



Institute of Banking Studies

ESG Risks and The Kuwaiti Financial Sector

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Please note that the findings and recommendations presented in this report are the sole responsibility of the author and do not reflect the views of any entity in Kuwait.

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List of Abbreviations

ADX	: Abu Dhabi Securities Exchange
BAU	: Business As Usual
BCBS	: Basel Committee on Banking Supervision
BIS	: Bank for International Settlements
CBK	: Central Bank of Kuwait
CDP	: Carbon Disclosure Project
CDSB	: Carbon Disclosure Standards Board
CED	: Committee for Economic Development
CIS	: Credit Impact Score
COP	: Conference Of Parties
CSR	: Corporate Social Responsibility
DFM	: Dubai Financial Market
DJSI	: Dow Jones Sustainability Indices
EBA	: European Banking Authority
EBRD	: European Bank for Reconstruction and Development
EPA	: Environmental Protection Agency
ESG	: Environmental, Social, Governance.
ETF	: Exchange-Traded Fund
FSB	: Financial Stability Board
GCC	: Gulf Cooperation Council
GFANZ	: Glasgow Financial Alliance for Net Zero
GFC	: Global Financial Crisis
GHG	: Green House Gas
GRESB	: Global Real Estate Industry Benchmark
GRI	: Global Reporting Initiative
ICAAP	: Internal Capital Adequacy Assessment Process
IFRS	: International Financial Reporting Standards
IIRC	: The International Integrated Reporting Council
IMF	: International Monetary Fund
IPS	: Issuer Profile Score
ISSB	: International Sustainability Standards Board
KIA	: Kuwait Investment Authority
KNAP	: Kuwait National Adaptation Plan
KNDP	: Kuwait National Development Plan
MENA	: Middle East and North Africa
MEW	: Ministry of Electricity and Water
MNE	: Multi-National Enterprises
MSCI	: Morgan Stanley Capital International
NDCs	: Nationally Determined Contributions
NGFS	: Network for Greening the Financial System

NSFR	: Net Stable Funding Ratio
OECD	: Organization for Economic Co-operation and Development
PIF	: Public Investment Fund
PRI	: Principles for Responsible Investment
SASB	: Sustainability Accounting Standards Board
SCA	: The UAE's Securities and Commodities Authority
SCF	: Strategic Cooperation Framework
SDG	: Sustainable Development Goals
SFWG	: Sustainable Finance Working Group
SIFIs	: Systemically Important Financial Institutions
SRI	: Socially Responsible Investing
SSE	: Sustainable Stock Exchanges
SWF	: Sovereign Wealth Fund
TCFD	: Task Force on Climate-related Financial Disclosures
UN	: United Nations
UNEP	: United Nations Environmental Program
UNFCCC	: United Nations Framework Convention on Climate Change
UNGC	: United Nations Global Compact
UNPRI	: United Nations Principles for Responsible Investment
VRF	: Value Reporting Foundation
WEF	: World Economic Forum
WFE	: World Federation of Exchanges
WRI	: World Resources Institute

Introduction

Climate change has become one of the leading issues on policy agendas and public debate around the world. The consequences of global warming are currently affecting our planet with a greater impact in some regions. Climate risks mainly materialize through two channels: firstly, as a result of an increase in mortality and morbidity and damage to infrastructures and the properties of firms and households, caused by climate-related events (physical risk); and secondly through the consequences for the economic and financial system stemming from the transition to a low-carbon economy (transition risk). Therefore, many countries have sought to include climate-risk based measures to mitigate the impact of human activities on nature.

The transition of many economies in the globe to low-carbon circular economy, following the Paris agreement, the United Nations Sustainable Development Goals (SDG), and the adoption of zero carbon emissions agendas includes many risks and opportunities for the overall economy and financial institutions. These developments have led many regulators and policy makers to adopt Environmental, Social, and Governance (ESG) concepts to enhance the industry's awareness for managing environmental risks while providing greater transparency for safe and prudent management of climate-related and environmental risks (European Central Bank, 2020). Rising pressures from stakeholders, investors and supervisory authorities made banks more active in adopting ESG practices. Needless to say, central banks also have a role to play. They examine sustainability profiles, and in particular, climate risks, as they can affect the ability to pursue institutional goals of price and financial stability and supervisory tasks.

In addition, the increasing interest of policy makers is to develop a sustainable financial framework that fosters inclusive development and awareness, through incorporating ESG into investors' and asset managers' decision-making processes while improving financial intermediaries' disclosure to end-investors in terms of sustainability risks and investment goals (European commission, 2018; European Central Bank, 2020). However, the ESG factors could have a varying impact on financial institutions' performance and solvency (EBA, 2021). A negative impact bank risk taking behavior, which could reflect on the banks' portfolios, leverage ratios, though its expected to reduce risk and compliance costs (Bebbington, et al., 2008; Oikonomou, et al., 2012). Moreover, having good governance could reduce financial-related risks, lead to better financial performance, and commitment to environmental issues in financial intermediaries (Chollet & Sandwidi, 2018). Therefore, establishing ESG policies incur costs for setting a framework with disclosure policies, which could be offset by mitigating risks and performance stability (Nizam, et al., 2019; Buallay, 2019).

In Europe, following the report of the European Commission's High-Level Expert Group on Sustainable Finance, the Action Plan: Financing Sustainable Growth, and Renewed Strategy on Sustainable Finance in 2021 many steps were taken to integrate environmental related risks into the financial system (EBA, 2021). European Banking Authority (EBA) and the central bank have been supporting the integration of the ESG concepts into the financial system framework. The EBA recommended that financial institutions should incorporate ESG risks-related considerations into their business strategies, while stressing the need to reflect these risks in the authorities' supervisory evaluations (EBA, 2021). However, this step is still facing many challenges, including the identification and measurement of ESG risk drivers to identify the exposures subject to higher ESG risks, the measurement of the transmission channels between ESG risk factors and actual losses, and challenges to the nature of the ESG risks (EBA, 2022).

In the GCC countries, the incorporation of ESG in business lines and reporting is becoming more relevant for the financial institutions in the region. The rising emphasis on consumer protection and social responsibility, and the diversification strategies away from oil includes an environmental, social and governance related components that could have an impact on financing decisions and risks in the medium to long term. Indeed, Saudi Arabia, the UAE, Bahrain, and Qatar have recently adopted zero-carbon emission strategies (E related commitments), while issuing data protection laws; regulations on ethical use of technologies like artificial intelligence, and government initiatives related to human rights, diversity and inclusion (S&G related commitments). On the other hand, Kuwait vision 2035 has no official pledge to reduce carbon emissions, but the authorities are focused on improving its governance and sustainable finance commitments though the recent publishing of Kuwait's Boursa ESG Reporting Guide and the adoption of ESG benchmark by Kuwait Investment Authority. On the environmental front, Kuwait has issued a national adaptation plan (2019-30) which include a medium to long-term strategies to boost the national capacity to withstand climate change induced disasters, such as the vulnerabilities of coastal areas to sea level rise and flooding risks, while focusing on marine life and fishers' sector, water resources, and health sector.

However, the implementation of the ESG concepts and processes could have a negative impact on banks with a high exposure to the hydrocarbon sector through lowering ESG ratings. In addition, penalizing regional financial institutions for extending credit to the oil sector may have a negative impact on the hydrocarbon industry going forward. Therefore, this report will be segmented into five main sections, the first section will layout the development of the ESG concept and the linkages with the SDGs, the second section will discuss the definition of the ESG pillars as well as the features of these risks and their characteristics, especially climate related risks. The third part will discuss the ESG principles within the financial sector, the role of supervisory authorities

and Basel III, and the main international ESG frameworks. Finally, the fifth part will include the state of ESG implementation in the GCC countries, the diversification plans and SDG progress, and the impact of ESG implementation in the Kuwaiti banking sector. The final section will contain a gap analysis for the implementation of the ESG pillars and disclosure in the banking sector as well as some conclusions and recommendations to face existing challenges.

The development of ESG concepts

The ESG term and its main theme could be traced back to the United Nations (UN) Global Compact's "Who Cares Wins" initiative, which focused on explaining to mainstream investors and analysts about materiality and the interplay between environmental, social and governance issues. However, the practice of ESG investing began in the early 1960s as socially responsible investing, where investors excluded stocks or entire industries from their portfolios based on business activities. In the 1970s, frameworks started to appear related to the ethical behavior of Multi-National Enterprises (MNE) following the guidelines developed by the Organization for Economic Co-operation and Development (OECD) in 1976, the introduction of the "social contract" by the Committee for Economic Development (CED), and the launch of the ILO's Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy. In the 1990s, Socially Responsible Investing (SRI) was developed, denoting investing money in companies and funds with a positive social impact (Bouye, et al., 2021).

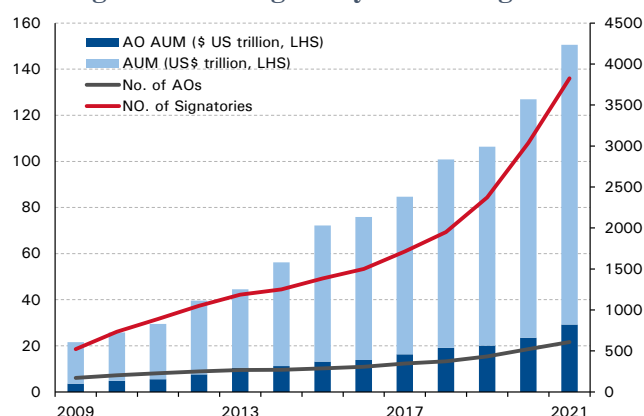
In 2005, the UN developed the Principles for Responsible Investment (PRI) with the number of signatories growing from 63 to 3,826 in 2021 and assets under management reaching \$121.3 trillion, up from \$6.5 trillion in 2006¹ (Figure 1). Then, ESG encompassed equity to fixed income assets, especially with the issuance of the first green in 2008 followed by other types of issuances such as social and sustainability bonds and sustainability performance-linked bonds, which could also be referred to as "impact investing". Following the adoption of the Paris Agreement on climate change and the UN 2030 Agenda for Sustainable Development in 2015, governments are making strides to transition to low-carbon and more circular economies on a global scale (EBA, 2020). Since the banking sector is considered the main financing tool for economic activities, the Paris one planet summit in 2017 launched a new Network for Greening the Financial System (NGFS). The network included many central banks and banking supervisors as well as international organizations (BIS, EBRD, OECD, SIF as observers) with a main focus on three streams: supervision, macro-financial and green financing. All of these frameworks led to a wide range of initiatives to measure the actions of enterprises.

¹ See, <https://www.unpri.org/pri>

However, there is neither a uniform definition of ESG nor a standard set of criteria that investors can look to in each of its subcategories. Moreover, no uniform disclosure regimes help investors

or data providers collect data in a standard format to support their assessment of ESG criteria across companies and countries. Moreover, technologies, policies, values, and social preferences differ across regions and evolve in different directions or at different speeds (Buniakova & Zavyalova, 2021). Therefore, the ESG term is often used interchangeably with sustainable investing denotes an investment approach in which analysis goes beyond purely financial factors. However, it could also be

Figure 1: PRI Signatory and asset growth



Source: UNPRI

viewed as the successor of SRI, which is gaining popularity worldwide. Nevertheless, unlike SRI, which relies on negative screening, ESG put forth a framework for caring about the environment on a global scale without failing to notice the economic and financial viability (Edelweiss Securities Limited, 2020). Market participants use various terms to describe ESG investments strategies, and, as mentioned, no uniform definition of ESG exists (Fekri, 2020).

Linkages between ESG and SDGs

The UN agenda for 2030, which includes the Sustainable Development Goals (SDGs), included a set of 17 goals with around 169 targets, which aims at putting a blueprint for a more sustainable future. Since then, (Persson, et al., 2016) countries started to align their development goals and target with this agenda while suggesting a behavioral and outcome based reporting with three main priorities; social awareness, clear definition of national targets, and action based reporting on the national level. The intuitive connection between ESG and SDGs have focused mainly on multiple aspects of the adoption process of ESG within firms and the motivations (Kocmanova & Simberova, 2014; Syed, 2017) and the disclosure of ESG measurements. SDGs are much broader than the ESGs and focus on good health and well-being, the elimination of poverty, zero hunger, quality education, clean water and sanitation, reduced inequity, as well as the environment and other issues encapsulated in ESGs. Most importantly, the SDGs call for leaving no one behind. This clearly shows the existence of a connection between SDGs and ESG firm-level metrics, though the role of business in advancing the SDGs is broadly unclear due to the mismatches between the targets at the national levels and the companies aims at maximizing their profitability while mitigating risks. As such, businesses may assume that governments are the sole actors

responsible for advancing the 2030 Agenda through legislative and policy reforms. However, the private sector also plays a pivotal role as many firms and banks started to link some of their targets to the SDGs on the micro-level.

Table 1: Equivalences between some SDGs and firm level ESG factors

SDGs		Firm level ESG metrics
SDG target	SDG indicator	ESG variable
Target 6.4: Substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.	6.4.1 Change in water-use efficiency over time.	Factor (E): Water use to revenues <ul style="list-style-type: none"> • Total water withdrawal in cubic meters divided by net sales or revenue in millions of USD.
Target 7.1: Ensure universal access to affordable, reliable, and modern energy services.	7.1.2 Proportion of population with primary reliance on clean fuels and technology.	Renewable energy use ratio <ul style="list-style-type: none"> • Total energy purchased from primary renewable energy sources divided by real energy use
Target 13.2: Integrate climate change measures into national policies, strategies, and planning.	13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan, which increases their ability to adapt to the adverse impacts of climate change and foster climate resilience and low GHG.	CO2 equivalent emissions to revenues <ul style="list-style-type: none"> • Total CO2 and CO2 equivalent emissions in tons divided by net sales or revenue.
Targets 3.9: Substantially reduce the number of deaths and illnesses from hazardous chemicals, air, water, soil pollution, and contamination.	3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation, and lack of hygiene. 3.9.3 Mortality rate attributed to unintentional poisoning.	Factor (S): Health-safety policy <ul style="list-style-type: none"> • Whether the company has a policy to improve employee health and safety within the company and its supply chain.
Target 8.8: Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.	8.8.1 Frequency rates of fatal and non-fatal occupational injuries by sex and migrant status.	Total accidents <ul style="list-style-type: none"> • Number of injuries and fatalities reported by employees and contractors while working for the company.
Target 5.5: Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life.	5.5.2 Proportion of women in managerial positions.	Board gender diversity <ul style="list-style-type: none"> • Percentage of females on the board. Executive management gender diversity <ul style="list-style-type: none"> • Percentage of female executives.
Target 16a: Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime.	16.a.1 Existence of independent national human rights institutions in compliance with the Paris Principles.	Human-rights policy <ul style="list-style-type: none"> • Whether the company has a policy to ensure the avoidance of child, forced, or compulsory labor, or to guarantee the freedom of association universally applied independent of local laws.

Source: (Delgado-Ceballos, et al., 2023)

Therefore, adopting business-level ESG goals should effectively advance sustainability though having indicator-based metrics that have a clear and direct impact on the society while being connected to profitability. This will help to identify companies that are not making efforts to be sustainable and bring change or something more permanent as stakeholders and investors usually reward entities with good ESG scores. Typically, ESG factors include environmental footprint (greenhouse gas emissions, wastewater and energy usage), social impact (labor standards, pay equality and diversity), financial performance (financial stability, shareholder returns), community contributions (charity work, local employment and local environmental projects), and governance (board structure, leadership, risk management and internal controls) (Table 1).

Moreover, integrating these factors within the banking sector has gained more traction recently, usually referred to as responsible banking or “green financing” depending on the focus. Many banks have adjusted their business models to accommodate sustainability commitments, which could increase opportunities through financial innovations, especially related to reducing the environmental footprint. However, most of these commitments are broad and could be interpreted differently, which was reflected in banks targets. Accordingly, having sets of guidelines that help in managing ESG commitments, providing directions on how to create ESG reports, which are used to document and disclose ESG progress are needed to have a clear set of procedures for all groups within the economy. These groups represent the developers and regulators of the ESG ecosystem and act as an intermediary between companies and other ESG stakeholders such as investors and the public. Investors and analysts consider ESG performance in their fundamental analysis of companies with the underlying premise that companies that proactively manage ESG issues are better placed than their competitors to generate long-term tangible and intangible results. However, there is not one standard as of now, efforts are being made to consolidate the frameworks for better consistency, as is the case with financial reporting (see appendix [1](#)).

