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Sustainable Finance in Banks as a Mechanism to Support the Green Economy – A Study of Different Experiences

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Abstract

This study examines the extent to which banks are transitioning to sustainable financing to support the green economy and explores the relationship between banks, sustainable funding, and the green economy. It analyzes the experiences of various banks worldwide, including First Abu Dhabi Bank in the United Arab Emirates, Triodos Bank in the Netherlands, and Riyadh Bank in Saudi Arabia. The findings indicate that these banks are actively advancing sustainable financing by integrating environmental, social, and governance (ESG) considerations to promote sustainable development. Furthermore, the study highlights the interconnected relationship between banks, sustainable funding, and the green economy, emphasizing how financial resources allocated to environmentally friendly enterprises enable banks to foster a more sustainable and inclusive green economy.

Keywords: Banks, sustainable financing, green economy, banking sustainability



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INTRODUCTION

Amid increasing environmental challenges and the pressing need for sustainable development, the role of the banking sector has become more crucial in supporting the green economy and achieving a balance between economic growth and environmental protection. Today, banks are among the key players in the financial system, possessing immense capacity to direct financial flows and shape investment trajectories. In this context, banks can serve as primary drivers in promoting sustainable investments that align with environmental and social priorities.

Furthermore, banks' shift toward sustainable financing can stimulate innovation and foster the development of new financial solutions that support environmental and social sustainability. This includes offering innovative financial products such as green loans and sustainable investment funds. The term "sustainable finance" encompasses various financial services and products dedicated to supporting environmentally sustainable

projects. These include investments in renewable energy—such as solar and wind power—energy efficiency improvements, sustainable water management, and initiatives aimed at reducing carbon emissions. By adopting sustainable finance, banks incentivize investments in sustainable projects.

Significance of the Study:

The study's significance lies in assessing the extent to which banks are adopting sustainable financing and highlighting their role in achieving sustainability across various dimensions.

Objectives of the Study:

This study aims to:

- Clarify the concept of banking sustainability and banks' orientation toward it.
- Define sustainable finance and its key dimensions.

 Analyze the relationship between sustainable finance and the green economy through selected case studies.

1. Studies in Foreign Literature

1.1 First Study: (Rayan, Tom, Katherine, Laurence, & Nick, 2020)

This study explores addressing environmental deficits through debt instruments, focusing on the practical and policy aspects of green bonds. It provides an introduction to green bonds, identifies key practical and policy concerns related to them, and examines the green bond market. Additionally, it establishes applied and critical research agendas regarding the use of green bonds as a potential solution to environmental deficits.

One of the key findings of this study is that green bonds can serve as an essential tool in advancing the green agenda. However, further comparative research is needed to assess the effectiveness of green bonds and their role in market development. The study also concludes that while green bonds significantly contribute to addressing environmental crises, they may not generate additional value solely through demand. Market contradictions persist, as investors seek price parity with conventional bonds, and environmental risks are often poorly integrated into credit ratings.

1.2 Second Study: (Zoëlle, 2023)

This study focuses on sustainable finance in financial institutions, particularly banks, examining the impact of sustainable finance on banks' financial performance. A systematic literature review methodology was employed, analyzing data extracted from 44 research articles. The study specifically investigates the effect of Environmental, Social, and Governance (ESG) factors on banking risks and financial performance.

Key findings indicate that a positive relationship exists between corporate social performance, environmental responsibility, and financial performance in many studies. However, some research found no significant relationship or even negative correlations. The study also discusses the importance of information transparency, non-economic incentives, reputation considerations, and investment risks in sustainable finance. Furthermore, it highlights both the advantages and limitations of sustainable finance, emphasizing the critical role of ESG factors in financial decision-making and their impact on the financial performance of banks and financial institutions. The study underscores the challenge of balancing profitability with sustainability.

1.3 Third Study: (Damien, Elise, Yvonne, & Nilskizer, 2023)

This study examines the challenges and opportunities related to financing the Sustainable Development Goals (SDGs) in Ghana, Indonesia, Mexico, and Senegal. It highlights the growing SDG financing gap, which has increased to \$3.9 trillion annually, and explores how

these countries are mobilizing resources through integrated national financing frameworks, SDG budgets, and SDG bonds.

- Ghana faces economic instability but leads local-level financing strategies.
- Indonesia leverages sovereign SDG bonds and energy transition partnerships.
- Mexico pioneered sovereign SDG bonds but struggles with governance challenges.
- Senegal aligns its national SDG financing strategy but requires more private-sector investments.

The study concludes that systemic financial reforms and stronger international cooperation are essential to closing financing gaps and accelerating SDG progress.

2. International Banks' Experiences in Sustainable Financing to Promote the Green Economy

2.1 First Abu Dhabi Bank's Commitment to Sustainable Financing

First Abu Dhabi Bank and Sustainable Finance in the UAE (December 5, 2023)

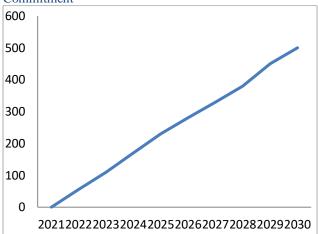
First Abu Dhabi Bank (FAB), the largest bank in the UAE and one of the world's most prominent financial institutions, has announced its commitment to lend, invest, and provide financing facilities exceeding AED 500 billion (\$135 billion) for sustainability and transition finance projects by 2030.

