Making Sustainability Measurable:

An Accounting Framework for the MENA Region





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The Middle East and North Africa region faces a complex environmental challenge. It is one of the regions most affected by water scarcity and climate-related pressures, yet it also has significant opportunities to advance renewable energy, improve resource efficiency, and build more sustainable economies. The key question is no longer whether these challenges exist, but how they can be translated into clear, measurable, and useful information that supports better decision-making by governments, businesses, and society.

This is where accounting can play a much broader role. Traditionally, accounting has been associated with financial records, profit, cost, and performance. However, accounting can also serve as a language for organizing environmental realities. It can help transform complex issues such as water stress, carbon emissions, renewable energy and waste into indicators, responsibilities and reports that support accountability and action.

In our published research on environmental sustainability accounting in the MENA region, we propose a theoretical framework built around a simple but powerful idea: what cannot be measured is difficult to manage. Sustainability reporting in many parts of the region remains developing, fragmented and often voluntary. In many cases, environmental reporting still relies heavily on broad narratives rather than consistent, comparable and decision-useful metrics. The challenge, therefore, is not only to produce more sustainability reports, but to develop a clearer way of deciding what should be measured, who should provide the data and how the results should inform decisions.

The proposed framework focuses on four environmental dimensions that are particularly relevant to the MENA context: water scarcity, carbon emissions, renewable energy and circular economy practices. These issues are not isolated environmental concerns. They are directly connected to food security, energy transition, urban planning, investment, governance and long-term resilience. By placing these four dimensions within an accounting framework, the study seeks to make them measurable, comparable and actionable.

The framework operates through three interconnected stages. The first stage is detachment, where a specific sustainability issue is identified and separated into measurable data points. For example, this may include water consumption, emissions levels, renewable energy capacity, or waste flows. The second stage is transformation, where the data is organized and interpreted using accounting tools. Two tools are especially important: natural capital accounting, which helps assess the condition and value of natural resources, and input-output analysis, which traces the movement of materials, energy and waste across economic systems. The third stage is extraction, where the information is converted into useful outputs such as environmental reports, performance indicators, dashboards and policy insights.

The value of this framework lies in its ability to move sustainability from general aspiration to structured information. When water is treated as a limited natural asset, organizations and governments can better assess how efficiently it is used across agriculture, industry and urban systems. When carbon emissions are classified and linked to economic activities, it becomes easier to identify their sources and design reduction strategies. When renewable energy is measured through installed capacity, energy generation and avoided emissions, green investment can be connected to both environmental and economic value. Similarly, tracking material and waste flows can support circular economy policies and reduce unnecessary resource loss.

Importantly, the framework is not intended solely for corporate organizations. It depends on a wider institutional ecosystem that includes environmental ministries, national statistics offices, regulators, firms and regional bodies. Reliable sustainability accounting requires consistent data, shared standards and collaboration across institutions. This is essential because environmental challenges do not stop at the boundary of a company, a sector or even a country. Water, emissions, energy and waste are cross-cutting issues that require coordinated responses.

The study's central message is that accounting can become part of the environmental solution in the MENA region. Rather than viewing accounting as a narrow financial practice, the framework positions it as a tool for measuring sustainability, supporting policy development and strengthening institutional accountability. In this sense, accounting can act as a bridge between global sustainability goals and the specific realities of the region.

Nevertheless, several practical challenges remain. Institutional capacity varies across the region, environmental data are not always harmonized, and reporting systems differ between countries and sectors. However, these challenges do not weaken the framework. Instead, they highlight the need for gradual implementation, beginning with core indicators and expanding as data quality, institutional coordination and regulatory capacity improve.

Sustainability in the MENA region requires more than ambition. It requires measurement, accountability and practical tools that can turn environmental complexity into informed action. Through this framework, accounting can help make environmental challenges more visible, decisions more evidence-based and the region's sustainability journey more effective.

To view the research, please scan the QR code.