

Comprehensive Statements under Sustainability Accounting: A Case Study

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The present research aims to demonstrate the role of sustainability accounting in improving the financial statements prepared by economic units. This achieves the purpose of providing comprehensive information on sustainable performance, which includes the dimensions of sustainability accounting represented by economic, environmental, social, technological, risk, and governance factors. The comprehensive lists have been prepared in the National Chemical and Plastic Industries Company for the purpose of clarifying the idea of research. Several conclusions have been reached, the most important of which is that sustainability accounting improves the preparation of financial statements to provide comprehensive information on sustainable performance. Furthermore, a number of recommendations have been reached, the most important of which is the preparation of comprehensive lists considering the accountability of sustainability by Iraqi economic units, especially the National Chemical and Plastic Industries Company, to rationalise the decisions of stakeholders.

Keywords: *Comprehensive Statement, Sustainability Accounting.*

Introduction

Continuous and evolving developments in science have led to the need to keep up with these developments, particularly in the accounting sciences. This has been positively reflected through the emergence of modern concepts, including sustainable development, which have affected the foundations of recognition, measurement, and accounting delivery by demanding information on other sustainability dimensions, as well as information on the economic dimension.



It is well known that the preparation of traditional financial statements, which depend solely on the economic dimension, do not provide useful information. Therefore, it is necessary to prepare comprehensive lists with help of sustainability accounting, which includes the six dimensions of sustainability. These dimensions are represented by economic, environmental, social, technological, risk, and governance aspects to provide useful information for the purpose of rationalising the decisions of stakeholders or the beneficiaries.

The research has been divided into the following topics. Firstly, the research methodology, which presents the methodology of the research. The second topic is dedicated to sustainability accounting, with an introductory entry into the subject. The third topic is reserved for the role of sustainability accounting in the preparation of comprehensive lists, while the fourth topic presents the practical aspect of the research. Finally, the fifth topic of the research is dedicated to the conclusions, and recommendations.

Research Methodology

The current research explores the problem of providing information that is not useful to stakeholders, as a result of fact the that the preparation of traditional financial statements is based solely on the economic dimension. Therefore, such statements do not rationalise the decisions of stakeholders, and the problem of the study can be formulated through the following questions:

1. Are traditional financial statements able to provide useful information to stakeholders?
2. Is there a possibility to prepare comprehensive statements with sustainability accounting?

Research Objectives

Furthermore, the present study seeks to achieve the following:

1. Introducing the concept of sustainability accounting.
2. Clarifying the importance of sustainability accounting in the preparation of comprehensive statements or lists.

Importance of the Research

The importance of the research is derived through the reliance on sustainability accounting in the preparation of statements or lists. This includes all six dimensions of sustainability accounting, which are represented by economic, environmental, social, technological, risk,

and governance aspects. Furthermore, this also includes its preparation, which will lead to the provision of comprehensive information on sustainable performance for the purpose of increasing the awareness of stakeholders, and rationalising decisions.

Research Hypothesis

The research seeks to test the basic premise that says the application of sustainability accounting contributes to improving the preparation of statements, and thus leads to the provision of comprehensive information on sustainable performance.

Sustainability Accounting

Definition of Sustainable Development

Several definitions of sustainable development were identified in the Brundtland Report, including that it is development which meets the current needs, without compromising the ability of future generations to meet their own needs (SASB, 2017: 2). Sustainable development is also defined as a development that is based on the principle of optimising the utilisation of available resources, with the aim of raising the standard of living to include future generations alongside the present generation (Al-I, 2012: 13).

The researchers believe that sustainable development is the process of optimising the resources available, and in all dimensions of the economic, environmental, social, and technological, which meet the needs of current generations and without compromising the ability of future generations to meet their needs.

Principles of Sustainable Development

Several researchers are convinced that the principles of sustainable development include the following (Badawi & Beltagui, 2013: 23):

1. Implementing and maintaining ethical practices and corporate governance systems.
2. Integrating sustainable development considerations into the decision-making process within the economic unit.
3. Supporting basic human rights and respecting the cultures, customs, and values of all stakeholders.
4. Implementing risk management strategies based on sound scientific information.
5. Continuous improvement of performance, health, and environmental performance.
6. Contributing to the economic, social, and institutional development of the communities in which the unit operates.

7. Providing effective, and transparent stakeholder reports, justice, empowerment, and participation.

Dimensions of Sustainable Development

The opinions of researchers differs in determining the dimensions of sustainable development. Accordingly, sustainable development can be divided into several dimensions, as follows (Emanoil et al., 2016: 727; Badawi & Beltagui, 2013: 21; Qasim, 2012: 27–35; Kafi, 2017: 78; Abu Al-Nasr, 2017: 106):

1. **Social Dimension:** intends to work sincerely with governmental, and non-governmental organisations, and individuals to solve problems related to unemployment, local and regional development, healthcare, wealth, social cohesion, and the distribution of services, as well as well-being, through the provision of health and education services, setting security standards, and respecting human rights, which refers to the relationship between nature and human beings.
2. **Economic Dimension:** intends to employ financial, material, and human resources optimally to achieve economic, competitive, and creative development. This dimension is based on the principle of maximising the well-being of society and eliminating poverty through the optimal exploitation of resources.
3. **Environmental Dimension:** intends to preserve the natural resources and beauty of nature, the quality of water, air, soil, climate change, and biodiversity through the efficient use of them, and relates to the material and biological resources, such as the optimal use of agricultural land and water resources in the world, rationalising the use of natural resources and protecting values, using renewable resources beyond their regeneration capacity.
4. **Technological Dimension:** this dimension is concerned with the transition to cleaner and more efficient technologies that will transform society into an era that uses less energy and resources to reduce the emissions of gases and pollutants, and create alternative energy.

The SASB believes that sustainability refers to the environmental, social, and governance dimensions (ESG) of the unit's operations and performance. In particular, sustainability includes managing the environmental, and social impacts of the unit, as well as managing the environmental, and social capital needed to create long-term value. It also includes the impact of environmental, and social factors on innovation, business models, and corporate governance (SASB, 2013: 7).