Defining ESG factors

The term ESG often refers to three main pillars within the frameworks mentioned above, Environmental (E), Social (S), and governance (G). It takes the holistic view that sustainability extends beyond just environmental issues. A growing number of ESG rating agencies that assign ESG scores, as well as new and evolving reporting frameworks, all of which are improving the transparency and consistency of the ESG information those firms are reporting publicly. In addition, many ESG investment vehicles have emerged, including green bonds, mutual funds, ETFs, and index funds (among others). These instruments make it easier for investors to align their investment decisions more closely with their own beliefs and values around. Furthermore, the adoption of ESG factors by institutions enhance their sustainability while attracting more investments and customers. Therefore, banks are considered as a main pillar for ensuring the

adoption of ESG principles in the economy through access to finance, which could help in achieving a smoother transition toward a low carbon economy. A growing body of literature has stressed the importance of adopting these factors within the financial system as seen below:

Environmental factors

These factors are often related to climate change, pollution, extreme weather events and global warming. They may also include corporate climate policies, energy use, waste, pollution, natural resource conservation, and treatment of animals. The attention to these factors is gaining more traction as shareholders, investors and clients are looking at the adopted environmental policies by institutions. Banks are becoming more sensitive to environmental issues as more banks are penalizing brown activities such as coal related industries (Degryse, et al., 2020). Furthermore, loans are one of the most important pillars in financing activities, which could put banks in a unique position of assessing their borrowers' risk and their ability to repay loans.

Natural disasters and extreme weather conditions that are amplified by climate change could cause significant disruption to the production process in many industries while incurring substantial damage to their profits. Among the natural disasters that might be intensified by climate change, drought is the most devastating for economic activities (Hong, et al., 2019; Huynh, et al., 2020) along with extreme weather conditions. Further, climate risk has a long-term and gradual nature and thus, it is more likely to inflict damage in the long-term. Therefore, if lenders view climate change as a risk factor, the adverse effect should be more pronounced for long-term loans. Based on that, the impact of climate factors is slow moving and could have two main impacts on institutions. First, the physical damage could affect their fixed assets and their day-to-day operations through the destruction of their facilities. Moreover, the transition to a low carbon economy could have an impact on their financial performance, ability to lend and invest in certain sectors, which could point that the environmental impact is multi-layered.

Social factors

The social part of the ESG pillars is aimed at institutions being socially responsible through upholding labor standards, diversity, human rights, gender equality, supply chain and other themes. The contribution of the social component of ESG to sustainable investment outcomes may be less intuitive than environmental factors, or even governance, but it is no less crucial. The social component of the ESG corresponds to the CSR and SRI, though it is generally discussed as a part of managing risks related to the institutions and investors. Socially responsible investments highlight the fact that more 3000 institutional investors and service providers that have signed onto the Principles of Responsible Investment (PRI), and agreement that takes into account CSR issues in their investment decisions and risk assessments.

A growing number of studies that links corporate social responsibility (CSR) with financial performance as banks consider it as means to restore their image and credibility, especially after the GFC (Brammer & Pavelin, 2005; Eberle, et al., 2013). The commitment of banks to sustainable CSR practices could benefit the bank itself and promote the adoption of sustainable practices by potential borrowers, thus exerting a positive impact on sustainable growth (Dorasamy, 2013), making the impact of the financial sector more pronounced when considering the effects of CSR practices. Moreover, some studies confirmed the positive relationship between CSR and scores and return on equities (Cornett, et al., 2016)

Governance factors

A large part of the momentum is focused on the climate and social related ESG indicators with little attention on corporate governance, which include a multitude of factors such as corporate structure, board composition, business ethics and anti-corruption. Data on this factor already exists as corporate governance predates the recognition of environmental and social risks, though the lack of attention to governance within the ESG may have led to some confusion about the role of governance in within its frameworks. The institutions' ability to commit to ESG factors lies with having effective corporate governance translates into concrete action and systemic change as inadequate anti-corruption practices, perverse incentive structures, contradictory lobbying activity, or ill-equipped leadership could render the adopted policies ineffective.

Based on the above, aligning the institutions' objectives with sustainability prospects depends on the ability of the executives and the higher management to understand the main sustainability drivers, incorporate them in their decision-making process and business models (Harjoto & Wang, 2020). Therefore, regulators in the financial sector should take into account the sensitivity of banks' higher management in anticipating sustainability challenges and incorporating them in their risk assessments. Furthermore, many studies have confirmed the positive relationship between sustainability and economic performance (Sharma, et al., 2020). However, implementing ESG strategies could increase the costs, though institutions usually expect to see positive effects on their financial performance and stability (Miralles-Quiros, et al., 2019). In addition, it will improve the reputation of the bank and attract new customers and investors (Branco & Rodrigues, 2006)

Corporate governance is also crucial for banks given the complexity and size of their operations. Therefore, banks are heavily regulated by authorities through setting rules and disclosure practices to make their operations more transparent while having appropriate safeguards against excessive risk-taking by financial companies (Aebi, et al., 2012). In addition, regulators usually intervene in other aspects such as limiting their abilities for lending and investing, imposing capital requirements, and setting bank governance characteristics, which could influence risk taking and incentives (Brogi & Lagasio, 2019). Many researchers also concluded that governance improve

that bank's mechanisms on risk taking and performance (Susi & Jaakson, 2020). Good governance also includes that the board of directors to fulfil their duties in supervising, protecting shareholders interest, and comply with regulatory requirements, which could reduce risk of insolvency through lowering agency costs, and information asymmetries between investors and banks.

Features and the definition of ESG risks

International frameworks and standards did not agree on a common and exact definition for ESG factors, though a general agreement has been established that they represent the main pillars for sustainability. Having different definitions could result in a different understanding goals, execution, and reporting. However, several commonalities could be seen through frameworks that could interconnect with each other:

- **Non-financial factors:** These factors are mainly related to the impact on the environment, such as GHG emissions, and social factors, including the working environment equality, rights, welfare, and poverty levels.
- **Factors' impact uncertainty** relates to the level of impact over time and could also be related to the impact of environmental policies during different time horizons.
- **Externalities:** Factors could have an impact on third parties that may not appear in firms' financial statements, which implies the inability to reflect the associated risks in pricing.
- **Impact on value chains:** Refers to firms' activities impact on their upstream and downstream value chains, pointing to the indirect effect of different ESG factors on firms through its interactions with their debtors, creditors, and vendors.
- **Public policy sensitivity:** Changes in public policies that are related to the adoption of ESG strategies/ frameworks, and their implementation could lead to structural changes within the market and the respective sector that are difficult to predict.

The impact of ESG factors on businesses could be through the physical impact of environmental hazards, or on their business model. For example, extending loans to a business with high-energy intensity could be affected by the changes in public policies related to promoting sustainability in the environment, which could have an adverse impact on the risk profile, the company's balance sheet, and solvency. Moreover, the incremental costs from social responsibility activities may lead to losses in the company's competitive capacity, which could lead to a negative impact on financial performance and therefore reduce the shareholder benefits. However, little studies within the banking sector have been done related to this issue, while a relatively large part of the existing literature has focused on the relationships between the financial performance and the integration of the social responsibility principles within their management processes and systems.

The results of these studies have led to divergent conclusions, (Simpson & Kohers, 2002) found a strong positive correlation between the introduction of socially responsible practices and the financial performance of banks. Nevertheless, the result of the work of (Esteban-Sánchez, et al., 2017) on a sample of 154 banks from 22 countries during 2005-10 founded that enacted social responsibility principles, showed mixed results that rejected the positive relationship between the adoption of these principles and banks financial performance (Esteban-Sánchez, et al., 2017).

Moreover, some researchers claimed that having sound environmental management could help these companies improve their reputation and performance “reputation-building hypothesis” (Konar & Cohen, 2001). However, scant research findings support a unified relationship between banks’ performance and the ESG factors. For example, (Dell'Atti, et al., 2017) concluded that social performance and reputation have a positive correlation, while corporate governance and environmental had a negative correlation, which could be related to banks’ ineffective environmental awareness and practices. In addition, (Forcadell & Aracil, 2017) found that bank financial performance gains from their reputational benefits. Moreover, banks voluntary commitments to social responsibility and environmental issues have a positive impact on their profits, which in turn, could motivate banks to invest more in ESG activities through a credible and quality management system (Abou Fayad, et al., 2017).

Recently, a pivot could be seen in research toward environmental issues through focusing on the banks’ environmental activities and their positive impact on value creation (Jeucken, 2010; Jo, et al., 2015; Finger, et al., 2018; Laguir, et al., 2018). Some analysts also found that there is a positive correlation between banks’ Tobin Q (the ratio between a physical asset's market value and its replacement value) and the adoption of ESG principles, though a negative correlation could be seen with the shareholder’ value creation (Hernández, et al., 2019). Other researchers also found a positive relationship between ESG and banks’ profitability, while stressing the importance of focusing on risks and opportunities from implementing ESG practices to move to a sustainable business (Brogi & Lagasio, 2019).

Climate-related environmental risks

International ESG initiatives and frameworks often consider climate risks as double layered as banks are usually impacted and contribute to this risk. Therefore, regulators should also prioritize disclosures to ensure a smoother transition of the financial industry toward a sustainable business model. Accordingly, the Financial Stability Board (FSB) recommended that banks view climate risks as both physical and transition risks. Physical risks are mainly related to economic costs due to extreme events and gradual climate changes, which may erode the value of assets and increase liabilities. This risk could have a direct impact on banks’ collateral such as real estate, increasing credit risk, as clients are unable to pay their installments. Moreover, banks that provide loans or

trade the securities of companies with direct exposure to climate-related risks suffer and accumulate climate-related risks through their credit and equity operations. On the other hand, transitional risks are mainly related to the adjustment of the policies and regulations towards a low-carbon economy. In addition, as the markets for lower-carbon and energy-efficient alternatives grow, firms may assume material exposures in their lending and investment businesses. Policy shifts could affect the value of assets, especially in high-energy intensity industries, and the emergence of a new technology that is more compatible with the goals of the adopted climate policies. These risks have increased the appetite of investors and shareholders to understand banks strategies in financing the economy transition towards low carbon emissions.

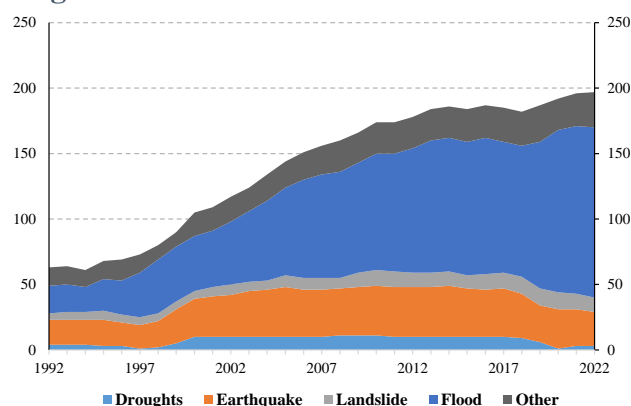
Therefore, climate-related disclosures are important as it could be viewed as evidence on banks efforts to address these risks. Developing a framework that identifies the required disclosure standards and their materiality triggers is important to communicate with the public. The most commonly referenced framework in the case of climate disclosures is the TCFD framework, which is recognized by regulators in the EU and is considered as guidance on climate-related disclosures. Moreover, the EBA requires that banks communicate information on climate risks, mitigation action, and green asset ratio (a measure of the financial support that banks are willing to give to sustainable activities). These requirements allow the understanding of how financial activities will help in meeting the Paris agreement objectives and SDGs goals.

Physical risks

As mentioned above, physical risks are related to natural catastrophes, extreme weather events and the economic events caused by them. These situations have increased during the last few decades as global warming could intensify the consequences on a global scale. These disasters destroy infrastructure and divert resources toward reconstruction and replacement. These risks affect also human capital, through deterioration in health and living conditions (Figure 2), which could affect future expectations and increase uncertainty and affect growth prospects.

If countries and firms do not take steps to reduce the effects of climate change, physical risks will increase in the future as extreme events could see a non-linear increase and become more correlated with each other over time. The consequences may have an adverse impact on credit and market risks, while influencing financial assets' value, amplifying risks for financial stability. However, the impact of physical

Figure 2: Natural Disasters in Western Asia



Source: EM-DAT

risk on banks' balance sheet could not be estimated easily as they are subject to sources of uncertainty, affecting macroeconomic scenarios and the subsequent changes in assets value. Physical risks are different according to sector and geographical areas, market and credit risks may also be affected by these differences.

Transition risks

Transitional risks, as above, are mainly related with the process of adjusting to a low carbon economy to reduce GHG emissions to help bring down the temperature around pre-industrial levels. This implies significant structural changes in policies, investments, and high-energy intensity economic sectors. These changes may affect banks' portfolios due to financial relocation of resources toward greener sectors, as well as their investment strategies. A sudden shift toward these policies may have destabilizing effects on the financial system as it could increase credit risks, lower collateral value, and affect banks' sentiment to lend to brown sectors, forcing banks to face higher risks. Transition scenarios are not able to capture the changes in technology preferences, which could also result in a policy gap that could increase vulnerability to transition risks. These risks also affect the resilience of an institution's business model.

Consequently, climate related risks (physical and transition) are one of the drivers of traditional financial risks (credit, operational, market, and liquidity risks). The impact of these risks depends mainly on the level and timing of measures taken for a smoother transition. Potential losses stemming from climate-related and environmental risks depend especially on the future adoption of climate-related and environmental policies, technological developments and changes in consumer preferences and market sentiment. There is also evidence of an interconnection between climate-related change and environmental risks, resulting in combined effects capable of potentially generating even greater impacts. Furthermore, it should be noted that climate change might have a longer time horizon compared to loan/ investment. Therefore, adopting a forward-looking approach enables institutions and policy makers to have faster and more holistic response, contributing to the gradual pace of transition to a low carbon economy.

ESG principles in the financial sector

The financial sector plays a significant role in the transition of the world economy toward sustainability, though ESG requirements are becoming a fundamental challenge for banks, as they require changes to business models and higher operational costs due to regulations. Therefore, financial institutions should assess the implications of ESG factors on their businesses and core operations (e.g., investment processes, product governance, risk controls, etc.) to make sure that ESG requirements are in line with the available regulatory guidelines.

Banks started to introduce ESG principles within their operational and governance frameworks to achieve sustainability. Innovations in new business models that takes into account the environmental footprint and social responsibilities are becoming more active in their new business models. These changes have made it more important for regulators to include ESG principles within their regulatory frameworks for the financial sector. However, the lack of a common definition for ESG framework is hindering the way for a global acceptance of ESG principles and have a full charge towards sustainable finance.

Table 2: ESG risk drivers transmission channels and financial risks

ESG risks	Transmission channel	Financial risks
Environmental Physical Transition	Falling profitability Lower valuations Declining household wealth Low asset performance Higher cost of compliance Legal and litigation costs	Credit risk Market risk Operational risk Liquidity risks Reputational risk
Social Change in social policies Change in sentiment		
Governance Inadequate management Non-compliance		

Source: (EBA, 2021), P.34

Linking the ESG principles with global initiatives such as the SDGs and the 2015 Paris agreement is a major step to strengthen the global response to climate change. Financial regulations role is viewed as pivotal to manage the transmission toward an environmentally sustainable economy, which could require developing new paradigms and the green guidelines in lending activity to reach a better selection of economic activities to finance (Kern, 2019). More importantly, regulations could help banks in guiding banks to allocate credit and investments for sustainable activities while protecting the economy against financial risks. Thus, having a common definition of ESG factors is not simple or easy also because there are a number of guidelines and rules formulated by various institutions (see appendix [1](#), [3](#)). The roots of pushing financial institutions to have a wider vision for non-financial and economic factors, could be found in the Equator principles (2003), which induced banks to consider environmental and social risks in their lending activities. Most recently, UNEP FI, sought to provide a multi-dimensional view of ESG factors with the aim of having a uniform discipline about sustainable finance and green financial assets. Based on these initial definitions, financial institutions must face new risks deriving from these factors that should be considered in financial management and the financial markets.

However, banks must also understand the negative impact of ESG outcomes related to their lending and investment activities, which may cause reputational damage and a direct financial impact. These incidents include, rising non-performing loans due to the client inability to comply

with the loan agreement, higher litigation risks due to inappropriate disclosure of ESG risks, increasing costs of capital on poor risk management, and the loss of long-term deposits if depositors shift their funds away due to concerns about the bank's ESG impacts. These risks may be less prevalent in emerging markets and our region, which could be related to the lack of comprehensive and robust regulations, and lower awareness and capacity within banks, and in turn from their clients, regarding ESG issues. Nevertheless, ESG-related business opportunities are more numerous given the need for investment activity due to the greater exposure of emerging markets to population growth, water scarcity and urbanization.

Supervisory role

Policy makers argued that climate change is out of the scope of the central bank and should be dealt with through governmental policies and initiatives while others iterated the impact of climate change on the financial system, which may have a lasting impact on prices and financial stability. Climate related impact on financial stability can be seen through the physical effects of pollution, shifting weather patterns, extreme weather events, disruption of manufacturing activities and supply chains. Financial institutions that extend credit to businesses vulnerable to natural disasters could experience higher levels of claims and losses in those portfolios if they fail to account for these risks. On the other hand, transition risks could also have an impact on the financial system through changes in policies, which could increase credit risks, as financial institutions will potentially see higher levels of claims, as well as lower collateral values and greater non-performing loans and losses arising from such exposure. Therefore, central banks should consider the impact of climate risks on the institutions they supervise and the financial system, which force central banks to develop their macro-prudential tools to address climate risks.

