Added value of banks in the research sample (million dinars)

| Year/Company | 2019 | 2020 | 2021 | 2022 | 2023 | مجموع | الوسطى | Max | Min |
|--------------------------------------|--------|--------|--------|--------|--------|---------|---------|--------|--------|
| Ashur Bank | 24,472 | 28,937 | 31,658 | 24,549 | 26,441 | 136,057 | 27211.4 | 31,658 | 24,472 |
| Pepsi Baghdad Company | 31,341 | 32,009 | 28,978 | 24,170 | 24,891 | 141,389 | 28277.8 | 32,009 | 24,170 |
| Al-Mansour Pharmaceutical Industries | 17,430 | 19,879 | 20,037 | 19,997 | 20,906 | | | 20,906 | 17,430 |
| National Chemical and Plastic | 14,307 | 12,003 | 12,892 | 15,540 | 15,982 | 70,724 | 14144.8 | 15,894 | 12,003 |

| Industries | | | | | | | | | |
|--|---------|---------|--------|---------|---------|---------|--------|----------|--------|
| Fallujah Construction Materials Production | 16,902 | 11,328 | 10.905 | 15,894 | 14,902 | | 59,037 | 11807.38 | 16,902 |
| Al-Wasit | 104,452 | 104,156 | 93,576 | 100,150 | 103,122 | 104,452 | | | |
| Max | 31,341 | 32,009 | 31,658 | 24,549 | 26,441 | 31,341 | | | |
| Min | 14,307 | 11,328 | 10.905 | 15,540 | 14,902 | 14,307 | | | |

Source: Prepared by the researcher based on published data and information obtained from the management of the sample companies.

From Table (1), the economic value added of companies can be measured. We note that the value does not depend solely on financial performance, but also takes into account administrative performance and the environmental and social contributions of the units. Increasing economic value added leads to increased operating profit, as a result of the gradual improvement of their capital to increase income resulting from increased contributions, generating more revenue, and strengthening the financial position of the units. We can note that there has been an increase in value for the years 2022 and 2023. This indicates an increase in companies' environmental and social responsibilities, especially after the COVID-19 pandemic has created responsibilities and contributions that companies must undertake as part of their environmental and social responsibilities.

5-2-2- Second Hypothesis: There is a statistically significant effect of measurement and disclosure according to environmental sustainable development indicators on the value added of the unit.

Table (2) below shows that the correlation value (R) between the variables reached 0.713, which is a value that represents the correlation between the independent variable, the control variables, and the dependent variable, and that the coefficient of determination (R Square) reached 0.129, which represents the explanatory power of the model used, meaning that the variable of applying environmental sustainable development indicators and the control variables explained 26% of the changes that occurred in the dependent variable (the economic added value of companies) in light of the variable of measurement and disclosure of (EVA), and the rest is due to other factors.

Table (2) Results of the analysis of the relationship between variables

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|--------------------|----------|-------------------|----------------------------|
| 1 | 0.713 ^a | 0.78 | 0.129 | 0.44367 |

Source: Prepared by the researcher using SPSS

Table (3) Results of analysis of variance

| Model | Sum of Squares | Df | Mean Square | F | Sig. |
|------------|----------------|----|-------------|-------|-------|
| Regression | 4.601 | 5 | 0.788 | 1.671 | 0.041 |
| Residual | 7.112 | 24 | 0.442 | | |
| Total | 11.713 | 29 | | | |

Source: Prepared by the researcher using SPSS

Table (3) above shows that the calculated F value was 1.671, which is much higher than its calculated tabular value at a significance level of 5%. The significance level of the Sig test was very high, reaching 0.038, which is much lower than the predetermined 0.05 acceptable error value in the social sciences. Therefore, the second sub-hypothesis is accepted.

This demonstrates that companies must ensure and maintain sustainable relationships with customers in order to meet the needs of information users. The extent of companies' contribution to environmental development, in light of the requirements of environmental sustainability indicators, has a positive impact on companies' economic added value. It is also evident that Age has no effect on the dependent variable, measuring and disclosing EVA, if the significance level is greater than 5%. Lev has no effect on reporting EVA if the significance level is greater than 5%. Furthermore, size has no effect on the level of reporting of EVA in the research sample companies, based on the significance level if it is greater than 5%.

By proving the second hypothesis, it can be concluded that measurement and disclosure based on environmental sustainability indicators has an impact on the value of the ethnic companies in the research sample. The researchers believe this demonstrates the importance of applying environmental sustainability indicators by the research sample companies.

Companies can measure the impact of implementing environmental sustainability indicators by identifying the environmental expenditures companies incur to ensure the implementation of environmental indicators and reduce pollutants and waste of natural resources in order to preserve them. They can also determine the role of these expenditures in adding value to companies, enabling

them to generate returns from these expenditures. They can also identify the amount of government facilities, interest rate reductions, tax reductions, and support from organizations concerned with the environment as a return on these expenditures. They can also determine the total percentages of environmental expenditures for the sectors as a whole, then determine the share of each sector and the amount of increase in this percentage annually. They can also compare the increase and decrease in this contribution with the increase and decrease in economic value added. After the measurement process, the impact of applying these indicators on the economic value added of the unit is disclosed. This is achieved by disclosing the mechanisms for calculating the costs of responding to these environmental indicators, disclosing these expenditures as percentages of total expenditures, the sector's contribution to this development, and the company's contribution relative to its sector. Therefore, the researchers selected companies from different sectors as a sample for the current research.