Based on the above, sustainability accounting is very important for economic units to distinguish sustainable activities for the purpose of measuring them and disclosing the overall performance of the unit to rationalise stakeholder decisions.

Definition of Sustainability Accountability

Some researchers believe that sustainability accounting is an information system that specialises in measuring the environmental, social, and economic performance of the economic unit, and delivering measurement results to stakeholders to ensure that the unit's contributions to sustainable development are assessed (Badawi & Beltaji, 2013: 38). These tools are also used to ensure that the work of economic unity is conducted in accordance with the principles of social responsibility or sustainable development, and to inform the stakeholders of the sustainable performance (Hyrslava et al., 2015: 608). Furthermore, the accounting and disclosure of sustainability is seen as a complement to financial accounting, as information on finance and sustainability can be assessed side by side and provide a comprehensive view of the unit performance and value creation, whether financial and non-financial, and across all forms of capital (SASB, 2013: 3).

The researchers believe that sustainability accounting is an information system that is concerned with recording, classification, and summarising events in many economic, social, environmental, and technological fields, as well as risks and governance, in order to provide useful information on sustainable performance through comprehensive reports of interest to rationalise their decisions.

Dimensions of Sustainability Accountability

From the researchers' point of view, sustainability accounting is comprised by the six dimensions of economic, environmental, social, technological, governance, and risk. It can be explained as follows:

1. **Economic Dimension:** intends to identify, measure, and communicate information about the resources of the economic and financial unit to all stakeholders or beneficiaries to rationalise their decisions.
2. **Environmental Dimension:** intends to identify, measure, and communicate information about the natural resources used by the unit or which influence it to all stakeholders to rationalise their decisions.
3. **Social Dimension:** intends to identify, measure, and communicate information about human resources that work with the economic unit or outside it (members of society) for all stakeholders to rationalise their decisions.

4. **Technological Dimension:** intends to identify, measure, and communicate information about the technology used by the economic unit, whether related to the modern advanced technology of machinery and equipment or information and communication technology to facilitate the delivery of information to all owners The use of software, computer, communication and social communication channels technology to provide timely information through video (via video reports) of the unit's activity to increase stakeholders' spoofing awareness of sustainable performance.
5. **Risks:** intends to identify, measure, and communicate information on the management of risks to the economic unit or the unit's failure to comply with its responsibility to meet sustainable development for all stakeholders to rationalise their decisions.
6. **Governance:** intends to identify, measure, and communicate information on the application of corporate governance in the economic unit, in order to reduce conflict and achieve balance and responsibilities among all stakeholders to rationalise their decisions.

The sustainability issues in traditional accounting have become important, as power relationships among stakeholders are constantly changing with the systemic changes in society.

Sustainability Accounting Objectives

The sustainability accounting seeks to achieve the following (Hyrslava et al., 2015: 608):

1. Developing the prospects of the accounting system.
2. Improving the economic performance of the economic unit.

The primary goal of sustainability accounting is to measure sustainable performance. A central issue is the debate on whether sustainability is an appropriate objective at the organisational level, and whether it is measurable at this level. A sustainability and business strategy for the organisation provides the context in which performance is discussed (Dragomir, 2011: 386).

Accounting Measurement

Accounting measurement is defined as the process of determining the monetary values of the items or events recognised and shown in the unit's financial reports (Abu Zir, 2008: 4). It is also defined by Al-Zoghbi as the description translation, where the term is a number



description (Al-Zoghbi, 2011: 55). Based on this, it can be said that accounting measurement is the translation of events with clear and understandable critical expressions for users.

Accounting Measure for Sustainable Performance

The researchers believe that measuring sustainability costs is very easy, while measuring revenue is difficult. This is because revenues are achieved indirectly by improving the reputation of the unit, which will be reflected in the increase in sold items by that unit, and the price of environmentally friendly products, through the application of the unit for all dimensions of sustainability accounting. Alternatively, revenue is measured by measuring the benefit provided to stakeholders, and then the exchange value or usage value is applied to check the generated revenues.

Accounting Delivery

The third function of accounting, after identification and measurement, intended to communicate the information processed to stakeholders for the purpose of rationalising decisions (Weygandt et al., 2002: 2). This information is communicated through the integrated report prepared by the economic units that adheres to the requirements of sustainable development. It contains financial statements, and schedules attached to them, and the report of the auditor, and the report of the Board of Directors, which must be comprehensive and integrated with the dimensions represented by the economic, environmental, and social, with the aim of providing confidence in the unit and its activities. Its implementation must be reliable through auditing by qualified audit offices (Jordi, 2016: 348–349).

To avoid the loss of a good reputation, the units were forced to provide information on their environmental-related activities to a wide range of stakeholders after the publication of the first separate environmental reports in 1989. The number of units that began to publish information about their environmental, social or sustainability policies has been increased since the middle of the nineteen-nineties. The units increasingly disclosed information on the environmental aspects of their business activities, and the correlation between those aspects and their economic and social performance (Kolk, 2004: 51). In addition to traditional accounting systems, which focussed on collecting, recording, and reporting on the economic events that have an impact on the financial position of the unit, and its profits.

Sustainability reports can bring significant benefits to the economic units. According to the GRI, sustainability reports can increase innovation and competition; sustainability and stability; encourage good management; and act as an incentive to establish a culture of

institutional transparency that contributes to the creation of responsible businesses (Persic et al., 2017: 4).

Quantitative disclosure of sustainability is not only in numbers and the way in which these figures are displayed, but also with the information received by the economic units invested in them. The disclosure factors can be explained as follows (Muller & Sebastiaan, 2011: 24):

1. **Comprehensive and Integrated Reporting:** means to report relevant financial, environmental, and social information in a single report, which was prepared based on the GRI 2009 guidelines.
2. **Audit/Confirmation:** units must check sustainability reports by large audit firms, particularly those with environmental impact businesses.
3. **Relative Importance:** the information in the report should cover topics and indicators that reflect the economic, environmental, and social implications of the unit through guidance by the GRI instructions, which would fundamentally affect the assessments and decisions of stakeholders, and should be achieved. The disclosure of this information is of added value to investors and analysts.
4. **XBRL:** economic units provide their information through the Broad Business Reporting Language (XBRL). The idea behind the XBRL is that business is doable by reporting language because it is simple. Instead of treating financial information as a single block, it provides a label for each individual element of the data to be readable.