In addition, it has been recognized that climate risks have a direct impact on price stability through the direct impact of these risks on the prices of food energy prices and the indirect impact on the extraction of natural resources and the brown industries (Volz, 2017). Furthermore, climate risks could lead to supply side shocks, which may result in output fluctuations and inflation, forcing the central bank to choose between stabilizing output fluctuations or control inflation (Coeure, 2018). Moreover, policy changes that include introducing carbon taxes or permit trading system could affect monetary policy regimes (McKibbin, et al., 2017). Moreover, (Dikau & Volz, 2021) reviewed the central bank mandate for 135 countries; they found that around 12% explicitly mentions sustainability goals while around 40% are required to support their government's policy priorities, which usually include sustainability goals such as the Paris Agreement and the SDGs. They suggested that central banks should incorporate climate related physical and transition risks into their policy frameworks to safeguard macro-financial stability. Based on the above, climate

risks are considered a material risk to financial stability and central banks should update their mandates to include it as an area of supervisory focus.

In Basel III, there is no explicit mention about lending to brown lending. For example, extending loans to low-carbon intensity ventures may include longer tenors, greater risks, and lower liquidity. Therefore, central banks should close this gap through introducing penalizations for brown lending, or incentives for banks to support green financing, through capital requirements calculations, or introducing green capital buffers. However, this approach may also include more related risks such as incentivizing banks to take greater credit risks within low carbon sectors. Furthermore, regulators could use stress testing, which could help in measuring the potential impact of climate change on financial stability. In the UK, the Bank of England and its Prudential Regulation Authority have already announced the inclusion of climate stress testing as part of their annual Concurrent Stress Testing process. Although climate stress tests involve complex challenges concerning how to model climate-related scenarios and assess the impact of related second-order effects, they provide critical information for both supervisors and supervisees. Mandatory climate stress testing will require banks and financial institutions to carefully consider climate risks.

ESG risks and factors in supervision

Banking core business includes providing credit to various activities, which is crucial in supporting economic growth making it vital to banking regulators to ensure that banks can withstand medium-term pressures, so as to protect the system as a whole. Environmental sustainability risks (physical, transition and liability risks) could be systemic, which should propel regulators in enacting prudent regulations and supervision to maintain financial stability. Accordingly, banks are incorporating these factors into their risk management models and governance frameworks, relocating their available funds away from unsustainable activities. These developments have helped banks in enhancing their abilities to adapt with the consequences of environmental changes while mitigating their impact on their stability.

The development of ESG guidelines would help banks in incorporating environmental, social and governance risks into their operations and credit assessment. However, the development of these frameworks could increase the volatility in asset prices while restricting the availability of credit to economic sectors that are not sustainable. These risks may increase corporate credit risks, especially for companies that depend on carbon emissions such as manufacturing, which could default due to a change in consumer preferences or policy changes by supervisory authorities (PRA, 2018). Moreover, risks could also stem from retail banking, especially through secured real estate loans. These properties should be insured against environmental damage, making the

borrower unable/ unwilling to pay if their collateral is heavily damaged. Furthermore, market risks could increase as when policies are in transition to accommodate these new directions, which may also include legal risks, could affect banks' treasury portfolios. Finally, sovereign risks could increase in countries that suffer significant climate events through damaging particular concentrations of industry, which in turn, may have an impact on the country credit ratings (BEI, UNEP, 2014). Engaging these risks have proved to be helpful for banks as they enhanced shareholder value, diversifying away from unsustainable activities while developing more sustainable investment products. However, climate risks have not yet fully materialized, and they will increase with global temperatures and rising sea levels, and growing unpredictability in extreme weather conditions.

Moreover, banking regulators could play a key role in ensuring the ability of the banking sector in allocating capital efficiently through providing liquidity to the economy while meeting the environmental sustainability challenges through a combination of regulatory frameworks and market innovation suitable for domestic circumstances. Enhanced disclosure of bank exposures to sustainability risks could help in making frequent assessments of potential risks while promoting a smooth transition to a low carbon-based economy.

ESG and Basel III

The main aim of Basel accords is to ensure the stability of the banking system through managing various types of risk across the banking industry on a global level. Basel requirements have tried to ensure that credit institutions maintain sufficient liquidity and strong capital positions, especially during periods of financial and economic distress while fostering transparency by including disclosure requirements. However, the repercussions of the Global Financial Crisis (GFC) during 2007-09 have resulted in introducing Basel III to remedy the shortcomings identified during that period with the aim of creating a resilient banking system while mitigating systemic risks to prevent future collapses of the financial sector.

The main requirements for Basel III include increasing the level of Tier I regulatory capital to 4.5% from 2% including a 2.5% conservation buffer. Moreover, it included a more grounded definition for Tier I to add common share as well as retained earnings, and up to an additional 2.5% countercyclical capital ratio that will be adjusted across the economic cycle. Furthermore, Basel III include some liquidity requirements (LCR, NSFR) which include an overall leverage ratio with a capital charge of 2.5% for Systemically Important Financial Institutions (SIFIs) (BCBS, 2013). It also asks banks to broaden their risk models while under going through frequent stress tests, including separate assessments of bank capital and governance, which could be used to forecast the bank's exposure to systemic macro-prudential risks. While the main focus of Basel risks was revolving around credit risk, market risk and operational risk, new types of risk are

emerging due to ongoing climate change. ESG risks may negatively affect financial institutions' assets in various ways, including physical and transition risks. As ESG risks become a new risk driver throughout the banking industry, it can be expected that there will be a supervisory response as to how to incorporate such ESG risks into the risk-based capital framework.

Table 3: Overview of Basel III framework three pillars

Basel III main pillars		
Pillar 1	Pillar 2	Pillar 3
Minimum capital requirements	Supervisory review process	Market discipline
Additional capital requirements:	Supervision:	Disclosure:
<ul style="list-style-type: none"> - Liquidity Coverage Ratio (LCR) - Net Stable Funding Ratio (NSFR) - OTC derivatives - Quality and level of capital - Countercyclical buffers - Leverage ratio - Capital conservation buffers - Loss absorption 	<ul style="list-style-type: none"> - Corporate governance - Managing risk concentrations - Alignment of LT incentives - Sound compensation practices - Supervisory colleges - ICAAP - Firm wide risk management - Valuation practices, stress tests - Supervisory review evaluation process 	<ul style="list-style-type: none"> - Risk management (market, credit, operations). - Regulatory capital components - Detailed reconciliation of capital - Regulatory capital ratios - Securitization exposures

Source: (BEI, UNEP, 2014)

Recently, the Basel Committee on Banking Supervision (BCBS) issued principles for the effective management and supervision of climate-related financial risks aiming at promoting a principles-based approach to improving both banks' risk management and supervisors' practices related to climate-related financial risks. Principles 1-12 provide banks with guidance on effective management of climate-related financial risks, while principles 13-18 provide guidance for prudential supervisors. Using climate-related risk scenario analysis to identify relevant risk factors, size portfolio exposures, identify data gaps and inform the adequacy of risk management approaches (BCBS, 2022). Stress tests that incorporate climate change could be used to address financial firm risks, financial system risks, macroeconomic risks, and, in some cases, a central bank's own balance sheet risks (NGFS, 2020). Though the integration of risks into stress tests should have institutional constraints as well as the scope for financial stability regulatory authorities and design of existing stress testing regimes, which is critical to ensure that climate stress testing is feasible in the near-term and while being systematically integrated into financial risk measurement and management practices. However, stress testing can support the measurement and management of both micro-prudential and macro-prudential climate-related financial risks,

though the benefits of stress testing with regards to climate change and financial stability are still largely unrealized (DeMenno, 2022).

Moreover, a recent study in the EU have clearly shown that the integration of ESG objectives into banks' businesses, strategies, products, management, and supervision is still in early stages as this effort faces a multitude of challenges for further advancement of green financing. Key challenges include the scarcity of data, lack of common definitions and standards, limited internal capabilities, and the lack of innovation within the ESG space given the low profitability of ESG offerings, and insufficient alignment at executive level. In addition, banks have not developed a clear vision about how ESG factors feed into various financial risk types and whether traditional risk types can fully capture risks from an environmental and social materiality perspective. On the supervisory level, internal capabilities to support a comprehensive approach to prudential supervision of ESG are not fully developed yet. This was mainly related to the lack of common definition of ESG factors, which reflected on ESG risk assessment that remain focused on the qualitative elements within the bank, given the lack of uniformity in quantitative indicators (BlackRock , 2021).

Main international ESG frameworks

Many international institutions have sought to set a certain criterion for ESG main principles and understanding as it has a direct impact on firms' reporting. However, most of these frameworks did not provide a detailed methodology for collecting information and data. Pressures are increasing on companies, from international investors, on various sectors to communicate their ESG commitments and standards through reporting. These investors are introducing their own standards, for example, BlackRock and Vanguard request disclosures in line with Sustainability Accounting Standards Board (SASB) and Task Force on Climate-related Financial Disclosures (TCFD) standards. The standards of ESG are specific in their focus shows how to collect the data and reporting needs, which makes frameworks more consistent and reliable for disclosures.

The ESG frameworks could be grouped into three main categories: voluntary disclosure frameworks, guidance frameworks, and third-party aggregators. Voluntary disclosure frameworks depend mainly on firms actively reporting their sustainability related practices, policies, data, and criteria. Most popular frameworks include Carbon Disclosure Project (CDP), Global Real Estate Industry Benchmark (GRESB), and Dow Jones Sustainability Indices (DJSI). The CDP focuses mainly on the organization carbon footprints. It provides a summary of the company's disclosure and environmental performance that shows investors and stakeholders that they are managing their environmental impact on climate change, forests and water security. The scoring ranges from D- to A, depending on the level of detail and comprehensiveness in a response, as well as the company's awareness of environmental issues, its management methods and progress. The CDP is

fully aligned with the TCFD main environmental standards. The GRESB and DJSI frameworks are real estate related for ESG disclosures on data, assets, and portfolios.

Guidance related frameworks are mainly focused on ESG reporting. These include SASB, GRI, TCFD, CDSB, and IIRC. Most of these frameworks have a voluntary disclosure theme, though they have different areas that they target. For example, SASB aims at providing relevant information for investors so that they could compare the performance related to sustainability issues, while the GRI covers the reporting of inclusiveness of stakeholders, sustainability, and integrity. GRI standards are divided into universal, sector, and topic-specific standards that can be applied to companies depending on their industry and impact. The TCFD provides voluntary disclosures focused on target-related risks to financial systems. The TCFD was established in the wake of 2015's COP21, with the aim of developing recommendations for more effective climate-related disclosures. TCFD recommendations are based on four thematic areas, which represent the core operating areas of a business: Governance, strategy, risk management, and metrics and targets. Finally, the IIRC, which merged with SASB in 2021 aims at creating a baseline for corporate sustainability disclosure that can be used around the world (see [appendix 3](#)).

GRI standards

The GRI is an independent organization that helps businesses to recognize their impact on their sustainability issues. It also represents the best practices for public reporting, their negative and positive contributions to sustainable developments. These standards are divided into three main segments, the universal standards, sectoral standards, and topic standards. The revised Universal Standards represent a significant update since GRI transitioned from providing guidance to setting standards in 2016. It could help organizations to comply with the growing regulatory disclosure needs, through specifying the requirements that the organization must comply with, uniform disclosures, and guidance to determine the most significant impact of these institutions on the environment, the economy, human rights, etc. The sector and topic standards contain disclosures about the related impact of the institutions within each sector and the popular topics and how they are managing them. The sectoral standards for the banking sector (financial services) are being updated and could be published by late 2023.

The main characteristics of GRI standards include the involvement of different stakeholders, making GRI reporting very comprehensive, especially in GRI 3 where the firm would report on materiality topics that focus on the relevance of sustainability issues impact on operations and stakeholders. In addition, the reporting process includes several layers of assessments for the stakeholders' expectations, depending on the scope of the sustainability report, and materiality assessment, which could help in determining main sustainability topics. General disclosures contain disclosures for organizations to provide information about their reporting practices;

activities and workers; governance; strategy, policies, and practices; and stakeholder engagement, which gives more insight into the profile and scale of organizations and provides a context for understanding their impacts as in the below table:

Table 4: GRI main disclosures

Organizational profile	
GRI standards	Requirements
General disclosures 2016	Name of the organization,
	Activities, brands, products, and services
	Location of headquarters
	Location of operations
	Ownership and legal form
	Markets served
	Scale of the organization
	Information on employees and other workers
	Supply chain
	Significant changes to the organization and its Supply Chain
	Precautionary principle or approach
	External initiatives
	Membership in associations
Strategy	
General disclosures 2016	Statement from senior decision-maker
Ethics and integrity	
General disclosures 2016	Values, Principles, standards, and norms of behavior
Governance	
General disclosures 2016	Governance structure
Stakeholder engagement	
General disclosures 2016	List of stakeholder groups
	Collective bargaining agreements
	Basis for identifying and selecting stakeholders with whom to engage.
	Approach to stakeholder engagement
	Key topics and concerns raised
Reporting practice	
General disclosures 2016	Entities included in the consolidated financial statements
	Defining report content and topic boundaries
	List of material topics
	Restatements of information
	Changes in reporting
	Reporting period
	Date of most recent report
	Reporting cycle
	Contact point for questions regarding the report
	Claims of reporting in accordance with the GRI Standards
	GRI content index
Management Approach 2016	Explanation of the material topic and its boundary

Source: GRI standards ([Link](#))

Based on the GRI general and topic disclosures, sustainability reports could be used to benchmark organizational performance in relations to existing laws, business norms, codes, and performance standards. It would also help in demonstrating the voluntary initiatives of the firm and its commitment to sustainable development in taking ESG factors into consideration during operations while embedding it in its long-term strategy. Furthermore, it would help in comparing the firm's performance to its peers in the sector as well as in comparing its performance over time.

SASB standards

These standards identify the subset of ESG issues most relevant to financial performance in each of 77 industries. They are designed to help companies disclose financially material sustainability information to investors. As of August 2022, the International Sustainability Standards Board (ISSB) of the IFRS Foundation assumed responsibility for the SASB Standards. These standards are designed to identify a minimum set of sustainability issues most likely to impact the operating performance or financial condition of the typical company in an industry, regardless of location.

Table 5: Sustainability Disclosure Topics & Accounting Metrics

Topic	Accounting metric	Category	Unit
Data security	No. of data breaches Percent of personally identifiable information number of account holders affected	Quantitative	Number Percent
	Description of identifying security risks	Discussion & analysis	N/A
Financial inclusion & capacity building	No. & amount of loans outstanding to promote small business and community development	Quantitative	Number Reporting Currency
	No. & amount of past due and nonaccrual loans qualified to programs designed to promote small business and community development	Quantitative	Number Reporting Currency
	Number of no-cost retail checking accounts provided to unbanked or underbanked customers	Quantitative	Number
	Number of participants in financial literacy initiatives for unbanked, underbanked, or underserved customers	Quantitative	Number
Incorporation of ESG factors in credit analysis	Commercial and industrial credit exposure, by industry	Quantitative	Reporting Currency
	Description of approach to incorporation of ESG factors in credit analysis	Discussion & analysis	N/A
Business Ethics	Monetary losses as a result of legal proceedings associated with fraud, insider trading, anti-trust, anti-competitive behavior, market manipulation, malpractice, or other related financial industry laws or regulations	Quantitative	Reporting Currency
	Description of whistleblower policies and procedures	Discussion & analysis	N/A
Systemic Risk Management	Global Systemically Important Bank (G-SIB) score, by category	Quantitative	Basis points
	Description of approach to incorporation of results of mandatory and voluntary stress tests into capital adequacy planning, long-term corporate strategy, and other business activities	Discussion & analysis	N/A

Source: SASB standards, financial sector, commercial banks, 2023

SASB standards are designed to enable communications on corporate performance on industry-level sustainability issues in a cost-effective and decision-useful manner using existing disclosure and reporting mechanisms. They mainly include disclosure topics, accounting metrics, technical protocols, and activity metrics, which should be used for communicating sustainability issues to investors and their impact on corporate liability in the long term. However, the International Financial Reporting Standards Foundation (IFRS) announced that by June 2022 the formation of a new board for international sustainability standards board (ISSB), which consolidates the Climate Disclosure Standards Board (CDSB) and the Value Reporting Foundation (VRF), which have the SASB standards under its umbrella. The ISSB will develop IFRS Sustainability Disclosure Standards to make a global disclosure baseline available, which would help in meeting the needs of providing comparable high-quality data for investors. The ISSB has four main objectives; (i) to develop standards for a global baseline of sustainability disclosures; (ii) to meet the information needs of investors; (iii) to enable companies to provide comprehensive sustainability information to global capital markets; and (iv) to facilitate interoperability with disclosures that are jurisdiction-specific and/or aimed at broader stakeholder groups. These announcements point to the continuous evolution of ESG disclosures, which points to the need of frequent updates to the regulatory frameworks, sustainability reports and guides for disclosures.