5-3- The Proposed Model for Measuring and Disclosure According to Environmental Sustainability Development Indicators

The proposed model includes indicators for measurement and disclosure according to sustainable development indicators and reporting requirements. It requires measuring costs in general and then allocating them according to the criteria shown in Table (4) below.

Table (4) Proposed Model for Measuring and Disclosure of Environmental Sustainability Indicators

| T | Environmental Sustainable Development Indicators | Measurement Mechanisms | Disclosure Requirements |
|---|--|--|--|
| 1 | Good Health and Well-being | Amounts spent on employee safety and health insurance, amounts paid to health institutions as grants or cash and in-kind donations to ensure the health and safety of individuals and the community, amounts paid during employee vacations, and contributions to public recreational programs. These are the returns obtained by measuring the sector's contribution to environmental sustainability, and then determining the sample company's percentage of the sector's total contributions. | Disclose all expenditures in environmental sustainability reports for all projects and health and wellness contributions, and disclose the amount of increase and percentage each sector contributes annually. |
| 2 | | The cost per cubic meter of clean water globally, cleaning expenses for unit waste, the amount of water savings, and sanitation costs, and measuring the percentage of companies' contributions, by sector, to rationalizing water consumption and reducing pollutants. | Comparison of clean water consumption rates, total employee health insurance, and other health contributions, and disclose the percentage of these companies' contributions to water conservation and public health. |
| 3 | Clean Water and Sanitation | Total energy costs, the amount of annual reduction in consumption, the annual costs of switching to clean energy, and the amount of reduction in polluting energy. | Energy used, how it is produced, and the percentage of energy reduction. |
| 4 | Affordable and Clean Energy | The amount of investments in renewable and clean energy, and comparing previous costs with current costs resulting from the use of clean energy, with specific costs for pollutant disposal being identified. | The most significant innovations the company has introduced, contributed to, or acquired. |
| 5 | Industry, Innovation, and Infrastructure | Comparing estimated consumption with the annual natural resources needed to produce the same materials and provide services. | The percentage of annual waste reduction. |
| 6 | Consumption and Production | Annual Environmental Contributions | Environmental projects supported by the company. |
| 7 | Climate Action | Estimated water consumption and costs of purifying polluted water compared to the return. From using this recycled water for agriculture or other industries | Annual pollutant damage and the duration of the unit's contribution to reducing waste and pollution. |

6- Conclusions and Recommendations

Through the research presented, a set of conclusions and recommendations were reached, as follows:

6-1- Conclusions

1- Entities should measure the costs and benefits of their various activities on the environment, and disclose the methods used for measuring each of the environmentally-related sustainable development indicators in financial reports, accompanying reports, and notes.

2- There is a growing demand for companies to measure and disclose environmental expenditures and the extent of their contribution to sustainable development by information users, external parties, and organizations concerned with the local and global environment.

3- Disclosure of environmental expenditures according to the United Nations Environmental Sustainable Development Indicators, whether in the form of numbers or percentages, in accompanying reports helps decision-makers make appropriate decisions, such as decisions related to investment, financing, tax breaks, interest rate reductions, and various forms of government support.

4- Environmental sustainable development indicators can be used to measure most environmental expenditures through the volume of spending on external environmental contributions and to determine the returns on these expenditures through their added value to the company.

5. Measuring environmental contributions according to environmental sustainable development indicators is relatively complex, as these costs are usually incurred by entities without financial returns. Rather, they are considered part of their responsibility towards society, as some are undertaken without any costs, such as rationalizing energy and water consumption.

6. The benefits companies achieve from measuring and disclosing these expenditures have led them to pressure international bodies, the Accounting Standards Board, and accounting system designers to provide consistent systems and rules for measurement and improve the methods of disclosure used.

7. The proposed model helps entities make these indicators quantifiable, which contributes to increasing the role of disclosure in adding economic value to the entity through the important information it provides that aids in making appropriate decisions by information users.

6.2. Recommendations

1. It is important for the Accounting Standards Board and accounting and oversight bodies to develop a guide applicable to various environments and sectors, including rules, foundations, and methods for measuring and disclosing environmental contributions, in line with the sustainable development goals set by the United Nations.

2. Companies must carefully plan their environmental contributions and the resulting returns by developing long- and short-term plans and policies based on environmental sustainability indicators and reviewing them continuously.

3. It is necessary to focus on developing accounting systems to keep pace with major developments in the business world and the changes in the interests and needs of users of environmental information, indicators, and standards.

4. Companies must develop methods that can help them measure and disclose environmental expenditures in the accompanying statements, thus enabling them to disclose environmental contributions in accordance with global sustainable development indicators.

5. It is important for the regulatory and accounting bodies and the standards board to develop measurable financial and physical indicators to implement the required procedures and policies.

6. It is important to measure and disclose according to an approved model to inform information users of the mechanisms for measuring and disclosing these indicators and the extent to which they can be quantitatively measured by determining the cost required to respond to these indicators and the expected benefits.

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