Based on the above, it can be said that the reports should be prepared in accordance with the dimensions of sustainability accounting as represented by economic, environmental, social, technological, risk, and governance aspects to provide high quality information to stakeholders.

Sustainability Accountability Standards

1. **Sustainability Accounting Standards Board:** The Sustainability Accounting Standards Board (SASB) was established in 2011, as an independent, non-profit organisation accredited in the setting of standards by the American National Standards Foundation (ANSI) (SASB, 2017: 1). The SASB aims to develop sustainability accounting standards that meet the needs of investors and the public in a way that enhances a high-quality disclosure of sustainability information, and focusses on known trends and complaints that are likely to affect the financial position or operating performance of the unit. It will therefore be prepared under the standard (SASB, 2013: 3).
2. **SASB Standards:** The Sustainability Accounting Standards Board (SASB) provides sustainability accounting standards to be used by US economic units to disclose

sustainability issues of relative importance to investors, and the public. The SASB standards are formulated as mandatory disclosure to the Securities and Exchange Commission (SEC) (SASB, 2017: 1). The SASB standards can be clarified through the following key groups:

- Healthcare
- Finance
- Technology and communication
- Non-renewable resources
- Transportation
- Services
- Resource transfer
- Consumption
- Renewable resources and alternative energy
- Infrastructure

Global Sustainability Reporting Initiative Standards

The efforts of the Global Sustainability Initiative Committee (GRI), issued by the Federation of Economics in Charge of Environment (CERES) in 1997, are among the most prominent efforts in this field, establishing sustainability standards that guide the development of unit sustainability reports, and which can be applied at an international level (Ismail, 2016:15).

The first version (G1) of the initiative standards was launched in 2000 to include social, economic, and governance issues, as well as environmental issues. The second generation (G2) was released in 2002, the third generation (G3) in 2006, and the fourth generation in 2013 (2016, 345). Finally, the latest version of the initiative was launched in 2016, which included guidelines covering economic, environmental, and social aspects, as well as basic standards, including general principles for the preparation of the report and principles that determine the quality of the report. This included three standards for general or comprehensive aspects; six criteria for economic aspects; eight standards concerning environmental aspects; and 19 criterion for social aspects. The standards took effect on 1 July 2018 (GRI, 2016: 3).

The initiative aimed to improve the media content of the sustainability report by providing information on the activity of the unit, in all its aspects. In order for the sustainability reports to be prepared in accordance with the standards of the Global Sustainability Initiative GRI, the desired objective of these reports must be quality determined, and the availability of the specific characteristics of the information it contains, in terms of its usefulness and comparability (GRI, 2006: 7).

A guideline model of the financial report issued by the Iraqi Economic Units can be provided with social, environmental, technological, risk, and governance information, as well as economic information, guided by the standards issued by the GRI and SASB. This is to improve the information content of the financial report, and thus the appropriateness of the information it contains, and in a way that meets the needs of users and achieves a balance among stakeholders and keeps pace with developments in the global business environment.

Sustainability accounting information must contain quantitative and qualitative features of transparency and comparability in the relevant sustainability context to enable external stakeholders to assess the sustainable impact of the unit.

The Role of Sustainability Accounting in Improving Reporting *Financial Reports*

Financial reports are defined as a means of communicating information prepared by the unit to beneficiaries that contain financial statements, the auditor's report, and the board report (Schroeder et al., 2009: 570–571).

The report is one of the most important sources of information on which stakeholders in the economic unit rely on their different decisions, as they are the main means of disclosing financial and non-financial information, and financial statements are the central part of financial reports (Al-Shami, 2009: 50).

Financial reports are broader than financial statements, and some financial information is preferable to be provided in financial statements. Meanwhile, others are preferable to provide financial report tables attached to financial statements, such as adjusted supplementary lists, natural resource reserves reporting, and management analyses included in the annual report, and letters to shareholders. These are provided to stakeholders represented by investors, creditors, and other users of information (Williams et al., 2006: 13).

Financial Reporting Objectives

There are many objectives for financial reports, which are explained as follows.

1. The general objectives of financial reports includes (Kieso et al., 2018: 4–5):
 - Providing useful information in rationalising investment and credit decisions to current and prospective investors and lenders.
 - Providing useful information that helps investors, lenders, and other users to estimate the size, timing, and degree of certainty associated with future cash flows.

- Providing information about the unit's resources, commitments, and changes.
2. The detailed objectives of financial reports includes (Al-Muhannadi, 2004: 27):
- Provide useful information in evaluating the performance of the unit and determining its profitability.
 - Provide useful information in determining liquidity and money flow.
 - Provide useful information in the report on management responsibility and assess its performance.
 - Provide information about management feedback and explanations to users.

The researchers agree that the objectives of financial reporting are to provide useful information to investors, lenders, and other users to make rational decisions.

3. The information to be disclosed in financial reports includes (Weygandt et al., 2002: 22; Schroeder et al., 2009: 572–575):

- **Financial Statements:** lists prepared by economic units at the end of the financial period that are normally prepared on 31 December of each year (starting on 1 January and ending on 31 December) to provide useful information for good economic decision-making (Ali & Others, 2015: 28).

The financial statements are the most important contents of the annual or periodic financial report issued by an economic unit, as these lists are audited by the unit's auditor, and attached to the auditor's report. These lists must be approved by the Chairman of the Board of Directors or a member of the Board of Directors of the unit authorised for this matter.