TCFD recommendations

The Financial Stability Board (FSB), which is an international body that monitors and makes recommendations about the global financial system, created an industry-led task force (the task force on climate-related financial disclosures) to develop voluntary, consistent climate related financial disclosures that would be useful to investors, lenders, and insurance underwriters in understanding material risks. The Task Force developed four widely adoptable recommendations on climate related financial disclosures that are applicable to organizations across sectors, help in forward looking information on financial impacts and focus on risks and opportunities related to low carbon transition (table 6).

The recommendations are focused around four main areas, governance, strategy, risk management, metrics, and targets, with disclosures supporting investors understanding about the impact of climate related risks on the financial risks and performance and the opportunities. Supplemental guides were drafted by the TCFD for the financial sector, which it organized into four major industries banks (lending), insurance companies (underwriting), asset managers (asset management), and foundations (investing), to illustrate the potential climate-related financial impacts in those sectors. The task force also recommends having clear emission reduction targets to be more aligned with the national targets, have a clear target in reaching net zero emissions while taking into consideration different scenarios, including 2° Celsius or lower scenario. These

scenarios show the climate risks potential impact and financial implications, which could help in supporting informative investment and capital allocation decisions.

Table 6: TCFD disclosure recommendations

Governance	Strategy	Risk management	Metrics & targets
Describe the board's oversight of climate-related risks and opportunities.	Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	Describe the processes for identifying and assessing climate-related risks.	Disclose the metrics used to assess climate-related risks and opportunities in line with its strategy and risk management process.
Describe management's role in assessing and managing climate-related risks and opportunities.	Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	Describe the processes for managing climate-related risks.	Disclose Scope 1, 2, 3 for GHG emissions, and the related risks.
-----	Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	Describe the targets used to manage climate-related risks and opportunities and performance against targets.

Source: (TCFD, October 2021)

Glasgow Financial Alliance for Net Zero (GFANZ)

The GFANZ is a group of global financial institutions that aims at decarbonizing the global economy by 2050. This group was established in April 2021 in collaboration with the UNFCCC and worked on developing tools and methodologies needed to turn financial institutions' net-zero commitments into action, drawing on and amplifying the enormously valuable work of the many organizations that have driven climate action for years. The group is focused on the vital role of financial institutions in supporting the global transition to net zero. Moreover, all members of GFANZ have made solid commitment to net zero transition by 2050 at the latest to support the global ambition to limit warming to 1.5 degrees C. They have also mid targets for 2025-35 reflecting maximum effort toward a fair share of the 50% global reduction in GHG emissions needed by 2030. Since launching in April 2021 with 160 members, Alliance membership grew to 450 by COP 26 and has now grown to over 550 members.

Third party aggregators

Third-party aggregators refer to frameworks that assess an organization's performance based on aggregated and publicly available data. Data is collected from specialized companies, publications, company websites, annual reports, and sustainability or CSR reports. Most influential are Bloomberg terminal ESG analysis, MSCI, Sustainalytics, and rating agencies such as Moody's. The methodologies adopted by these providers are intrinsically different, but market investors use the final ratings for the same purpose. In this regard, the analysis of the methodological approaches will be beneficial to understand which factors are driving the final ESG ratings.

Looking at table 7, each agency provides a different rating methodology with various data points and weightings for different topics. Moreover, some provide relative scores (MSCI), while others provide an absolute score (Refinitiv). Therefore, comparing ratings and methodologies confirms the lack of convergence between these ratings given that their aims and scaling are different. For example, Sustainalytics provide a risk rating (numeric) after taking into account different industry related issues, while the MSCI rate the firms based on their performance related to the industry, which makes these ratings comparable against different firms within the same sector. In addition, Refinitiv provides a numeric score with a scale given to specific industry issues, which makes it more suitable for comparison across sectors. However, these aggregators take into account all of the pillars through assessing different metrics, which are the result of aggregation of sub-indicators which measures the multiple aspects of how they use and manage their resources. The MSCI and Sustainalytics usually target investors' need to identify ESG risks and opportunities to help in constructing their portfolios and management processes. The rising influence of ESG rating providers and the difficulty in reporting especially with related to the environmental factors. Data users called for the need for a more standardized reporting guidelines, which was dealt with by the exchanges, which published several guidelines, which could help companies in reporting their ESG while being in line with the existing guidelines and principles.

Table 7: ESG criteria for main index providers

Pillar	Thompson Reuters	MSCI	Bloomberg	Sustainalytics
Environmental	<ul style="list-style-type: none"> • Resource use • Emissions • Innovation 	<ul style="list-style-type: none"> • Climate change • Natural resources • Pollution and waste • Environmental opportunities 	<ul style="list-style-type: none"> • Carbon emissions • Climate change effects • Pollution • Waste disposal • Renewable energy • Resource depletion 	<ul style="list-style-type: none"> • Carbon related disclosures
Social	<ul style="list-style-type: none"> • Workforce • Human rights • Community • Product responsibility 	<ul style="list-style-type: none"> • Human capital • Product liability • Stakeholders' opposition • Social opportunities 	<ul style="list-style-type: none"> • Supply chains • Discrimination • Political contributions • Diversity • Human rights • Community relations 	<ul style="list-style-type: none"> • Business ethics • Human capital • Human rights (supply chain)
Governance	<ul style="list-style-type: none"> • Management • Shareholders • CSR strategy 	<ul style="list-style-type: none"> • Corporate governance • Corporate behavior 	<ul style="list-style-type: none"> • Cumulative voting • Executive compensation • Shareholders' rights • Takeover defense • Staggered boards • Independent directors 	<ul style="list-style-type: none"> • Corporate governance • Data privacy and security • Product governance
Key metrics & sub-metrics	186	34	Less than 120	58

Source: (Boffo & Patalano, 2020), (Eccles & Strohle, 2018)

While progress is being made, exchanges incorporate a range of reporting frameworks that have different purposes with respect to financial materiality and ethical standards, pointing to the different standards and formats. ESG ratings are still important for investors to make informed capital allocation decisions and other stakeholders to assess the non-financial performance of a firm. The increasing number of rating agencies and methodologies have created divergences, even among the top raters within the industry; however, academic and regulatory efforts could help in improving data quality, transparency and reporting.

The recent pushback against ESG

The implementation of ESG principles has faced some pushback in recent years as it became a political flashpoint with fear increasing among corporate leaders around facing opposition from the government despite focusing on ESG impact on shareholders' value. Moreover, some analysts think that these policies may not be compatible with banks/ firms' main goals that are related to having efficient operations while maximizing profits as they imply taking additional investment risk to promote social and environmental policy goals. Moreover, the success of ESG initiatives has varied widely, prompting criticism and skepticism on multiple fronts. Opposers of ESG policies often discuss that ESG could hinder profitability and job creation, while ESG analytics materiality topics focus mainly on the environment and society instead of focusing on the impact of ESG factors on firm valuation. Moreover, ESG metrics and reporting lack standardization while some companies engage in "greenwashing", which include exaggerating their ESG commitments for marketing purposes, making it difficult to compare ESG performance among different companies. In addition, some companies focus on superficial short-term changes rather than addressing core systemic issues. Furthermore, critics point to the ESG inability to address climate change and its repercussions without having necessary regulations and government intervention, due to the loss of confidence in the government abilities. ESG investing ignores the role of government in solving problems and inserts the corporation as the primary source of solutions.

These critiques focus mainly on the environmental and social pillars of the ESG while the governance pillar receives nearly no criticism as its relationship with the company's operations is well defined and have a tangible impact on the company performance. On the other hand, research results have yielded mixed results. For example, (Azmi, et al., 2021) found that low levels of ESG activity have a positive impact on the bank value with diminishing return to scale. They also found a positive impact on cash flows and efficiency and a negative effect on the cost of equity. Moreover, (Ersoy, et al., 2022) found an inverted U-shape relationship between the social pillar and the market value, a U-shape relationship with the environmental pillar, while (Galletta, et al., 2023) found an inverse relationship between ESG scores and operational risks.

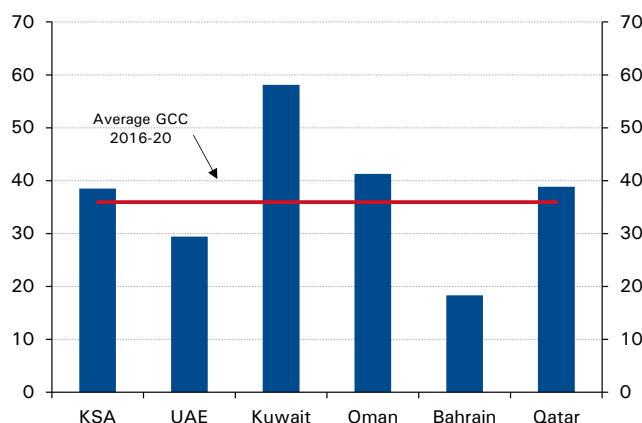
However, supporters of ESG policies see criticism as a necessary step that helps in refining strategies while reconciling controversial topics including climate change and energy transition

with profitability and shareholder's value. Many steps and efforts to standardize the ESG metrics are underway such as the SASB, the TCFD, and the GRI are working on creating consistent frameworks for measuring and reporting ESG performance. Moreover, regulators are encouraging companies to take a long-term focus while preventing greenwashing and ensure companies are held accountable for their ESG commitments through helping companies in seeking opportunities where ESG initiatives can drive innovation, efficiency, and long-term value creation, rather than viewing them as a cost. The outlook for ESG policies adoption remains positive though efforts are being made to address the legitimate concerns of ESG critics to ensure its long-term viability. By standardizing metrics, implementing regulatory oversight, promoting long-term thinking, engaging with stakeholders, and finding the right balance between profit and purpose, ESG can evolve into a powerful tool for sustainable and ethical business practices. It is imperative that ESG remains a force for positive change in the corporate world, contributing to a more sustainable and responsible global economy.

Diversification plans, oil dependence and carbon neutrality

Economic diversification has gained more traction following the oil price slump in 2014. The momentum was renewed following the pandemic induced global economic slowdown, which pushed Brent oil prices to reach \$23/bbl in April 2020. Economic visions in the GCC date back to late 1990s, where Oman was the first to release “Oman Vision 2020” in 1995, followed by Bahrain (The Economic Vision 2030) and Qatar (Qatar National Vision 2030) in 2008, Kuwait (Kuwait Vision 2035) and the UAE (UAE Vision 2021) in 2010, and Saudi Arabia with its Vision 2030 strategy issued in 2016. Several of these documents have since been updated or released in new forms including Oman and Kuwait. All of these documents feature similar medium- to long-term development plans that seek to keep up with the rapid advancement of globalization and the need for better equipped competitive national economies.

Figure 3: Oil dependence in GCC countries



In the first wave of Vision documents, the emphasis was on providing a general sense of direction alongside trying to assure the national populations that the government was indeed thinking ahead about the need for comprehensive broad-based economic reform program. Given that most these plans, except for the original Omani one from 1995, were developed in a high oil-price environment, the vision documents outlined a broad strategy of where national economies should be headed but there existed a little sense of urgency in seeing many of these plans implemented in the way they were laid out. However, the increase in oil price volatility has placed more strains on the GCC countries fiscal positions, and stressed the necessity of having a stable non-oil revenue stream to finance the government operations and development plans as oil and gas reserves will eventually run out. Moreover, oil revenues could decline in the face of declining world demand starting 2040 of the plans to transition the global economy to renewal energy sources and the continued improvements in the efficiency and storage technology. Before the pandemic, the International Monetary Fund (IMF) estimated that, unless GCC countries undertake substantial fiscal and economic reforms, they would deplete their conserved wealth by 2034 (Mirzoev, et al., 2020). The volatility in hydrocarbon revenues and the projected depletion in its reserves has motivated the GCC countries to develop other productive sectors in an attempt to diversify their economies and revenue streams away from oil.

Table 8: GCC countries emissions targets

Country	Net zero targets (National Agendas)	NDC Target (UNFCCC)
Bahrain	Raise renewable energy share to 10% of electricity generation by 2035 (6% as of 2019) Reduce carbon emissions by 30% by 2035 Reach net zero carbon commissions by 2060	Prioritization of adaptation action over mitigation.
Kuwait	To reach carbon neutrality all sectors Cut GHG emissions by 7.4% by 2035 Reach carbon neutrality in the oil and gas sectors by 2050 Reach carbon neutrality in other industries by 2060	Reduction of 7.4% below BAU (maximal ambition) unconditionally in 2035
Oman	Reduce emissions and reach net-zero by 2050 Reach carbon neutrality by 2050 Target \$140 billion in investment in the green hydrogen industry by 2030 Produce 1 million tons of green hydrogen by 2030	Energy sector reduction of -7% below high BAU by 2030
Qatar	Reduce greenhouse gases by 25% by 2030 Reduce carbon intensity of liquefied natural gas facilities by 25% by 2030	25% reduction below an unspecified BAU level by 2030.
Saudi Arabia	Reduce carbon emissions by 278 million tons per year by 2030 Cut global methane emissions by 30% by 2030	Reductions in actions, projects and plans of 278 MtCO ₂ eq the 2030 reductions previously pledged. Announced only: net-

	Reduce 200 million tons of carbon emissions by 2030 Achieve carbon neutrality by 2060	zero emissions by 2060 (unclear which sectors and whether CO ₂ or GHG).
UAE	Achieve carbon neutrality by 2050. Reduction of 31% in GHG emissions, measured in CO ₂ eq, relative to BAU in 2030.	A 31% reduction below BAU by 2030 (raising the target from 23.5% to 31% by 2030 relative to BAU)

Source: Country's visions and government websites, UNFCCC

However, the private sector within these countries is still reliant on the government infrastructure and mega projects and consumption, which is financed through their oil receipts. Therefore, several strategies and visions have been adopted during the last decade that aims at developing the industrial and services sectors while not being dependent on oil and gas revenues, changing legislative frameworks while privatizing parts of these sectors, developing new revenue streams for the budget through introducing the VAT and excise taxes, and increasing FDI. While we could see some success in these initiatives, the hydrocarbon sector still acquires between 30-40% of real GDP, on average, except for Bahrain and Kuwait at around 15% and 50%, respectively.

Most notably, some of the updated versions of these visions included climate related targets that are aligned with the Paris agreement 2015 target in achieving emissions neutrality by 2050-60. In addition, some of the GCC visions include achieving carbon neutrality goal (net zero emissions) by 2050-2060, raising the share of renewable energy in their fuel mix, investing in green hydrogen industries, and reducing emissions. Moreover, some pointed to sustainable economy, financing and the transition toward a low carbon circular economy. For example, the UAE 2050 strategy pointed to financing clean energy projects. Furthermore, other complementary initiatives were launched in the UAE such as the circular economy initiative whose, main aim is to achieve sustainable governance and the ideal use of natural resources, by adopting consumption and production methods that ensure the quality of life for current and future generations as shown in the table 8.

Kuwait National Adaptation plan (2019-30)

As part of its vision to preserve its natural resources and mitigate the impact of human activities on the surrounding nature and maritime life, Kuwait, Environment Public Authority (EPA) and in collaboration with non-governmental institutions, launched a nationwide sectoral plan with guidelines of the national actions needed to adapt to climate change, prepared under the UNFCCC directives, programs, and projects. The main aim of this plan is to provide guidance for communities that are under threat of climate change while reducing the vulnerabilities of the social and biological systems through transforming it into policies, programs, and activities within relevant sectors. The strategic actions within the plan will also focus on improving the resilience of fisheries, the marine and water sectors to climate change, mitigating the impact of sea level rise

risks on coastal areas, and enhance the capacity of the health sector for increased health risks due to climate change (Table 9).

Moreover, the implementation of the Kuwait National Adaptation Plan (KNAP) will not be the responsibility of the Environment Public Authority (EPA) only, as it would require the collaboration with different government and non-governmental institutions, especially with relations to actions related to mitigating the impact of climate change on coastal areas and the health sector. The advancement of the KNAP implementation will be supervised by the EPA while the related governmental institution will help in the adoption of the actions and activities through allocating the needed resources and financing to mainstream the integration of the KNAP into these institutions mandate. Therefore, the EPA is expected to maintain the coordination and oversight role in various activities and initiatives that aim to reach the desired goal to reduce the negative impacts of climate change and adopt with it.