The various types of financial statements can be explained by Schroeder and others (2010: 639):

1. **Financial Position List:** defined (weygandt et al., 2002: 22) as a statement showing the assets, liabilities, and property rights of a particular unit, and on a specified date of time for the purpose of knowing the financial position of the unit.
2. **Income list:** defined as an income (income and gains) expense (including losses) for a particular unit to determine the outcome of the activity (profit or loss) over a certain period of time (Ali & others, 2015: 45)
3. **List of shareholders' equities:** defined as a summary of changes in the property rights of a particular unit during a given period of time (weygandt et al., 2002: 22).
4. **Cash flow list:** defined as a summary of cash inflows and cash outflows for the operational, investment, and financing activities of a

particular unit over a certain period of time (Weygandt et al., 2002: 22).

5. **Clarifications and observations:** clarifications contain additional information for those presented in the financial statements, and the explanation provides detailed or analytical explanation of the items disclosed in those statements, and information on the items eligible for recognition in those statements (AAC, 2009: 2786).
6. **Auditor's report:** this report is the opinion of the auditor of the financial statements prepared by the administration, specifically whether they have been presented fairly and in accordance with the GAAP.
7. **Board report:** This report is a management discussion and analysis, which mainly specialises in assessing the reasons for the performance of the economic unit during the previous period (improvement or deterioration).

Traditional reports do not include information on sustainability. Thus, some countries, including Italy, have passed key laws on social and environmental impact, including procedural justice, transparency, and avoidance of the phenomenon of confiscation of resources that belong to all stakeholders, in order to provide real and correct representation of the unity of economic and financial aspects (Vallesi et al., 2012: 19).

According to Lytos, the traditional lists prepared by the units do not contain sustainability information. In order to facilitate their understanding from all stakeholders, lists must be prepared in accordance with sustainability accounting to improve the quality of information.

Sustainability Accounting and Comprehensive Listings

Sustainable development has become essential in the discussions of researchers, businessmen, politicians, and NGOs, as well as other stakeholders. Most economic units seeking sustainable development have focussed their economic, environmental, and social programs on how to achieve the goal of maximising the value of the units.

The new challenge is the responsibility of the units to sustain towards stakeholders. Accountability is the duty to provide information to stakeholders who have the right to do so and is closely linked to the concepts of sustainability of the units. It is an essential component of business strategies for sustainability. The goal of sustainability accounting is to prepare calculations on unit interaction with the community, and the natural environment. Sustainability accountability is a framework that can be used to express economic, social, and environmental impact, and show how it relates.



The practice of sustainability reporting on the vision, plans, and challenges, and economic, social, and environmental achievements of the unit, is one of the most historic developments in progress towards a sustainable global economy and informed markets. However, the form of sustainability reporting in practice is heterogeneous because units that try to integrate social, environmental, and financial accounting information, do so in different ways. This includes extended financial reports with sustainability issues, and specific reports such as environmental report, social report, unit responsibility report, etc. This expansion of current financial reports enhances financial reports by integrating sustainability reports, which are often expressed as non-financial statements.

It also answers to information requirements for a wider range of stakeholders. The units are therefore making efforts to improve transparency, accountability, and sustainability communication practices. Some of them have a long history of producing health, safety, and environmental reports. Others have recently produced the first sustainability report or the basic trilogy or are considering producing one report soon. The number of units producing sustainability reports has increased significantly over the past decade and cannot be denied as a major business practice throughout the world (Persic et al., 2017: 9).

One way to deal with this is to create standards and guidelines for sustainability reporting, some of which are linked to the financial report standards of the specific characteristics of international financial reporting standards. They cover certain aspects of transparency, inclusiveness and completeness, relevance, accuracy, neutrality, comparability, clarity, timing, and auditability (Lotfi, 2011: 29).

Units need to think about how best to integrate sustainability information into their key reports (lists), and how they respond to changing stakeholder expectations has a significant relationship to the level of unit social responsibility. In fact, research conducted with various groups of stakeholders from investors, regulators, managers, and auditors has shown that social, environmental, and economic factors, as well as their bonding factors, should be taken into account when evaluating the overall performance of the units. Therefore, management accountants should be fully aware of what is driving public thinking, and how these factors change. For example, the value of the unit's brand will be affected either by positive or negative perceptions. By reporting sustainability, accountability for its effects and contributions can be enhanced, thereby enhancing trust, facilitating values, and building a more cohesive society.

Interest in the preparation of sustainability reports has increased in recent years to avoid deficiencies in the financial report. This requires the existence of criteria and guidelines to help prepare them, and includes useful information that is comparable in reports that provide

users with the necessary information. Subsequently, it has led to an increase in the interest of professional organisations and specialists in establishing standards governing the reporting process, and disclosing the sustainability of units reflects the social, environmental, and economic aspects of the activities of the units (Ali & Ali, 2018: 9).

Sustainability reporting is an attempt to provide additional calculations that will capture external factors to encourage behaviour that will mitigate the effects of unsupervised economic activity (Oana, 2009: 107).

Comprehensive Reports

The annual comprehensive reports of economic units with sustainability accounting aim to provide useful information to stakeholders, as they include the dimensions of sustainability accounting represented by economic, environmental, social, technological, governance, and risk. Therefore, it provides financial and non-financial information, as opposed to annual financial reports focussing on financial information to provide useful and comparable information.

The comprehensive report contains comprehensive lists, attached tables, the auditor's report and the Board's report, including previous sustainability dimensions.

The comprehensive lists are made at the end of the financial period, which include all dimensions of accounting for economic, environmental, social, and technological sustainability, as well as risks and governance, through the lists of balance sheet, income, cash flow, and equity to provide information for stakeholders. The focus will be on all lists, except the title list.

Objectives and Advantages of Comprehensive Reporting

There are many objectives and benefits for comprehensive reports, as explained by Muller and Sebastiaan, (2011: 10), and Lotfi (2011: 28–29):

1. Increase the reputation and the trade brand of the economic unit.
2. Prepare indicators and evidence of overall performance.
3. The ability to improve the level of impact on the society, and to make the activities of the economic unit that lead to legitimate environmental and social impacts, and in line with the requirements of sustainability.
4. Assessing and managing opportunities and risks for the unit and obtaining new opportunities.
5. Reducing costs by eliminating losses and improving efficiency (cost efficiency).

6. Meet the investor's expectations.
7. Involve stakeholders (beneficiaries) in the process of exchanging information.
8. Providing details about what the economic unit is doing on environmental, and health and safety issues.
9. Consolidating the principles of governance in order to achieve sustainable development.
10. Increase transparency and accounting accountability within the economic unit.
11. Support monitoring or oversight processes, motivating employees, and providing information on the internal operations of the unit.

The involvement of the stakeholders is an important part of sustainability performance, as their interests and needs point not only at the point where economic, environmental, and social efforts should be focussed, but also for the success of sustainability (Petroleum Chemical Industry Corporation, 2013: 19).

The researchers believe that the inclusion of sustainability calculations in comprehensive statements or lists should be regulated in accordance with sustainability accounting to be beneficial to stakeholders.

Importance of the Technological Aspects in Comprehensive Statements

Scientific and technological development has contributed to the well-being of individuals, including constant IT-related developments, and its importance in terms of the provision of communication services of various kinds, like providing education and information services to individuals. Economic units have made the world a small village, whose members can easily communicate and exchange information according to an anytime-anywhere basis (Munir & Naima, 2005: 2).

With the development of communication, and in line with requested regulators for immediate access to information in a competitive environment, economic units responded to this request by creating an automated (computerised) database that can provide economic unit information to users in a timely manner. The timely disclosure of appropriate information helps prevent surprises that could completely change the outlook for future economic unity, as well as give investors greater confidence in the information available to them (Hendriksen, 1977: 546).

The researchers believe that the exchange of information prepared in comprehensive reports and comprehensive lists, in particular, and in light of online sustainability accounting, facilitates the process of communicating them to stakeholders to rationalise their decisions. Furthermore, there is potential to provide information in light of sustainability accounting through reporting. Visual reporting provides useful, simple, and clear information to all



stakeholders in order to increase their awareness and culture, and thereby rationalise their decisions.

Sustainability accounting is a tangible manifestation of the company's commitment to transparency through all the forms of accounts that go beyond economic calculations. Business organisations can initiate their activities and users can assess whether the entity is socially, financially, and environmentally responsible (Eswarlal et al., 2).

Auditor's Report

The auditor's opinion on comprehensive lists are the responsibility of the administration, specifically whether they are prepared fairly and in accordance with the standards of sustainability accounting and gap accounting. The report must be prepared in accordance with the standards of sustainable auditing by an auditor or an international audit office with experience in sustainable activities.

Board Report

In this report, management discussion and analysis is explained, which specialises in assessing the reasons and justifications for the unit's performance during the period, and its commitment to sustainability accounting standards. It can be explained by including sustainability accounting dimensions in the lists through the following study section.

Practical Aspect

About the National Chemical and Plastic Industries Company/Mixed Stock Company

The company was founded on 23 October 1962 with a capital of IQD 150,000 under the certificate of incorporation. The capital increased during the subsequent years to become IQD 1,518,750,000, and is subject to the law of companies No. 21 of 1997, amended and located in the area of Saffron.

The company aims to produce chemicals and plastics, which are represented by sponge suppalling, six types of pvc granules, agricultural covers, bags, pallet, various volume bottles, boxes for soft drinks, vegetables, and so, through several manufactures.

Statements under the Sustainability Accounting for National Company
(table 1)
statement of financial position

National Chemical and Plastic Industries Company. Mixed Stock Company. Baghdad statement of financial position under (IS) IAS1 adjusted for responsibility for sustainable activities. on 31 December 2016.		
Details	2016	2015*
Non-Current Assets		
Property, plant and equipment (net) (including under implementation) (IAS16)	833332011	436558202
Goodwill	–	–
Other intangible assets	–	–
Investments in associates (IFRS9)	1200000000	1372966944
Investments held for sale	–	–
Long-term granted loans	–	–
Deferred tax assets (IAS12)	2898770	0
Sustainability Assets		
Net assets for environmental contributions (GRI300)	30000000	0
Net assets for social contributions (GRI400)	40000000	0
Net human resources assets (GRI400)	40000000	0
Net assets for technology (GRI305)	25000000	0
Net risk assets (GRI205)	15000000	0
Total Sustainability Assets	150000000	0
Total non-current assets	2186230781	1809525146
Current assets		
Inventory (including credits) (IAS2)	2022504670	2688612931
Account receivable	1979012954	2289709238
Account receivable other	–	–
Prepaid expenses	–	–
Cash and equivalent cash	2176180887	915691034
Total current assets	6177698511	5894013203
Total assets	8363929292	7703538349
Owners Equity		
Equity attributable to the shareholders of the parent company		
Stock capital	15187500000	15187500000
Additional capital	–	–
Excess reassessment (IFRS1)	328280690	–
Legal reserve (compulsory)	1378569512	2249219708

Retained earnings	(12228228825)	(13425100590)
Uncontrolled rights (minority)	-	-
Unrealised earnings/Fair value adjustments (IFRS9)	<u>156834388</u>	-
Total Owners Equity	<u>4822955765</u>	<u>4011619118</u>
Current liabilities		
Commercial credit and other credit Commercial	2835041640	3043919231
Short-term loans	-	-
The rolling part of long-term loans	-	-
Tax payable (current)	-	-
Expenses payable	-	-
Total current liabilities	2835041640	3043919231
Long-term liabilities		
Long-term loans		
Deferred tax liabilities*(IAS12)	57931887	
Long-term allocations	<u>648000000</u>	<u>648000000</u>
For the financing of assets for sustainable activities	-	
Total non-current liabilities	<u>705931887</u>	<u>648000000</u>
Total liabilities	3540973527	3691919231
Total Owners Equity and liabilities	<u>8363929292</u>	<u>7703538349</u>

Source: (National Chemical and Plastic Industries Company,2016: 1)

(Table 2)

Statement of comprehensive income

National Chemical and Plastic Industries Company; Mixed Stock Company; Baghdad Statement of comprehensive income (IS) IAS1 adjusted for responsibility for sustainable activities; For the year ending 31 December 2016	
Operating income	4337603953
Cost of sales	<u>(1264199698)</u>
Total income	3073404255
Other gains and revenues	397010699
Deduct: marketing expenses	(271826625)
Administrative expenses	(2320094544)
Other expenses	(377545692)
Loss of low values of fixed assets equipment, cars, furniture(IAS36)	<u>(36939896)</u>
Profits for the period before sustainability burdens	464008197
Deduct: burdens of sustainable responsibility	
Environmental contributions (GRI300)	20000000
Social contributions (GRI400)	30000000
Human resources contributions (GRI400)	30000000
Technological contributions (GRI305)	20000000