Table 9: Main actions and parts of KNAP (2019-2030)

Fisheries & maritime	Water sector	Coastal areas	Health sector
Adapt efficient irrigation methods to reduce water losses and conserve water in a more sustainable way, like bio-diverse planting, hydro-zoning, and PO irrigation	Utilize technologies for water conservation and consumption	Develop a crisis plan and management to confront climate change effects	Increase awareness of climate changes effects and impacts on general health
Develop monitoring capacity to prevent overfishing while designing new marine protected areas	Develop risk assessment on water resources depletion in the face of climate change	Provide financial aid for preventative and protective actions for coastal damage	Develop warning systems for extreme weather conditions and alerts communication strategy
Enhance awareness by involving the local community in the protection and sustainable consumption of marine life and the impact of climate change on it	Involve more sustainable methods of water treatment	Establish a specialized center for coastal management and organize information and tools for climate risk modeling	Increase drought-proof vegetation to reduce dust fallout from dust storms
Provide financial and technical support to institutions and sectors responsible for marine life protection and fisheries		Protect coastlines from SLR by constructing protection barriers	

Source: Kuwait National Adaptation plan (2019-30), ([Link](#))

The state of ESG implementation in GCC countries

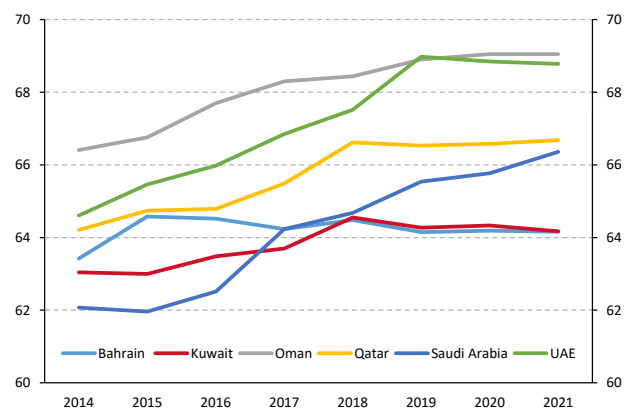
The GCC countries share the same environmental challenges in terms of water scarcity, environmental footprints, and the negative impact of climate change. The focus of the countries is still on their economic goals of diversification and creating new revenue streams while maintaining a high welfare status for their citizens. However, the GCC countries became more engaged in the sustainability agenda following decades of oil driven growth through international agreements including the SDG agenda, the Paris Agreement, and several environmental regimes. These frameworks have helped these countries to align their agenda with the national visions through introducing more comprehensive approaches related to resilience, ecosystem management, integrated management or inter-sectoral coordination.

All of the GCC countries have established committees to track the SDG progress while including some of its elements in their national visions. As seen in Figure 4 the GCC is making solid progress toward these goals, though challenges in accelerating the pace of implementation, especially on the environmental side. The rising level of engagement has paved the way for ESG issues to gain more traction within the region. The transformation of the GCC countries, led by their diversification strategies, has shed more light on the ESG agenda.

The growing demand in the region for youth, the threats of climate change has put more emphasis on business growth as well as the social and environmental outcomes, which increased the interest in ESG strategy and reporting with the private sector across Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the UAE. Moreover, water stressed countries face high levels of water and air pollution that are driving increased risk scores. Water scarcity within the region

is connected with other areas of concern such as food insecurity, desertification, and consumption. As water scarcity increases, supply chains may be threatened, and the agriculture sector will face severe limitations in food production, resulting in a negative impact on human livelihood and economic development. Based on that strategies related to ESG have been introduced to ease investors and shareholders' pressures. However, most private and small companies have a long way to go, as they appear to be in their initial phase, while government policies are evolving.

Figure 4: SDG index score



Source: <https://dashboards.sdindex.org/>

Therefore, streamlining the ESG process is key to help in making the GCC become a global leader in the ESG space.

Looking at the GCC financial landscape, we could see that the banking system started to adopt parts of the international standards and initiatives related to the ESG factors. For example, most listed banks within the GCC region have an annual sustainability report in addition for their compliance with the stock exchange housing in reporting their progress in their ESG targets. In addition, they have adopted international standards published by the GRI and SASB, which broadly aligns with the disclosure guidance issued by their exchange houses in their respective countries. However, reporting and disclosures in the GCC have yet to be aligned, Therefore, in an effort to streamline the process for listed companies, the GCC Exchanges Committee, chaired by the Saudi Exchange published a unified set of ESG disclosure metrics, while accounting for regional sensitivities. The disclosure metrics included 29 standards (10 Environmental, 10 Social, and 9 Governance metrics) that are aligned with the World Federation of Exchanges and Sustainable Stock Exchanges Initiative and include categories across GHG emissions, energy & water usage, gender pay, employee turnover, gender diversity, data privacy, ethics and more.

Table 10: GCC key metrics in Bourse disclosure guides

Country	Disclosure	Environmental	Social	Governance
Bahrain	Voluntary	<ol style="list-style-type: none"> 1. GHG emissions 2. Emission intensity 3. Energy usage 4. Energy intensity 5. Energy mix 6. Water usage 7. Environmental operations 8. Environmental oversight 9. Climate risk mitigation 	<ol style="list-style-type: none"> 1. CEO pay ratio 2. Gender pay ratio 3. Employee turnover 4. Gender diversity 5. Temporary worker ratio 6. Non-discrimination 7. Injury rate 8. Global and health safety 9. Child and forced labor 10. Human rights 11. Nationalization 12. Community investment 	<ol style="list-style-type: none"> 1. Board diversity 2. Board independence 3. Incentivized pay 4. Collective bargaining 5. Supplier code of conduct 6. Ethics and anti-corruption 7. Data privacy 8. Sustainability reporting 9. Disclosure practices 10. External assurance
Kuwait	Voluntary	<ol style="list-style-type: none"> 1. GHG emissions 2. Emission intensity 3. Energy usage 4. Energy intensity 5. Energy mix 6. Water usage 7. Environmental operations 8. Environmental oversight 9. Climate risk mitigation 	<ol style="list-style-type: none"> 2. Gender pay ratio 3. Employee turnover 4. Gender diversity 5. Temporary worker ratio 6. Non-discrimination 7. Injury rate 8. Global and health safety 9. Child and forced labor 10. Human rights 11. Nationalization 	<ol style="list-style-type: none"> 1. Board diversity 2. Board independence 3. Incentivized pay 4. Collective bargaining 5. Supplier code of conduct 6. Ethics and anti-corruption 7. Data privacy 8. Sustainability reporting 9. Disclosure practices 10. External assurance
ADX	Voluntary	<ol style="list-style-type: none"> 1. GHG emissions 2. Emission intensity 3. Energy usage 4. Energy intensity 5. Energy mix 6. Water usage 7. Environmental operations 8. Environmental oversight 	<ol style="list-style-type: none"> 1. CEO pay ratio 2. Gender pay ratio 3. Employee turnover 4. Gender diversity 5. Temporary worker ratio 6. Non-discrimination 7. Injury rate 8. Global and health safety 	<ol style="list-style-type: none"> 1. Board diversity 2. Board independence 3. Incentivized pay 4. Supplier code of conduct 5. Ethics & prevention of corruption 6. Data privacy 7. Sustainability reporting

		9. Climate risk mitigation	9. Child and forced labor 10. Human rights 11. Nationalization 12. Community investment	8. Disclosure practices 9. External Assurance
DFM	Voluntary	1. GHG emissions 2. Emission intensity 3. Energy usage 4. Energy intensity 5. Energy mix 6. Water usage 7. Environmental operations 8. Environmental oversight 9. Climate risk mitigation	1. CEO pay ratio 2. Gender pay ratio 3. Employee turnover 4. Gender diversity 5. Temporary worker ratio 6. Non-discrimination 7. Injury rate 8. Global and health safety 9. Child and forced labor 10. Human rights 11. Nationalization 12. Community investment	1. Board diversity 2. Board independence 3. Incentivized pay 4. Collective bargaining 5. Supplier code of conduct 6. Ethics & anti-corruption 7. Data privacy 8. Sustainability reporting 9. Disclosure practices 10. External Assurance
Tadawul	Voluntary	1. GHG emissions & intensity 2. Carbon footprint 3. Financing environmental impact 4. Climate change vulnerability 5. Biodiversity 6. Water Stress 7. Raw Material Sourcing 8. Toxic Emissions & Waste 9. Packaging Material & Waste 10. Electronic Waste 11. Opportunities in Clean Tech 12. Opportunities in Green Building 13. Opportunities in Renewable Energy 14. Opportunities in cleaner Hydrocarbon energy	1. Labor management 2. Health & Safety 3. Human capital development 4. Supply chain labor standard 5. Product Safety & Quality 6. Chemical Safety 7. Privacy & Data Security 8. Responsible Investment 9. Controversial Sourcing 10. Access to Communication 11. Access to Finance 12. Access to Healthcare 13. Opportunities in Nutrition & Health	1. Board 2. Tax transparency 3. Pay 4. Ownership and control 5. Accounting 6. Business ethics
Oman	Voluntary	1. GHG emissions 2. Emission intensity 3. Energy usage 4. Energy intensity 5. Energy mix 6. Water usage 7. Environmental operations 8. Environmental oversight 9. Climate risk mitigation	1. CEO pay ratio 2. Gender pay ratio 3. Employee turnover 4. Gender diversity 5. Temporary worker ratio 6. Non-discrimination 7. Injury rate 8. Global health & safety 9. Child & forced labor 10. Human rights	1. Board diversity 2. Board dependence 3. Incentivized pay 4. Supplier code of conduct 5. Ethics & anti-corruption 6. Data privacy 7. Sustainability reporting 8. Disclosure practices 9. External assurance
Qatar	Voluntary	1. Environmental policy 2. Environmental impacts 3. Energy consumption 4. Energy intensity 5. Carbon/ GHG emissions 6. Primary Energy source 7. Renewable energy Intensity 8. Water management 9. Waste management	1. Full time employees 2. Employee benefits 3. Employee Turnover rate 4. Employee training hours 5. Health 6. Injury rate 7. Human rights policy 8. Child and forced labor 9. Women in the workforce 10. Qatarization 11. Local procurement	1. Board diversity 2. Board independence 3. Board-power separation 4. Voting results 5. CEO pay ratio 6. Gender pay ratio 7. Incentivized pay 8. Ethics code of conduct 9. Supplier code of conduct 10. Bribery, anti-corruption 11. Sustainable reporting 12. External assurance
GCC	Voluntary	1. GHG Emissions 2. Emissions Intensity 3. Energy Usage 4. Energy Intensity 5. Energy Mix 6. Water Usage 7. Environmental Operations	1. CEO Pay Ratio 2. Gender Pay Ratio 3. Employee Turnover 4. Gender Diversity 5. Temporary Worker Ratio 6. Non-Discrimination 7. Injury Rate	1. Board Diversity 2. Board Independence 3. Incentivized Pay 4. Supplier Code of Conduct 5. Ethics & anti-corruption 6. Data Privacy 7. Sustainability Reporting

		8. Environmental Oversight 9. Climate Risk Mitigation	8. Global Health & Safety 9. Child & Forced Labor 10. Human Rights	8. External Assurance
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Source: ESG disclosure guides of respective countries

Many countries have already put in place disclosure guidelines for the publicly listed companies that include a recommended set of metrics that shows the company's ability to hedge sustainability related risks and identify new opportunities to create long-term value for stakeholders. These guides also aim at encouraging innovation within the market as well as the development of green financial products. All GCC disclosure guidelines voluntary and aligned with the GRI, SASB, and CDP standards as shown in [appendix 3](#). However, the definition of materiality may be different in Kuwait, Qatar, and the UAE as the frameworks that they are aligned to are different. For example, the GRI definition of materiality emphasizes the impact of a company on its stakeholders and the environment while the RCFD, IIRC, and SASB focus on the financial impact as their targeted audience are investors and financial stakeholders.

Furthermore, the One Planet Sovereign Wealth Fund Coalition, of which the Abu Dhabi Investment Authority, Kuwait Investment Authority (KIA) and Saudi Arabia Public Investment Fund (PIF) are founding members, has assisted Sovereign Wealth Funds (SWFs) looking to integrate policy and ESG factors into the investment management process since 2017. The KIA reiterated its commitment to sustainable financing as it announced recently its intention to make the ESG central to its outlook while transitioning toward ESG compliance for the entire portfolio. In addition, the PIF in collaboration with Tadawul group are planning to establish an exchange platform for carbon offsets and credits in the MENA region, which contributes to the Paris Agreement goals. The carbon-trading platform will be the main destination for companies and organizations seeking to reduce emissions.

Moreover, many banks in the GCC have started several initiatives to protect the environment while central banks are pushing for the incorporation of ESG factors into risk management and stress testing and reserve management objectives and asset class composition to help in hedging liquidity and capital preservation against economic shocks. For example, financial institutions in the UAE have adopted green finance initiatives as part of sustainability development. Qatar and Bahrain have taken steps toward initiating green finance through Qatar Central Bank and the Ministry of Finance. Moreover, many banks within the region are issuing sustainability reports, showing their ESG progress. The central banks are also taking a leading role through issuing regulatory directives and including the ESG factors within their regulatory sandboxes, while other countries founded working groups to supervise the implementation of this issue. For example, the UAE established the Sustainable Finance Working Group (SFWG), which reaffirms the government commitment to facilitate the transition and ensure the adoption of sustainable finance at a national level through the regulatory cooperation on practices and frameworks. They published guiding principles on

sustainable finance to strengthen sustainability disclosures while designing the sustainable finance taxonomy with the intention of publishing specific outputs in 2023 and beyond.

In addition, the Saudi banks are prioritizing ESG programs given their growing exposure to global financial markets and the heightened attention from rating agencies. The Saudi central bank is also keen to incorporate ESG standards in banks operational frameworks and risk management. The financial sector development program, which is part of the Saudi 2030 vision, stipulated the need for enhancing the Saudi ESG rating while issuing sovereign sustainable debt instruments. In Bahrain, the central bank (CBB) is placing great emphasis on integrating disclosure guidelines to ensure progressive adoption of ESG disclosures. The CBB also issued a circular to all licensees in November 2021 to raise awareness on climate-related risks, which was followed by a detailed guidance note in March 2022 aimed at ensuring licensees regulated in the area of climate-related risk management. The CBB anticipates the issuance of the ESG disclosure guidelines in the first half of 2023 that will be addressed to listed companies and relevant CBB licensees. Overall, the incorporation of the ESG factors within the financial sectors is gaining more momentum in recent years as the GCC countries are accelerating their implementation of national visions. The published voluntary guides by regional exchanges, the aim to incorporate ESG factors within the banking supervisory and operational framework, and the inclusion of these factors within the SWFs investment strategies could push the ESG agenda forward, though harmonizing these efforts is needed given the high interconnectedness of the GCC economies.

Kuwait progress in ESG implementation

Kuwait as part of the GCC has made a solid progress in incorporating the ESG factors into their government and big corporations' agenda. First, the government is making a good progress in implementing the SDG goals, which are imbedded in its development plans as part of the Kuwait vision 2035, the Kuwait National Development plan (KNDP), the Strategic Cooperation Framework (SCF) for 2020-25 with the UN, and the Kuwait National Adaptation plan 2019-30. The Kuwaiti government also took action related to this issue through implementing more than 16 mega projects that are inter-linked with the SDGs goals and targets, though facing significant challenges, including the slow pace of reforms, the impact of the pandemic on the economy, and the effect of oil price volatility on the fiscal position. These efforts enabled Kuwait rank to reach 101 among 163 countries in 2022 with a score of 64.5% of all SDG goals at the international level.

Table 11: Kuwaiti Banks latest ESG rankings

No.	Bank Name	Sustainalytics*	MSCI**	Reuters***
1.	National Bank of Kuwait	27.2	BB	62/100
2.	Commercial bank of Kuwait	N/A	N/A	33/100

3.	Gulf bank	31.4	BBB	40/100
4.	Al-Ahli bank of Kuwait	32.2	N/A	45/100
5.	Burgan Bank	38.8	N/A	N/A
6.	Al-Ahli united bank	N/A	N/A	N/A
7.	Kuwait international bank	37.4	N/A	30/100
8.	Kuwait Finance House	30.7	BBB	37/100
9.	Boubyan bank	30.1	BB	69/100
10.	Warba bank	34.8	BB	N/A
11.	Industrial bank of Kuwait	N/A	N/A	N/A

Source: [MSCI](#), [Sustainalytics](#), [Refinitiv](#)

* Negligible (0-10), Low (10-20), Medium (20-30), High (30-40), Severe (40+)

** Laggard (CCC, B), Average (BB, BBB, A), Leader (AA, AAA)

*** Score range 0-25 indicates poor relative ESG performance and insufficient degree of transparency in reporting material ESG data publicly, >25-50 shows satisfactory relative ESG performance and moderate degree of transparency in reporting material ESG data publicly, >50-75 indicates good relative ESG performance and above average degree of transparency in reporting material ESG data publicly, >75-100 indicates excellent relative ESG performance and high degree of transparency in reporting material ESG data publicly

In support of these efforts, the financial services sector is moving toward the incorporation of the ESG factors within its operational framework and risk management assessment. The Kuwaiti Boursa has recently issued a voluntary guide for ESG disclosure to meet the needs of compliance and the investors and shareholders' requirements for information related to corporate risk management, governance, social impact, and the environmental footprint through their identified ESG themes and materiality matrix. It also helps in unifying the disclosure practices in the country to be in line with international frameworks (see appendix 4) the United Nations-led Sustainable Stock Exchanges (SSE) initiative, and the KPIs from the World Federation of Exchanges (WFE). The Boursa reporting guide recommended a set of 30 indicators (Appendix 5) that covers the three pillars within the ESG. These metrics are also relevant for all sectors and compliment the KNDP.