Risk contributions (GRI205)	30000000
Governance contributions (GRI102-103)	<u>20000000</u>
Total sustainability responsibility blindness	<u>(150000000)</u>
Profit period adjusted by blindness sustainability before tax	314008197
Tax expenses	<u>(47101230)</u>
Profit period adjusted by sustainability costs	266906967
Other comprehensive income	-
Unrealised earnings/Fair value adjustments (IFRS9) (IFRS1)	156834388
Excess reassessment (IFRS1,IFRS9)	<u>328280690</u>
Total comprehensive income for period	<u>752022045</u>

Source: (National Chemical and Plastic Industries Company,2016: 2)

(table 3)

Statement of Cash flows

National Chemical and Plastic Industries Company; Mixed Stock Company; Baghdad Statement of Cash flows (IS) IAS7 adjusted for responsibility for sustainable activities; For the year ending 31 December 2016		
Cash flows from operating activities		
Net income	752022045	
Added		
depreciation expense	109272775	
Loss of sale and decrease in the value of fixed assets	-	
Investment losses in subsidiary shares (equity method)	-	
Decrease in Inventory	666108261	
Decrease in account receivable	310696284	
Increase in deferred tax liabilities	57931887	
deduct		
Increase in deferred tax assets	2898770	
Decrease in account payable	208877591	
Income of investments in shares of subsidiaries (equity method)	-	
Gains of sale fixed assets	-	
Net cash flows from operating activities		1684254891
Cash flows from investment activities		
Cash inflows		
Sale of fixed assets	-	
Disposal of long-term financial investments	172966944	
Return of loans granted	-	
Cash outflows		
Purchase of fixed assets	506046584	
Purchase of sustainability fixed assets	<u>150000000</u>	

Long-term financial investments	-	
Grant of Loans	-	
Net cash flow from investment activities		(483079640)
Cash flows from financing activities		
Cash inflows		
Surplus revaluation	328280690	
Retained earnings	444849720	
Unrealised earnings	156834388	
Issuing shares and bonds		
Receiving loans		
Cash outflows		
Legal reserve		
Share buyback	<u>870650196</u>	
Repayment of loans received	-	
Cash dividend	-	
Net cash flows from financing activities		<u>59314602</u>
Change in cash from operating, investing and financing activities		1260489853
+Cash and equivalent in the first term		<u>915691034</u>
=Cash and equivalent at the end of the term		<u>2176180887</u>

Source: (National Chemical and Plastic Industries Company, 2016: 3)

When the unit does not comply with the responsibilities of sustainable activities, it will incur costs for the damage of its failure to fulfil its responsibilities for sustainable activities, as follows in Table 4.

(Table 4)
Financial statement

National Chemical and Plastic Industries Co. financial statement of effects not liability for sustainable activities for the year ending 31 December 2016		
Details	Partial	Total
The Field of Environmental Contributions (GRI300)		
The value of damage to individuals and resources due to pollution.	60000000	100000000
The value of damage not to purify the liquid waste.	40000000	
The Field of social contributions (GRI400)		
The value of the damage due to the lack of training courses for the residents of the area.	20000000	
The value of the damage due to the non-employment of		

persons with disabilities	10000000	100000000
The value of the damage due to the lack of transportation and transportation (staff delays).	40000000	
The value of the damage due to the lack of provision of childcare services (staffing).	30000000	
The Field of Human Resources: (GRI400)		
The value of the damage due to the lack of staff development.	20000000	120000000
The value of the damage due to the interruption of work.	70000000	
The value of damages not to provide a suitable environment for staff.	30000000	
The Field of Technology (GRI305)		
Value damage due to lack of modern technology.	90000000	140000000
The value of damage due to the lack of clean technology.	50000000	
Risks (GRI205)		
The value of damages of not achieving standard quality levels.	80000000	150000000
Value of damage due to product insecurity.	70000000	
Governance (GRI102-103)		
The value of the damage decisions making the wrong personal.	30000000	80000000
Cost of court cases against the Unit.	50000000	
Total negative effects as a result of irresponsibility for sustainable activities.		690000000

May be illustration details of aggregation amounts shown in statement of income and statement of financial position through the following:

Table of Costs details for sustainable activities shown in statement of income	
Details	amounts
1. The field of Environmental Contributions	
• Cost of discovering new sources of energy (GRI302).	5000000
• Cost of water and air pollution controls (GRI303).	4000000
• Cost of liquid waste treatment (GRI306).	6000000
• Cost of improving the aesthetic appearance of the environment (GRI300).	5000000
Total	<u>20000000</u>
2. The field of Social Contributions	
• Donations to public schools, orphanages, displaced persons, and the	

<p>popular mobilisation.</p> <ul style="list-style-type: none"> • Increased employee employment differences (GRI401). • Disability employment differences (GRI401). • Additional benefits and grants for workers (GRI403-405). • Differences in transport services • Cost of workers' housing services. • Cost of nursery for the children of workers. • Cost of supporting public service bodies and institutions (GRI419). • Cost of recreational services for residents of the area (GRI415). • Cost of health services for residents of the region (GRI403). • Cost of housing services. <p>Total</p>	<p>6000000</p> <p>3000000</p> <p>2000000</p> <p>2000000</p> <p>3000000</p> <p>1000000</p> <p>1000000</p> <p>2000000</p> <p>5000000</p> <p>2000000</p> <p>3000000</p> <p>30000000</p>
<p>3. Human Resources</p> <ul style="list-style-type: none"> • Cost of staff training, language, and computer courses and development programming. • Cost of entries at local and international conferences and seminars. • Cost of educational and health services for workers (GRI403-404). • Cost of non-working training (GRI415). • Cost of industrial security requirements. <p>Total</p>	<p>11000000</p> <p>5000000</p> <p>6000000</p> <p>2000000</p> <p>6000000</p> <p>30000000</p>
<p>4. Technology Field</p> <ul style="list-style-type: none"> • Cost of using cleaner technology, software, computers, and modern technology methods (GRI305). 	<p>20000000</p>
<p>5. Risks</p> <ul style="list-style-type: none"> • Cost of product quality control. • Cost of control of standard product quality specifications. • Cost of control of factory operations. • The cost of monitoring sudden stops. • Cost of control to achieve acceptable levels of product quality. 	<p>10000000</p> <p>6000000</p> <p>5000000</p> <p>3000000</p> <p>6000000</p> <p>30000000</p>
<p>6. Governance</p> <ul style="list-style-type: none"> • Cost of applying corporate governance (GRI102-103). 	<p>20000000</p>
<p>Total burden of responsibility for sustainable activities.</p>	<p>150000000</p>