Table 12: Kuwaiti banks ESG pillar scores according to Refinitiv

No.	Bank Name	Reuters	Environmental	Social	Governance
1.	National Bank of Kuwait	62/100	Environment: 40 Emissions: 72 Resource use: 63 Innovation: 26	Social: 59 Human rights: 78 Product responsibility: 94 Workforce:36 Community: 55	Governance: 75 Management: 82 Shareholders: 46 CSR strategy: 83
2.	Commercial bank of Kuwait	33/100	Environment: 5 Emissions: 31 Resource use: 0 Innovation: 0	Social: 16 Human rights: 0 Product responsibility: 31 Workforce:10 Community: 26	Governance: 69 Management: 86 Shareholders: 56 CSR strategy: 0
3.	Gulf bank	40/100	Environment: 13 Emissions: 32 Resource use: 48 Innovation: 0	Social: 35 Human rights: 40 Product responsibility: 30 Workforce:35 Community: 35	Governance: 58 Management: 44 Shareholders: 91 CSR strategy: 79
4.	Al-Ahli bank of Kuwait	45/100	Environment: 10 Emissions: 20 Resource use: 37 Innovation: 0	Social: 42 Human rights: 19 Product responsibility: 63 Workforce:55 Community: 23	Governance: 62 Management: 74 Shareholders: 38 CSR strategy: 42
5.	Kuwait international bank	30/100	Environment: 3	Social: 32	Governance: 38

			Emissions: 16 Resource use: 0 Innovation: 0	Human rights: 0 Product responsibility: 31 Workforce:25 Community: 71	Management: 30 Shareholders: 66 CSR strategy: 37
6.	Kuwait Finance House	37/100	Environment: 5 Emissions: 0 Resource use: 0 Innovation: 8	Social: 34 Human rights: 0 Product responsibility: 31 Workforce:18 Community: 89	Governance: 55 Management: 74 Shareholders: 26 CSR strategy: 0
7.	Boubyan bank	69/100	Environment: 22 Emissions: 71 Resource use: 63 Innovation: 0	Social: 66 Human rights: 44 Product responsibility: 94 Workforce:81 Community: 37	Governance: 93 Management: 98 Shareholders: 94 CSR strategy: 69

Source: [Refinitiv](#)

Moreover, the central bank of Kuwait is playing a key supporting role in the adoption of ESG factors in the banking system frameworks as well as helping at enhancing their scores through issuing various laws, directives and instructions for data protection regulations, which is one of the main reporting themes under the governance pillar. Indeed, the continuous update of the CBK regulations to governance and data privacy have helped in supporting Kuwaiti banks high governance scores across rating agencies. The 2019 amendments to the rules and regulations of corporate governance in Kuwaiti banks have helped in enhancing the implementation of the independence of the management board through adding independent members to the board while stressing the importance of risk management governance and the role of the management board. Moreover, customer protection laws, directives, and cybersecurity initiatives have drawn a solid framework for customer right protections while focusing on data governance, taking into consideration the financial sector's use of data in service and product development to cater to the needs of its clients, while ensuring their privacy. In addition, the CBK's recent ESG related directives included imbedding the ESG factors within the bank governance, strategy, and risk management while setting clear goals for sustainable financing. The CBK stressed the need for including climate change related factors in the process of the ICAAP internal adequacy evaluation. These directives were in line with Basel core principles of effective supervision as they are sufficiently broad and resilient to include supervisory responses to climate change financial risks.

It also pointed to the importance of financial inclusion and access to finance, which could be helped through new financial solutions and products that supports sustainability. Furthermore, the central bank has given priority to green products in its regulatory sandbox tests. The supervisory initiatives were also supported by the banking sector, which accelerated the pace of its ESG factors adoption in recent years to meet the growing demand for investors and stakeholders about Kuwaiti banks' sustainability policies. For example, Kuwait Finance House started to publish sustainability reports since 2010. The National Bank of Kuwait, and later most of the banks, have followed suit.

The adoption of Kuwaiti banks to the ESG factors has resulted in high scores in the governance pillar (Table 11), which could be explained by the strong supervisory framework adopted by the central bank and the recommendations of the Basel committee following the GFC, which greatly enhanced governance frameworks in banks. However, Kuwaiti banks ratings in the social pillar is a mixed bag, while their scores in the environmental part is low, shifting the emphasis of future improvements in the environmental pillar. Most of third-part aggregators' data and ratings shows that Kuwaiti banks' financially material risks are medium to high compared to the median of the industry. This could be related to the state of the sectors in the economy, as most of the sectors have not fully adopted the ESG factors, the absence of a clear de-carbonization target, considering the implied impact on the temperature rise, and having a comprehensive climate related strategy that covers its environmental footprint targets. However, these policies are still under development, given that the economy is still in an early transition stage, which is reflected in their lending portfolios through lower environmentally friendly loans compared to developed countries. In addition, the high-risk sectors exposure remains high given the economy's high exposure to fossil fuels. Indirect exposure through government related entities could push the overall exposure to higher numbers.

Table 13: GCC Banks latest ESG rankings

Country	Bank Name	Sustainalytics	MSCI	Reuters
Bahrain	Ahli united bank	N/A	N/A	62/100
	National bank of Bahrain	N/A	N/A	77/100
	Bank of Bahrain and Kuwait	N/A	N/A	42/100
	Bahrain Islamic Bank	N/A	N/A	46/100
	Khaleeji Commercial Bank	N/A	N/A	24/100
	Al Salam Bank	N/A	N/A	43/100
Oman	Bank Muscat	36.4 (High risk)	N/A	56/100
	Bank Dhofar	39.1 (High risk)	N/A	38/100
	Sohar International Bank	N/A	N/A	16/100
	HSBC Bank Oman	N/A	N/A	48/100
	Bank Nizwa	N/A	N/A	29/100
	Ahli Bank	N/A	N/A	16/100
Qatar	Qatar International Islamic Bank	31.7 (High risk)	B (Average)	11/100
	Qatar Islamic Bank	27.8 (Medium risk)	B (Average)	66/100
	Masraf Al Rayan	31.4 (High risk)	BB (Average)	27/100
	Qatar National Bank	23.1 (Medium risk)	A (Average)	73/100
	Doha Bank	36.7 (High risk)	N/A	58/100
Saudi	Saudi British Bank	36.2 (High risk)	B (Average)	22/100
	Saudi Investment Bank	32.3 (High risk)	BBB (Average)	57/100
	Banque Saudi Fransi	30.8 (High risk)	BB (Average)	36/100
	Bank Aljazira	24.1 (Medium risk)	BB (Average)	21/100
	Riyad Bank	33.1 (High risk)	BB (Average)	76/100
	Al Rajhi Bank	26.6 (Medium risk)	BBB (Average)	50/100
	Arab National Bank	29.9 (Medium risk)	BB (Average)	32/100
UAE	First Abu Dhabi Bank	22.5 (Medium risk)	A (Average)	67/100

	Emirates NBD Bank	28.9 (Medium risk)	BBB (Average)	46/100
	Abu Dhabi Commercial Bank	21.0 (Medium risk)	AA (Leader)	74/100
	Abu Dhabi Islamic Bank	34.1 (High risk)	A (Average)	38/100
	Dubai Islamic Bank	31.6 (High risk)	BBB (Average)	29/100
	Commercial Bank of Dubai	35.4 (High risk)	N/A	25/100
	National Bank of RAK	37.3 (High risk)	N/A	65/100
	National Bank of Fujairah	28.3 (Medium risk)	N/A	45/100

Source: [MSCI](#), [Sustainalytics](#), [Refinitiv](#)

* Negligible (0-10), Low (10-20), Medium (20-30), High (30-40), Severe (40+)

** Laggard (CCC, B), Average (BB, BBB, A), Leader (AA, AAA)

*** Score range 0-25 indicates poor relative ESG performance and insufficient degree of transparency in reporting material ESG data publicly, >25-50 shows satisfactory relative ESG performance and moderate degree of transparency in reporting material ESG data publicly, >50-75 indicates good relative ESG performance and above average degree of transparency in reporting material ESG data publicly, >75-100 indicates excellent relative ESG performance and high degree of transparency in reporting material ESG data publicly

Looking at Refinitiv detailed scores in the three pillars (Table 12) we could notice that bank having relatively high scores compared to others is having a high human rights score and community work. This part also includes financial inclusion, education, digitization, and data protection, which is fairly developed in Kuwait. These results set the stage to the necessity of having a self-assessment tool to be used by company staff to evaluate human rights-related policies, procedures and performance to increase the banks ratings. In addition, Kuwait is unique by hosting a sizable stock of foreign human capital, which makes ensuring the availability of facilities for remittances and access to finance key for supporting individual banks' ESG ratings. Furthermore, Kuwaiti banks ESG ratings are broadly in line with their regional peers (Table 13).

Moreover, rating agencies, such as Moody's have issued a credit impact score that is neutral-low for most banking institutions in Kuwait, with an ESG profile scores in the governance side and weak in the environmental side, mainly due to high exposure to transition risks. Its worth noting that Moody's ESG analysis includes two main types of scores, the issuer profile scores (IPS) and credit impact scores (CIS). The ESG Credit Impact Scores (CIS) reflect the impact of ESG considerations on the rating of an issuer or transaction, i.e., an output of the rating process that indicates the extent, if any, to which ESG factors impact the rating of an issuer or transaction. Whereas the E, S and G profile scores are based on an issuer's or transaction's outright exposure to ESG risks or benefits and ESG specific mitigants, the CIS places ESG considerations in the context of the issuer's other credit drivers that are material to a given rating.

Table 14: Moody's CIS & IPS rating for Kuwaiti banks

No.	Bank Name	Credit impact score	ESG issuer profile scores			Credit opinion date	Notes
			Env.	Soc.	Gov.		
1	Ahli united bank	CIS-2	E-4	S-3	G-2	Feb-2023	The credit impact score is neutral to low (CIS-2), reflecting a limited impact of the ESG factors on the banks' ratings. Banks' have a high environmental exposure on carbon transition risks, their portfolio exposure to a dependent economy on hydrocarbon production, and the impact of carbon transition on deposit ratings of some banks, though
2	Boubyan Bank	CIS-2	E-4	S-3	G-2	May-2023	
3	CBK	CIS-2	E-4	S-3	G-2	Feb-2023	

4	NBK	CIS-2	E-4	S-3	G-2	Mar-2023	government support rating uplift could partly neutralize this impact. In addition, social risks related to regulatory and litigation risks require high compliance standards, data security and customer privacy, while risks related to customer relations, though lower than the industry's average. Moreover, Moody's has stated that banks have an appropriate risks functions and board structure and governance practices with an effective oversight. The credit impact score is moderately negative (CIS-3), pointing to the governance attributes limited impact on the banks' current ratings. The ESG issuer profile shows that these banks have a high exposure to environmental risks related to carbon transition risk. In addition, social risks related to regulatory and litigation risks require high compliance standards, data security and customer privacy. Finally, governance practices established a track record of broadly meeting its annual guidance on financial targets.
5	Gulf Bank	CIS-2	E-4	S-3	G-2	Nov-2022	
6	KFH	CIS-2	E-4	S-3	G-2	Feb-2023	
7	Warba Bank	CIS-3	E-4	S-3	G-3	Feb-2023	
8	Burgan bank	CIS-3	E-4	S-3	G-3	Oct-2022	

* Source: Moody's investors service credit opinion. ** ESG Credit Impact Score: CIS-2 (neutral to low); CIS-3 (Moderately negative). ESG Issuer Profile Scores: E-4 (highly negative); S-3 (moderately negative); G-3 (moderately negative); G-2 (neutral to low).

The banking sector in Kuwait is ahead of the overall economy in terms of adopting the ESG agenda. The macro economy as the low carbon transition is in its early stages. The economy is still heavily reliant on oil with more than 50% of the real GDP comes from the oil sector, while adding the related hydrocarbon industries, elevate that number higher. This could be attributed to the growing pressures of investors as well as the strength of the regulatory framework adopted by the central bank and its keenness to update their frameworks according to best international practices, especially those related to Basel accords, risk management and stress testing. Therefore, to enhance the ratings of Kuwaiti banks, promoting policies that helps in making the ESG investments more visible could increase the bank reputation and value. Moreover, policy makers should also provide more support for the financial services sector to encourage their adoption of ESG frameworks, which could also help in mitigating their losses from ESG risks while protecting the ecosystem (Ersoy, et al., 2022). Based on that, policies should be developed and harmonized across the financial sector, while taking into account the segments differences within the sector to regulate sustainability activities and reporting.

The impact of ESG implementation in Kuwaiti banking system

The incorporation of the ESG pillars within the banking system operational and supervisory levels requires defining ways to track the ESG impact of loans and investments, establish policies that takes into consideration ESG in the decision-making process, create new green products through supporting innovations, risk assessment of climate factors on traditional pillars of financial risk, developing reporting and disclosure. ESG reporting allows banks to improve their business reputation and customer relationships given the increasing investor demands for transparency and consistent reporting on ESG performance improvements to mitigate risks and generate sustainable long-term financial returns. Increasing pressures from regulators, customers, investors, and

employees have helped in expediting the adoption of these principles during the last decade. The recent directives and guidelines by the central bank and the capital market authorities are clear signs of their commitment to pushing for a mandatory ESG reporting over the coming years. In addition, customers are becoming more interested in the role of banks in the ESG agenda as increasing attention is given to these factors when it comes to financial investments. Moreover, rising awareness of banks employees and the need to Kuwaiti banks to retain efficient employees are factors pushing for the more inclusion, diversity, and gender pay parity at banks.

Therefore, a full implementation of the ESG principles in Kuwait could cause a shift in investor preferences as well as the lending portfolio composition of banks, which is currently dominated by a relatively high exposure to the real estate sector (table 15). It will also have an impact on traditional financial risks, balance sheet, financial ratios, bank behavior and risk appetite, since it is academically established that ESG implementation has a non-negative and stable relationship with corporate financial performance (Esteban-Sánchez, et al., 2017). Furthermore, we could see a preference for green investments by private equity investors, as the performance of portfolios free of fossil fuel production assets does not differ in terms of risk and return, making divesting from the fossil fuel more easier, given the already low credit exposure at around 5% of the total banks' lending portfolio. At the same time, banks will try to link as well as try to link climate strategies with new business opportunities, putting more focus on product innovations.

Table 15: Banks Credit exposure by sector

Sector	2010		2015		2020		2022	
	KD bn	%	KD bn	%	KD bn	%	KD bn	%
Trade	2.3	8.9	3.1	9.2	3.3	8.1	3.2	6.8
Industry	1.6	6.3	2.0	6.0	2.1	5.1	2.4	5.1
Construction	1.8	7.0	2.0	5.7	1.9	4.6	2.1	4.5
Agriculture & fishing	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
NBFI	2.8	11.0	1.3	3.9	1.0	2.4	1.0	2.2
Consumer loans	0.7	2.7	1.2	3.5	1.6	4.0	2.0	4.2
Installment loans	4.8	18.7	9.3	27.5	12.7	31.3	15.7	33.6
Purchase of securities	2.7	10.5	3.1	9.2	2.6	6.4	3.2	6.9
Real estate	6.3	24.4	7.8	22.9	8.9	22.0	9.5	20.3
Crude oil & gas	0.2	0.8	0.6	1.9	1.9	4.6	2.1	4.4
Public services	0.0	0.0	0.1	0.3	0.1	0.3	0.1	0.2
Other loans	2.5	9.6	3.3	9.8	4.5	11.1	5.6	11.8
Total	25.7	100.0	34.0	100.0	40.6	100.0	46.9	100.0

Source: Central bank of Kuwait

Climate risks, as part of the materiality topics is expected to have a profound impact on banks operations in Kuwait, risk management strategies, and portfolio composition. Moreover, it would affect the supervisory frameworks of the central bank given its interlinkages with the traditional financial risks (capital, liquidity, interest rate, market, credit, compliance) as well as risk management frameworks, including stress-testing methodologies. For example, banks would have

to define the sectors with high emissions, sectors that could decarbonize, or reduce emissions and green sectors which would be more preferable and sustainable to allocate funds. This would entail a clear shift in banks' credit exposures as we expect that lending to agriculture, oil and gas and manufacturing would see a decline or divestment overtime. On the other hand, the real estate and construction sectors would start pursuing the implementation of the ESG pillars within their sector to help in gaining more access to finance, which would increase banks' exposure within this sector over the long term, heightening the probability of systematic risks. Therefore, banks should start providing de-carbonization loans for brown sectors to help in the process of these sectors transition. However, it is still too early to quantify the impact of the ESG pillars on the banking sector, or the Kuwaiti non-oil economy, given that the country is still in early stages of transition to a low carbon economy.