Table of details assets and liabilities for sustainable activities shown in the statement of Financial position .	
Details	Amounts
Assets	
1. Net Assets for Environmental Contributions	
• Pollution control buildings (GRI305)	20000000
• Waste purification equipment (GRI306)	8000000
• Expenses for improving the aesthetic appearance of the environment.	<u>2000000</u>
	30000000
2. Net Assets for Social Contributions	
• Childcare centre buildings	13000000
• Residential buildings for workers (GRI405-406).	11000000
• Facilities and entertainment	4000000
• Healthcare Facilities (GRI403)	3000000
• Transportation	4000000
• Medical equipment and equipment (GRI403)	3000000
• Medical supplies stock (GRI403)	<u>2000000</u>
	40000000
3. Net Assets for Human Resources	
• Building and construction of training centres (GRI404).	31000000
• Means and equipment training (GRI404)	4000000
• Equipment and tools (GRI408)	2000000
• Worker protection tasks stock (GRI403).	<u>3000000</u>
	40000000
4. Net Assets for Technology	
• Modern computers (GRI305).	15000000
• Modern technical equipment (GRI305).	<u>10000000</u>
	25000000
5. Risks	
• Monitoring devices to prevent the defective (GRI205).	15000000
Total net assets for sustainable activities	150000000
Total liabilities for the financing of assets for sustainable activities	<u>150000000</u>

The above comprehensive list provides extensive information that relates to all dimensions of sustainability accounting, and to the requirements of sustainability accounting standards, and contributes to rationalising stakeholder decisions.

Conclusions and Recommendations

Conclusions

In light of the previous investigations, several conclusions have been reached, and the most important of which are:

1. Sustainable development is the process of optimising the resources available in all economic, environmental, social, and technological dimensions that meet the needs of present generations, and without compromising the ability of future generations to meet their needs.
2. Sustainability accounting is an information system that is concerned with recording, classifying (tabulating), and summarising events in many economic, social, environmental, and technological areas, as well as risks and governance. It provides useful information on sustainable performance through comprehensive reports to stakeholders, which enables them to rationalise their decisions.
3. The new challenge of sustainability accountability is the responsibility of the units to provide the needed information to stakeholders through the preparation of calculations on the interaction of units with the community, and the natural environment.
4. Sustainability accounting improves the preparation of financial statements to provide comprehensive information on sustainable performance.
5. The comprehensive statements are the lists prepared in light of the dimensions of accounting for economic, environmental, social, and technological sustainability, as well as risks and governance, to provide comprehensive information to stakeholders.

Recommendations

Based on the findings, the researcher recommends:

1. Relying on sustainable development to optimise the resources available in all economic, environmental, social, and technological dimensions to meet the needs of current generations, and without compromising the ability of future generations to meet their needs.
2. Apply sustainability accounting to create an information system that is interested in recording, classifying, tabulating, and summarising events related to the many economic, social, environmental, and technological dimensions, as well as risks and governance, for the purpose of providing useful information on sustainable performance through comprehensive reports to stakeholders, enabling them the opportunity to rationalise their decisions.



3. Meet the new challenge of sustainability accounting to provide information to stakeholders by preparing calculations on unit interaction with the community, and the natural environment to achieve sustainability.
4. Apply sustainability accounting to improve the preparation of financial statements for the purpose of providing comprehensive information on sustainable performance.
5. Relying on comprehensive lists prepared in consideration of the dimensions of accounting for economic, environmental, social, and technological sustainability, as well as risks and governance, to provide comprehensive information to stakeholders.



REFERENCES

- Abu Al-Nasr, Medhat and Mohamed, Yasmine Medhat, “Sustainable Development - Concept - Dimensions - Indicators”, The Arab Group for Training and Publishing, Cairo, 2017.
- Abu Zir, Afaf Ishaq, “The Main Axes of Accounting Measurement of Assets Using the Fair Value Concept in the Framework of International Accounting Standards”, 2008.
- Ali, Muhammad Ibrahim and Ali, Muhammad Abd, “Standards of a Global Initiative for Sustainability to Improve Reports and Their Relationship with Corporate Governance,” research presented produced from the requirements of International Accounting, 2018.
- Ali, Muhammad Ibrahim and Muhammad, Iyad Tahroslaman, Muhannad Abdul Rahman, “Financial Management”, Al-Manhaj Printing, Baghdad, 2015..
- Al-Kafrawi, Hisham Mohamed Ahmed, “Environmental and Social Disclosure Assessment in Sustainability Reports and its Role in Rationalizing Long-Term Investment Decisions”, Master Thesis Accounting / College of Commerce / Mansoura University, 2016.
- Al-Muhannadi, Muhammad Abdullah, “The Impact of Accounting Disclosure in Publiced Annual Financial Reports on Stock Prices, Master Thesis Accounting / Al-Bayt University, Jordan, 2004.
- Al-Shafi’i, Hassan Ahmed, “Sustainable Development, Accounting and Auditing in Physical and Sports Education”, Dar Al-Wafaa for Print and Publishing World, Alexandria, 2012.
- Al-Shami, Akram Yahya, “The Impact of the Qualitative Characteristics of Accounting Information on the Quality of Financial Reports of Commercial Banks Operating in the Republic of Yemen,” Master of Accounting / Middle East University, Amman, 2009.
- Al-Zoghbi, Yamen Khalil, “Accounting Measurement Based on Fair Market Value and Its Importance to Jordanian Industrial Joint Stock Companies in the Amman Stock Exchange,” Master Thesis, Department of Accounting, 2011..
- Badawi, Muhammad Abbas and Al-Beltaji, Yousry Muhammad, "Accounting in the field of sustainable development between theory and practice", The Modern University Office, Alexandria, 2013.
- Dragomir, Voicu D,"Accounting for Sustainability: the Quest for a Conceptual framework",384 Int. J. Critical Accounting, Vol. 3, No. 4, 2011.