Gap analysis on ESG implementation in Kuwaiti banks

The regulatory authorities in the financial sector have already issued multiple directives related to the inclusion of the ESG principles within their disclosure policies, operational frameworks, and risk management tools. Moreover, the Kuwaiti Boursa issued a guideline for all listed companies on the disclosure of ESG practices, creating uniformity for reporting standards within the country. However, the banks specific and overall scores indicate relatively low scores compared to advanced economies as well as other parts within the emerging economies banks. However, main rating agencies credit impact scores remain neutral to low despite having a relatively low environmental score in IPS due to high exposure transition risks. Moreover, most ranks for Kuwaiti banks ranges between medium to high risk (Sustainalytics), average (MSCI), and satisfactory ESG performance (Refinitiv), while others do not have ratings. This points to the need of more efforts to align their ESG targets and goals with the international standards, have clear targets, especially in the environmental front, and be more specific in defining their materiality topics. Moreover, the ratings show a gap emerging between banks as some made headway on implementing their environmental and social risk policies, which puts more pressure on the regulatory authorities to enhance the incorporation of these pillars with their operational frameworks at the same pace to avoid sharp disparities among banks. Therefore, this section will show a gap analysis on the environmental side for Kuwaiti banks in order to help in increasing their ratings and level of alignment with international standards.

Banks reporting on the environmental pillar

The Kuwaiti banks are progressing in their environmental disclosures as most of them started to produce sustainability reports as early as 2010. These reports have helped in illustrating their development in reporting and incorporating the ESG pillars within their strategies, operational frameworks, and reporting. Moreover, these reports also include a discussion on materiality topics

and the banks' targets, such as fintech, digitization, energy consumption, waste management, etc. However, Kuwaiti banks adoption of ESG practices is relatively recent, same as other banks in the GCC region, putting them at the early stages compared to other major banks in the advanced economies and emerging markets. Given the continuous updates on international frameworks banks should ensure the resilience of their incorporation of these standards in order to meet the growing needs of investors while preserving high quality supporting system as well as ongoing development of the GHG Protocol and implementing a continuous update process. On the other hand, the central bank is continuing to include these pillars within the supervisory framework, which would help to better align themselves with these standards while ensuring the effective and prudent management of the institution through promoting sustainability in risk management, enhancing transparency and reporting.

Table 16: Kuwaiti banks* disclosure alignment with the Boursa guide

Environmental metrics (Boursa disclosure guide)	NBK	KFH	KIB	BOUB	CBK	WBA	BUR	GULF	AHLI	UAHLI
GHG emissions										
Scope I	✓	✓	N/A	✓	N/A	N/A	N/A	✓	✓	✓
Scope II	✓	✓	N/A	✓	N/A	✓	N/A	✓	✓	✓
Scope III	✓	✓	N/A	✓	N/A	✓	N/A	✓	✓	N/A
Emissions intensity										
Total Emissions	✓	✓	N/A	✓	N/A	✓	N/A	✓	✓	N/A
Total non-GHG emissions	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Energy usage										
Energy directly consumed	✓	✓	N/A	✓	N/A	✓	✓	✓	✓	✓
Energy indirectly consumed	N/A	N/A	N/A	N/A	N/A	✓	✓	N/A	✓	N/A
Energy intensity										
Total direct energy usage	✓	✓	N/A	✓	N/A	✓	✓	✓	✓	N/A
Energy mix										
Energy usage by generation type	✓	✓	N/A	✓	N/A	✓	N/A	N/A	N/A	N/A
Water usage										
Total amount of water consumed	✓	✓	N/A	✓	N/A	✓	✓	✓	✓	✓
Total amount of water reclaimed	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Environmental operations										
Does your company follow a formal Environmental Policy?	N/A	No	No	N/A	N/A	N/A	No	N/A	N/A	Yes
Does your company follow specific waste, water, energy, and/or recycling policies?	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A	Yes
Does your company use a recognized energy management system?	N/A	N/A	No	N/A	N/A	N/A	N/A	✓	N/A	Yes
Environmental oversight										
Does your Board/Management team oversee	✓	✓	No	✓	N/A	✓	N/A	N/A	N/A	No

and/ or manage climate-related risks?										
Does your Board/ Management team oversee and/ or manage other sustainability issues? Yes/No	✓	✓	✓	✓	N/A	✓	✓	✓	✓	✓
Climate risk mitigation										
Amount invested annually in climate-related infrastructure, resilience, and product development	✓	N/A	N/A	✓	N/A	N/A	N/A	N/A	✓	N/A

Source: Sustainability report for respective banks, and banks direct correspondence. Warba bank did not publish any sustainability report as of end 2022.

* National Bank of Kuwait (NBK), Kuwait Finance House (KFH), Kuwait International Bank (KIB), Boubyan Bank (BOUB), Commercial Bank of Kuwait (CBK), Warba Bank (Warba), Burgan Bank (BUR), Gulf Bank (GULF), Al-Ahli Bank of Kuwait (AHLI), Al-Ahli United Bank (UAHLI).

Taking a closer look at these reports, most banks claim that their lending portfolio and operational practices are in line with Kuwait's Environmental Protection Agency (EPA) law, which prohibits the implementation of any project without conducting an environmental impact assessment. Moreover, most of the banks report their water and energy direct usage and emissions (MTCO₂) under scope II as seen in table 13, pointing to the need for more efforts to have more alignments with Kuwait's Boursa disclosure standards. The emissions data could allow banks to put realistic targets to achieve the National Determined contributions (NDCs) for Kuwait, supporting the government efforts in reducing national emissions and adapt to the impacts of climate change. However, these disclosures are considered as a requirement that could enable these banks to align the emission targets with the net zero target by 2050, supporting the government NDC in Paris agreements through financing technologies directly contributing to the elimination of real-economy GHG emissions and services to enable the global transition to net zero. These solutions include scaling up zero-carbon alternatives to high-emitting activities. This could be done through focusing the resources that financial institutions have on targeting the reduction in their financed GHG emissions, which are significantly larger than their operational emissions.

Furthermore, some banks have set medium term targets that are mainly related to waste management, digitization, and reducing their buildings environmental impact, though no clear target for de-carbonization has been set or a reduction of GHG emission that is in line with the country's NDCs, or reaching Net zero emissions by 2050 (global efforts to limit warming to 1.5 degrees). These targets should take account of material portfolio scope 3 emissions, create investment products aligned with net-zero emissions, and facilitate increased investment in climate solutions. In addition, banks disclosures should focus on identifying and disclosing transitional and physical risks and their impact on their operations, the cost of interruptions, and other factors that allows for a better understanding of financial exposure regarding such issues as the possible impairment or stranding of assets and its effects on the balance sheet components (table 17).

Table 17: TCFD climate related metric categories

Category	Measuring unit	Rationale
GHG Emissions Absolute scope 1, scope 2, and scope 3; emissions intensity	MT of CO ₂ e	Disclosure of GHG emissions is crucial to understand the exposure to climate-related risks and opportunities. Disclosure of absolute emissions across value chain and emissions intensity provides insight into how institutions may be affected by policy, regulatory, market, and technology responses to limit climate change
Transition Risks Amount and extent of assets or business activities vulnerable to transition risks	Amount or (%)	Disclosure of the amount and extent of assets or business activities vulnerable to climate-related transition risks allows better understanding of potential financial exposure as possible impairment or stranding of assets, effects on the value of assets and liabilities, and changes in demand for products or services.
Physical Risks Amount and extent of assets or business activities vulnerable to physical risks	Amount or (%)	Disclosure of the amount or extent of assets or business activities vulnerable to material climate-related physical risks allows users to understand the potential financial exposure regarding such issues as impairment or stranding of assets, effects on the value of assets and liabilities, and cost of business interruptions.
Climate-Related Opportunities Proportion of revenue, assets, or other business activities aligned with climate-related opportunities	Amount or (%)	Disclosure of the proportion of revenue, assets, or business activities aligned with climate-related opportunities provides insight into the position of organizations relative to their peers and allows users to understand likely transition pathways and potential changes in revenue and profitability over time.
Capital Deployment Amount of capital expenditure, financing, or investments in climate-related risks and opportunities	Reporting currency	Capital investment disclosure by non-financial organizations and financing by financial organizations gives an indication of the extent to which long-term enterprise value might be affected.
Internal Carbon Prices Price on each ton of GHG emissions used internally by an organization	Price in reporting currency, per MT of CO ₂ e	Internal carbon prices provide users with an understanding of the reasonableness of an organization's risk and opportunity assessment and strategy resilience. The disclosure of internal carbon prices can help users identify which organizations have business models that are vulnerable to future policy responses to climate change, and which are adapting their business models to ensure resilience to transition risks
Remuneration Proportion of executive management remuneration linked to climate considerations	(%), weighting, description, or amount in reporting currency	Remuneration policies are important incentives for achieving the goals and objectives and may provide insight on an organization's governance, oversight, and accountability for managing climate-related issues.

Source: (TCFD, October 2021)

We have focused on the TCFD recommendations as they are fully aligned with the GRI and the CDP initiative. In addition, the newly formed ISSB has iterated the referral to the TCFD guidance that sets out types of scenario analysis, including quantitative, partially quantitative and qualitative. The ISSB also agreed that it would build on the TCFD guidance, specifying that scenario analysis must be applied but setting out the required approach that is scalable to an entity's circumstances. Moreover, these recommendations provide a source of data that can be analyzed at a systemic level, to facilitate authorities' assessments of the materiality of any risks posed by climate change to the financial sector, and the channels through which this is most likely to be transmitted.

Key Gaps

The purpose of this section is to identify gaps within the progress of incorporating climate related-ESG pillars within the banking frameworks in Kuwait. It mainly looks at key elements that support a successful implementation and the contribution in achieving Kuwait's NDC target, to ensure that the collective action is on track with the Paris agreement goals. The gap analysis included the comparison between the disclosure and the incorporation of ESG in risk management among banks. The survey of the sustainability reports of Kuwaiti banks and the TCFD recommendations reveals the following:

- **Gaps related to the implementation of “E” pillar**

- ✓ Some Kuwaiti banks are yet to start taking into consideration the incorporation of the ESG into their operational frameworks. However, most of the disclosure and reporting requirements are still voluntary. The global movements to incorporate these concepts within Basel frameworks and risk management would make having these pillars as part of the banking system strategy, frameworks and supervision a necessity in order to adhere to best international practices.
- ✓ Banks focus on reporting their scope I and II, which are related to their direct consumption of fuels (cars & boilers) as well as their electricity consumption, while scope 3, which include emissions that occur in the value chain of the bank, including both upstream and downstream emissions is harder to capture. Which could be related to the absence of a comprehensive methodology to calculate the emissions related to banks loans and investments, as they comprise the most relevant climate warming impact of a bank.
- ✓ Having a historical series for emissions, energy intensity and other climate related metrics would help banks in analyzing historical trends, setting up their targets and commitments that are compatible with the KNDP, Kuwait NDC, and the year for reaching net zero emissions. Banks should also develop emissions targets that are compatible with the national agendas as well as the 2°C scenario.

- **Gaps related to NDCs and the KNDP**

- ✓ Kuwait's NDC contribution of 7.4% of emissions by 2035 focus mainly on emission reductions through improving distribution efficiency and electricity production, without stating the need to rationalizing electricity consumption through adopting more environmentally friendly frameworks and cost-saving green buildings, given that Kuwaiti citizens electricity consumption per capita is the

highest in the world. Modifying the national NDCs would allow banks to have a clear target when financing real estate and construction projects.

Table 18: Kuwait aggregate GHG emissions (CO₂eq)

Sector	2016	% of total
Energy	82,556.6	95.6
Public electricity & heat production	47,665.8	55.2
Oil & Gas	9,405.3	10.9
Manufacturing & construction	2,856.5	3.3
Transportation	15,000.8	17.4
Other combustion activities	569.3	0.7
Fugitive emissions (oil & gas)	7,058.9	8.2
Industrial process & product use	1,932.2	2.2
Agriculture	154.4	0.2
Forestry and land use	-13.2	0.0
Waste	1,706.5	2.0
Total National Emissions	86,349.6	100.0
Net National Emissions	86,336.4	100.0

Source: UNFCCC ([Link](#))

- ✓ Most countries mention private climate finance as a required resource to implement NDC targets and plans as part of their wider financial requirements. However, there is rarely an explicit breakdown of the volume of private finance that countries require to be raised to implement their plans. The Ministry of Electricity and Water (MEW) is responsible for operating electricity plants and grids, making it hard for banks to benefit from providing financing for the transition to more efficient electricity generation and new renewable energy plants to the government. Moreover, the slow implementation of the privatization program within the energy sector prevents financial institutions in supporting Kuwait's NDCs.
 - ✓ The strength of the link between NDCs and KNDP revised plan as well as sustainable development goals need to be explicitly recognized and acted upon in the planning and implementation process of NDCs. Furthermore, the slow implementation of the national plans may delay the achievement of the NDC making it necessary to have some room to maneuver given the time limit.
- **Disclosure gaps**
 - ✓ The Kuwait Boursa guide is aligned with most international disclosure frameworks, though much work is needed to ensure its alignment with the TCFD recommendations as in the table below.

Table 19: TCFD main climate related recommendations and Kuwait Boursa disclosure guide

TCFD climate related recommendations	Boursa disclosure guide
Governance	
<p>Describe the board's oversight of climate-related risks and opportunities</p> <ul style="list-style-type: none"> – Processes and frequency by which the board and/or committees are informed about climate-related issues. – how the board monitors and oversees progress against goals and targets for addressing climate-related issues – Taking climate-related issues into consideration while reviewing and guiding strategy, setting risk management policies, annual budgets, business plans, and performance objectives, monitoring acquisitions, and divestitures; 	<p><u>Metric: Environmental operations</u></p> <ul style="list-style-type: none"> – Does your company follow a formal Environmental Policy? Yes, No <p><u>Metric: Environmental oversight</u></p> <ul style="list-style-type: none"> – Does your Board/Management Team oversee and/or manage climate-related risks? Yes/No – Does your Board/Management Team oversee and/or manage other sustainability issues? Yes/No
<p>Describe management's role in assessing and managing climate related risks and opportunities</p> <ul style="list-style-type: none"> – Board responsibilities include assessing/ managing climate related issues – Describing the associated organizational structures. – Process of informing the management about the climate related issues. – Management monitoring of climate related issues. 	<p>Some banks' sustainability reports include a broad description of the management responsibilities and their climate related responsibilities as well as the management structure.</p>
Strategy	
<p>Describe the identified climate-related risks and opportunities over the short, medium, and long term.</p> <ul style="list-style-type: none"> – Describe how climate related issues manifest itself in the institutions' assets and infrastructure over the short, medium, and long term. – Describe the specific climate related issues arising during time horizons that could have a material financial impact. – Describe the process of determining risks and opportunities that could have a financial impact. – Provide descriptions of risks and opportunities by sector and/ or geography, as appropriate. – Banks should describe significant concentrations of credit exposure to carbon-related assets – Disclosing climate-related risks (transition and physical) in their lending and other financial business activities. 	<p>NA</p>
<p>Describe the impact of climate-related risks and opportunities on business, strategy, and financial planning.</p> <ul style="list-style-type: none"> – Consider including the impact on their businesses, strategy, and financial planning in the following areas: <ul style="list-style-type: none"> + Products and services & supply chain + Adaptation and mitigation activities + Investment in R&D + Operations, acquisitions or divestments + Access to capital – The interdependencies among the factors that affect their ability to create value over time. – The impact on financial performance and position. – Describe plans for their reductions of GHG emissions and transitioning to low carbon economy. This should include emission targets and specific activities intended to reduce GHG emissions in their operations and value chain or to support the transition. 	<p>General description about the risks in portfolio within sustainability frameworks.</p>