- Emanoil Muscalu , Mihai Neag , Elisabeta-Emilia Halmaghi," Lucian Blaga” The Ecological Dimension Dimension of Sustainable Development ", Scientific Research and Education in the Air Force-Afases, 2016.
- Fagerström, Arne & Fredrik ,Hartwig, & Gary ,Cunningham," Accounting and Auditing of Sustainability: Sustainable Indicator Accounting, SIA", Conference Paper · July 2016.
- GRI,"Global Reporting Initiative (GRI) standards",Reporting on sustainability issues that matter most,2006.
- GRI,"GRI 101: FOUNDATION",2016.
- Hendriksen, Eldon ," Accounting Theory ", Irwin, United States of America, 1977.
- Hyršlova,Jaroslava& Helena, Becková & Marie, Kubáňková ," Sustainability Accounting: Brief History and Perspectives," International Days of Statistics and Economics, Prague, 2015.
- Ismail, Essam Abdel Moneim, “The effect of the degree of disclosure of corporate sustainability on the quality of financial reports - An applied study on companies listed on the Egyptian Stock Exchange,” Journal of the Faculty of Commerce for Scientific Research, Faculty of Commerce, Alexandria University, Volume 53, Part II, No. 2, 2016. .
- Jordi Morros ,"The integrated reporting: A presentation of the current state of art and aspects of integrated reporting that need further development", Intangible Capital, vol. 12, núm. 1, Universitat Politècnica de Catalunya Terrassa, España 2016.
- Kafi, Mustafa Youssef, "Sustainable Development", Al-Rimal for Publishing and Distribution, Amman, 2017.
- Kieso, Donald, Weygandt, Jerry&Warfield, Terry ," Intermediate Accounting ", Wiley, United States of America, 2018.
- Kolk ,Ans ,"A Decade of Sustainability Reporting: Developments and Significance", Int. J. Environment and Sustainable Development, Vol. 3, No. 1, 2004.
- Lotfi, Amin El-Sayed Ahmed, "Accounting and Auditing on Sustainable Development", University House, Alexandria, 2011.
- María ,Luisa Pajuelo Moreno & Teresa Duarte-Atoche ," Relationship between Sustainable Disclosure and Performance—An Extension of Ullmann’s Model", Published: 15 August 2019.



- Muller & Sebastiaan , " Quantative Sustainability Disclosure An International comparison and its Impact on Investor Valuation ",2011.
- Munir, Nouri and Naima, Park, "Information and Communication Technology and its Importance in Countries' Economies to Keep Up with the Challenges of the New Global Economy - and Requirements - ", Faculty of Economic Sciences and Management Sciences, Hassiba Ben Bouali University, Chlef, 2005.
- National Chemical and Plastic Industries Company "Annual Reports" ,2016.
- Oana, Raluca Ivan,"Sustainability in Accounting–Basis: A Conceptual Framework", Annales Universitatis Apulensis Series Oeconomica, 11(1), 2009.
- Parkin,Sara,"Accounting for Sustainability",Guidance for Higher Education Institutions , Heps, 2003.
- Persic, Milena& Sandra Jankovic& Dubravka Vlastic3 ,"Sustainability Reporting : Possible Ways of Rethinking Hospitality Accounting ", Journal of Economic and Social Development, Vol 2, No 2,2017.
- Persic,Milena&Halimi,Lahorka,"Non-Financial Information and Integrated Reporting in the Hospitality Industry: Case Study of Croatia",Copernican Journal of Finance & Accounting,Volume 6, Issue 3, 2017.
- Qasim, Khaled Mostafa, "Environmental Management and Sustainable Development", University House, Alexandria, 2012.
- SASB, Sustainability Accounting Standards Board," Conceptual Framework ",2013.
- SASB," SASB Conceptual Framework ", 2017.
- Schroeder, Richard Clarke, Martel Cathy, Jack, "Accounting Theory," The Arabization of Khaled Ali Ahmed Kajiki and Ibrahim Weld Muhammad Fall, Revision of Kilani Abdul Karim, Dar Al-Merikh, Riyadh, 2010.
- Schroeder, Richard, G., Clark, Myrtle, W.& Cathey, Jack, M , " Financial Accounting Theory and Analysis :Text and Cases ", 9th Edition , Wiley, United States, 2009.
- Vallesi1, Martina& Andrea1, Alessia D', Eswarlal2, Vimal umar , "Evaluation of Sustainable Accounting Practices in THE Italian ioenergy Sector,"PAGRI 3/2012.
- Villiers, C. & Maroun, W. , " Sustainability Accounting and Integrated Reporting",Routledge Taylor&Francis Group,2018.



Wackernagel,i Mathis &Kirk Hamilton,ii &Jonathan Loh,iii & Jerome Sayreiv," Accounting for Sustainable Development:Complementary Monetary and Biophysical Approaches",Prepared for the OECD -Roundtable on Sustainable Development November 21, 2001.

WBCSD the World Business Council for Sustainable Development," ESG Disclosure Handbook ", 2019.

Weygantd , Jerry &Kieso , Donald, & Warfield,Terry ," Accounting principles ", Wiley, United States of America,2002.

Williams, Jan, R., Haka, Susan, F.&Bettner, Mark, S.&Carcello, Joseph,V. ," Financial Accounting ", Mcgraw-Hill, New York , 2006.