<p>Describe the resilience of the strategy, taking into consideration different climate related scenarios, including a 2°C or lower scenario.</p> <ul style="list-style-type: none"> – Include how strategies could change to address potential risks and opportunities. – Climate related scenarios and time horizons considered. 	NA
Risk Management	
<p>Describe the processes for identifying and assessing climate related risks.</p> <ul style="list-style-type: none"> – Report processes for assessing the potential size and scope of identified climate-related risks – Definitions of risk terminology used or references to existing risk classification frameworks used. – Characterizing their climate-related risks in the context of traditional banking risk categories such as credit risk, market risk, liquidity risk, and operational risk. 	General description of climate related risks and the classification frameworks.
<p>Describe the processes for managing climate related risks.</p> <ul style="list-style-type: none"> – Decision making process for managing climate related risks including how materiality determinations are made. 	
<p>Describe how processes for identifying, assessing, and managing climate related risks are integrated into the organization's overall risk management.</p> <ul style="list-style-type: none"> – Describe process of identifying, assessing and managing climate related risks are integrated into their overall risk management. 	NA
Metrics and targets	
<p>Disclose the metrics used to assess climate related risks and opportunities in line with its strategy and risk management process.</p> <ul style="list-style-type: none"> – Provide the key metrics used to measure and manage climate related risks and opportunities, metrics consistent with the cross-industry, climate-related metric categories. – Providing forward-looking metrics for the cross-industry, climate-related metric categories. – Provide a description of the methodologies used to calculate or estimate climate-related metrics. – Provide the metrics used to assess the impact of (transition and physical) climate-related risks on their lending and other financial intermediary business activities in the short, medium, and long term. They should also be broken down by industry, geography, credit quality, average tenor. – Provide the amount and percentage of carbon-related assets relative to total assets as well as the amount of lending and other financing connected with climate-related opportunities. – Describe the extent to which their lending and other financial intermediary business activities are aligned with a well below 2°C scenario. Banks should also indicate which business activities (e.g., loans to specific sectors or industries) are included. 	<ul style="list-style-type: none"> - Key metrics in the Bursa guide should be reported by all banks so that it could provide a historical context for trend analysis. - Sustainability reports provide a broad context of the methodology for calculating these metrics, making it hard for assessing their comparability across institutions.
<p>Disclose Scope 1, 2, and Scope 3 greenhouse gas (GHG) emissions, and the related risks.</p> <ul style="list-style-type: none"> – Provide their Scope 1 and Scope 2 GHG emissions independent of a materiality assessment (trend analysis could be done through historical series). – Disclose GHG emissions for lending and other financial intermediary activities where data and methodologies allow (emissions should be calculated in line with the Global GHG Accounting and Reporting Standard for the Financial Industry developed by the Partnership for Carbon Accounting Financials or a comparable methodology). 	<p><u>Metric: GHG emissions</u></p> <p>E1.1) Total amount, in CO2 equivalents, for Scope 1</p> <p>E1.2) Total amount, in CO2 equivalents, for Scope 2</p> <p>E1.3) Total amount, in CO2 equivalents, for Scope 3</p> <p><u>Metric: Emissions intensity</u></p> <p>E2.1) Total GHG emissions per output scaling factor</p>

	E2.2) Total non-GHG emissions per output scaling factor
Describe the targets used to manage climate related risks and opportunities and performance against targets. <ul style="list-style-type: none"> – Key climate-related targets related to GHG emissions, water usage, energy usage, etc., consistent with the cross-industry, climate-related metric categories. + Target is absolute or intensity based + Time frames over which the target applies + Base year from which progress is measured + Key performance indicators progress against targets 	N/A

Source: TCFD website, Bursa disclosure guide.

Conclusions and policy recommendations

The incorporation of the ESG pillars within Kuwaiti banks risk management, credit portfolio, and investment practices is still at an early stage. The Kuwait Bursa disclosure guide as well as the central bank directives have played a crucial role in pushing the banks to adopt ESG principles within their frameworks. Furthermore, the implementation of the ESG pillars in Kuwaiti banking system was both driven by banks own initiative and supported by the central bank, to enhance their ESG ratings across different rating agencies. The current scores of Kuwaiti banks are solid in the governance pillar, mainly due to the continuous updates of the CBK's governance laws and regulations as well as the banks' need to ensure sustainability. On the other hand, the banks' scores in the environmental pillar are still low which could have contributed to banks being in early stages of implementing the guidelines under this pillar, though their credit impact score is neutral to low according to main rating agencies. Finally, social scores vary depending on the banks' level of involvement in social activities. Therefore, banks should aim at increasing their environmental and social ratings through enhancing their disclosures on these pillars, while developing products that help brown industries in reducing emissions/ de-carbonization, which should help in smoothing the transition of the overall economy into circular low carbon emissions. Moreover, disclosure guidelines should be subject to continuous updates given the evolution of new concepts and frameworks. In addition, banks should align their voluntary disclosure guidance with the international standards and recommendations while fostering ESG training and capacity building to enhance their capabilities and the integration of ESG practices in their strategic objectives.

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Appendix (1): ESG factors usually included in frameworks

Table (1.1): ESG factors included in international frameworks

Environmental	Social	Governance
<ul style="list-style-type: none"> • GHG emissions • Energy consumption and efficiency • Air pollutants • Water usage and recycling • Waste production and management (water, solid, hazardous) 	<ul style="list-style-type: none"> • Workforce freedom of association • Child labor • Forced and compulsory labor • Workplace health and safety • Customer health and safety • Discrimination, diversity and equal opportunity • Poverty and community impact • Supply chain management 	<ul style="list-style-type: none"> • Codes of conduct and business principles • Accountability • Transparency and disclosure • Executive pay • Board diversity and structure • Bribery and corruption • Stakeholder engagement • Shareholder rights

<ul style="list-style-type: none"> • Impact and dependence on biodiversity • Impact and dependence on ecosystems • Environmentally friendly products and services innovations. 	<ul style="list-style-type: none"> • Training and education • Customer privacy • Community impacts 	
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Source: EBA, on management and supervision of ESG risks for credit institutions and investment firms ([EBA/REP/2021/18](#)), p.26.

Table (1.2): ESG factors included in European frameworks

Environmental	Social	Governance
<ul style="list-style-type: none"> • GHG emissions • Energy consumption and efficiency • Exposure to fossil fuels • Water, air, soil pollutants • Water usage, recycling and management • Land degradation, desertification, soil sealing 	<ul style="list-style-type: none"> • Implementation of fundamental ILO Conventions • Violation of UN Global Compact Principles • Inclusiveness/Inequality • Exposure to controversial weapons • Discrimination • Insufficient whistleblower protection 	<ul style="list-style-type: none"> • Anti-corruption and anti-bribery policies • Excessive CEO pay • Diversity (unadjusted gender pay gap and board gender diversity)

<ul style="list-style-type: none"> • Waste production and management (hazardous, non-recycled) • Raw materials consumption • Biodiversity and protection of healthy ecosystems • Deforestation 	<ul style="list-style-type: none"> • Rate of accidents and number of days lost to injuries, accidents, fatalities or illness. • Human rights policy • Investment in human capital and communities • Trafficking in human beings 	
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Source: EBA, on management and supervision of ESG risks for credit institutions and investment firms ([EBA/REP/2021/18](#)), p.26.

Table (1.3): ESG factors included in industry and other common areas' frameworks

Environmental	Social	Governance
<ul style="list-style-type: none"> • Consumption of materials, energy and water • Production of GHG emissions, other emissions to air and water • Production and management of waste and wastewater • Protection of biodiversity 	<ul style="list-style-type: none"> • Quality and innovation in customer relations, rights of customers to gain information about environmental issues • Human rights • Labor practices: human resource management and employee relations, diversity issues, gender equality, 	<ul style="list-style-type: none"> • Set of rules or principles defining rights, responsibilities and expectations between different stakeholders in the governance of the entity/sovereign • Executive pay • BOD independence • Board composition and structure

<ul style="list-style-type: none"> • Research and development in low-carbon and other environmental technologies 	<ul style="list-style-type: none"> workplace health and safety considerations • Access to credit and financial inclusion • Personal data security 	<ul style="list-style-type: none"> • Shareholder rights, Internal audit & Compensation • Bribery, corruption, integrity in corporate conduct/conduct frameworks
<ul style="list-style-type: none"> • Water usage and consumption • Waste management and production • Energy consumption • Pollution & Biodiversity • GHG emissions 	<ul style="list-style-type: none"> • Labor and workforce considerations • Human rights • Inequality • Discrimination • Gender equality 	<ul style="list-style-type: none"> • Rights and responsibilities of directors • Remuneration • Bribery and corruption

Source: EBA, on management and supervision of ESG risks for credit institutions and investment firms ([EBA/REP/2021/18](#)), p.26.

Appendix (2): Frameworks currently used by international institutions

Year	Framework	Content
2003	Equator Principles	Guidelines used to identify, assess and manage environmental and social risks when financing projects
2006	Principles for Responsible Investment (PRI)	Referred asset owners/institutional investors, investment managers, and service providers to incorporate ESG factors into their investment and ownership decision
2010	International Integrated Reporting Council (IIRC)	Framework for integrated reporting along the lines of six capitals (financial, manufactured, intellectual, human, social and relationship and natural)

2012	International Finance Corporation Environmental and Social Performance Standards (IFC Performance Standards)	Definition of IFC clients' responsibilities for managing environmental and social risks.
2015	United Nations Sustainable Development Goals (SDGs)	Collection of 17 interlinked global goals designed to be a blueprint to achieve a better and more sustainable future intended to be achieved by 2030
2016	Global Sustainability Standards Board Global Reporting Initiative	Principles used by organizations to better understand, manage and communicate their impacts on sustainability-related issues
2018	OECD Due Diligence Guidance for Responsible Business Conduct	Guidelines covering non-binding principles and standards for responsible business conduct in a global context consistent with applicable laws and internationally recognized standards
2018	Committee of Sponsoring Organizations of the Tread way Commission and the World Business Council for Sustainable Development Guidance for Applying Enterprise Risk Management to ESG-related risks	Guidelines to overcome ESG-related risk challenges across the ERM process and provides methods for managing both upside and downside ESG-related risks.
2019	United Nations Environment Program Finance Initiative (UNEP FI)	Principles aiming at aligning banks' business strategies with the objectives of the SDGs and the Paris Agreement
2020	Sustainability Accounting Standards Board (SASB) Standards	Standards that help companies disclose financially-material sustainability information to investors
2020	World Economic Forum (WEF) report on 'Measuring Stakeholder Capitalism'	Common metrics and disclosures on non-financial factors can be used by companies to align their mainstream reporting on performance against ESG indicators and track their contributions to the SDGs
Frameworks specifically addressing environmental factors		
2017	Recommendations of the Financial Stability Board Taskforce on Climate-related Financial Disclosures (TCFD)	Framework to disclose climate-related risks and opportunities through their existing reporting processes.
2017 (updated 2021)	International Capital Market Association Green Bond Principles	Principles for the qualification of green bonds
2018	Natural Capital Protocol + Supplement (Finance)	Framework for organizations to identify, measure, and value their impacts and dependencies on natural capital.
2018	Climate Bond Initiative Climate Bonds Standard	Sector-specific eligibility criteria for assets and projects that can be labeled as green investments

2018	Climate Disclosure Project (CDP), UN Global Compact (UNGC), World Resources Institute (WRI), and World Wildlife Fund, Science-Based Targets initiative.	Targets and guidelines referred to the Paris Agreement
2019	Partnership for Carbon Accounting Financials Global GHG Accounting and Reporting Standard for the Financial Industry	Guidelines for the specific asset class

Source: EBA, on management and supervision of ESG risks for credit institutions and investment firms ([EBA/REP/2021/18](#)), p.23-25.

Appendix (3): Comparing selected ESG frameworks key disclosure standards

Framework	GRI	IIRC	TCFD	SASB
Objectives	Measure companies' impacts on environment and society	Enhance information quality available to financial capital providers for efficient capital allocation	Provide a framework for climate-related disclosures and present financial implications of related business	Facilitate material sustainability information disclosures by issuers to investors
Voluntary/ Mandatory	Voluntary	Voluntary	Voluntary	Voluntary
Required information on "E"	Materials, Energy, Water, Biodiversity, Emissions, Waste, Environmental Compliance	No specific disclosure requirement: require companies to consider the use of 'natural capital' in reports and its role in	Focus on strategy, risk management, and metrics and targets around climate-related risks and opportunities. For example, it includes metrics for	Require information for corporate impacts on the environment: For example, it includes use of non-renewable, natural resources as inputs

		organizations' value chains	climate risk assessment, GHG emissions.	or through harmful releases into the environment
Required information on “S”	Metrics required on Labor practices, human rights, society and product responsibility	No specific social disclosure requirements	N/A	Social capital (e.g. human rights, local economic development) and human capital (e.g., training, diversity, and compensation)
Required information on “G”	Governance structure, executive level responsibility for ESG topics, stakeholder consulting on ESG topics, composition of highest governance body, identifying and managing ESG impacts, risk management process, etc.	Leadership structure including skills and diversity, strategic decision-making process, reflection of organization’s culture, ethics, and values in its use of capital.	Governance metrics related to board oversight and management's role in assessing and managing of climate-related risks and opportunities	Business model and innovation (i.e., addressing sustainability issues) and leadership and governance (i.e. management of conflicted interest with broad stakeholder groups)

Source: (BlackRock , 2021)

Appendix (4): GCC disclosure guidance alignment with the international standards

Country	GRI	SASB	TCFD	IIRC	CDSB	CDP
Bahrain	●	●	●	●	●	●
Kuwait	●	●	X	●	X	●
Qatar	●	●	X	●	X	●
Saudi Arabia	●	●	●	●	●	●
The UAE						
ADX	●	●	X	●	X	●
DFM	●	●	●	●	X	●

Source: <https://sseinitiative.org/>

Appendix (5): Key metrics and calculation for Kuwait's Boursa ESG Guide

5.1: Environmental metrics

Indicator
Environmental
GHG emissions
CO2 emissions, scope I
CO2 emissions, scope II
CO2 emissions, scope III
Emission Intensity
GHG emissions per output scaling factor
Total non-GHG emissions per output scaling factor
Energy use
Total amount of energy directly consumed
Total amount of energy indirectly consumed
Energy Intensity
Total direct energy usage per output scaling factor
Energy mix

Percentage: Energy usage by generation type
Water usage
Total amount of water consumed
Total amount of water reclaimed
Environmental operations
Does your company follow a formal environmental policy
Does your company follow specific waste, water, energy, and/or recycling
Does your company use a recognized energy management system? Yes/No
Environmental oversight
Does your Board/Management Team oversee and/or manage climate-related risks? Yes/No
Does your Board/Management Team oversee and/or manage other sustainability issues? Yes/No
Climate risk mitigation
Total amount invested, annually, in climate related infrastructure, resilience, and product development.

Source: Unified direction for a sustainable future, Kuwait Boursa, 2021

5.2: Social metrics

Social
Gender Pay Ratio
Ratio: Median male compensation to median female compensation
Employee Turnover
Percentage: Year-over-year change for full-time employees
Percentage: Year-over-year change for part-time employees
Percentage: Year-over-year change for contractors and/or consultants
Gender diversity
Percentage: Total enterprise headcount held by men and women
Percentage: Entry- and mid-level positions held by men and women
Percentage: Senior- and executive-level positions held by men and women
Temporary Worker Ratio
Percentage: Total enterprise headcount held by part-time employees
Percentage: Total enterprise headcount held by contractors and/or consultants
Non-Discrimination
Does your company follow a sexual harassment and/or non-discrimination policy? Yes/No
Injury Rate

Percentage: Frequency of injury events relative to total workforce time
Global Health & Safety
Does your company follow an occupational health and/ or global health & safety policy? Yes/No
Child & Forced Labor
Does your company follow a child and/or forced labor policy. Yes/No
If yes, does your child and/or forced labor policy also cover suppliers and vendors? Yes/No
Human rights
Does your company follow a human rights policy? Yes/No
If yes, does your human rights policy also cover suppliers and vendors? Yes/No
Nationalization
Percentage of national employees
Direct and indirect local job creation

Source: Unified direction for a sustainable future, Kuwait Boursa, 2021

5.3: Governance metrics

Governance
Board Diversity
Percentage: Total board seats occupied by men and women
Percentage: Committee chairs occupied by men and women
Board Independence
Does your company prohibit its CEO from serving as board chair? Yes/No
Percentage: Total board seats occupied by independents
Incentivized Pay
Are executives formally incentivized to perform on sustainability? Yes/No
Supplier Code of Conduct
Are your vendors or suppliers required to follow a Code of Conduct? Yes/ No
If yes, what percentage of your suppliers have formally certified their compliance with the code?
Ethics & Anti-corruption
Does your company follow an Ethics and/or Anti-Corruption policy? Yes/No
If yes, what percentage of your workforce has formally certified its compliance with the policy?
Data Privacy
Does your company follow a Data Privacy policy? Yes/No

Has your company taken steps to comply with GDPR rules? Yes/No
Sustainability reporting
Does your company publish a sustainability report? Yes/No
Is sustainability data included in your regulatory filings? Yes/No
Disclosure Practices
Does your company provide sustainability data to sustainability reporting frameworks? Yes/No
Does your company focus on specific UN Sustainable Development Goals (SDGs)? Yes/No
Does your company set targets and report progress on the UN SDGs? Yes/No

Source: Unified direction for a sustainable future, Kuwait Boursa, 2021