This pledge marks an 80% increase from the AED 275.4 billion (\$75 billion) allocated in 2021, making it the largest sustainable finance commitment by any bank in the Middle East and North Africa (MENA) region to date. Moreover, this commitment represents half of the AED 1 trillion (\$270 billion) pledge announced by the UAE Banks Federation during COP28. (Source)

This initiative underscores FAB's deep commitment to playing a leading role in advancing the region's sustainable finance agenda while demonstrating its agility in responding to evolving customer and societal priorities.

As a regional climate action leader, FAB's sustainable financing has had a tangible positive impact in the UAE, the MENA region, and globally. From 2021 to September 2023, FAB financed over AED 100 billion (\$27 billion) in renewable energy, clean transportation, green buildings, and social projects.

Figure 1: Graph Illustrating FAB's Financial Commitment



Source: (Sigma Earth, 2024)

The graph above illustrates the projected linear increase in the committed amount over the decade, starting in 2021. This progress is represented by a blue line, symbolizing the bank's commitment to environmental sustainability, gradually reaching the AED 500 billion target by 2030. This financial commitment signifies a major shift toward supporting renewable energy projects, energy-efficient infrastructure, and carbon emission reduction initiatives. Over the years, the strategic increase in financing highlights the phased approach adopted by the bank to significantly contribute to the green finance sector, aligning with global sustainability goals and the United Arab Emirates' vision for a sustainable future.

First Abu Dhabi Bank Pledges AED 500 Billion for Sustainable Financing by 2030

This transformative commitment within the financial sector aims to support projects with a significant environmental impact. The ambitious initiative aligns seamlessly with the broader objectives of the UAE, as First Abu Dhabi Bank channels substantial financial resources into sustainable finance, positioning itself at the forefront of the transition toward a sustainable future.

Second, Abu Dhabi Bank and Sustainable Finance in the Middle East

First Abu Dhabi Bank's pledge to allocate AED 500 billion to green finance by 2030 is a pivotal move within the Middle East's financial landscape. This substantial investment is expected to have a profound impact, not only by enhancing environmental sustainability but also by setting a new industry benchmark for financial institutions in the region.

By prioritizing sustainable finance, First Abu Dhabi Bank is actively contributing to reducing the carbon footprint—a crucial step toward combating climate change and fostering sustainable development. The bank's commitment extends beyond its balance sheets,

serving as a guiding example for other financial institutions in the UAE and across the Middle East.

This initiative is likely to create a domino effect, encouraging banks and financial entities to prioritize green investments and develop sustainable financial products. As more institutions align with this sustainable financing model, the collective impact can significantly accelerate the region's transition to a greener economy. [(Abu Dhabi Bank, 2023)]

Furthermore, First Abu Dhabi Bank's commitment could stimulate broader economic diversification efforts in the region, reducing reliance on fossil fuels while fostering innovation in renewable energy and sustainable technologies. This strategic shift toward sustainable finance is not merely about environmental responsibility; it represents a progressive approach to financial investment, promising a more resilient and sustainable economy for the future of the Middle East.

2.2 Triodos Bank – The Netherlands First: Introduction to Triodos Bank

Triodos Bank is a specialized European sustainable bank headquartered in the Netherlands. Established in 1980, it has four branches located in Zeist (Netherlands), Brussels (Belgium), Bristol (United Kingdom), and Madrid (Spain), along with an agency in Frankfurt (Germany). Triodos Bank is recognized as a pioneer in ethical banking, known for its focus on sustainable and ethical financing. The bank funds companies that it believes add cultural value and benefit both people and the environment. Due to its commitment to sustainable banking, it has been regarded as a leader in the field. In this section, we will explore Triodos Bank's case study and its impact on sustainable financing. [(Katrin, 2011)] The name Triodos is derived from Greek, meaning a "three-way approach", reflecting the three pillars of sustainability it upholds: People, Planet, and Prosperity. This means that the bank considers the social, environmental, and economic impact of every project it finances. The bank aims to stimulate national and international initiatives that promote social innovation, particularly in organic farming, environmental sustainability, renewable energy, arts and culture, education, and healthcare.

Triodos Bank manages a range of funds across these sectors and raises donations to support research and development in the fields it operates in, across the countries where it has a presence.

Triodos Bank's Mission

Triodos Bank finances companies, institutions, and projects that add cultural value and benefit both people and the environment, with the support of depositors and investors who wish to promote socially responsible enterprises and sustainable communities.

Core Values and Principles of Triodos Bank

- Sustainable, and Inclusive 1. A Resilient, **Economy**
 - The financial sector plays a crucial 0 role in supporting a resilient, sustainable, and inclusive economy.
 - The bank focuses on strategic themes such as energy, climate, food and agriculture, and social inclusion.
- 2. Transparent Banking
 - Trust is a key component of banking 0 and the financial sector as a whole.
 - Triodos Bank publishes all data on its loans and banking services, ensuring maximum transparency.
- 3. All Financing is Impact Financing
 - Every financial decision inherently has an impact on institutions, investors, society, and nature.
 - By investing money consciously and responsibly, the bank aims to achieve positive outcomes.
- 4. Diversity in Banking Practices
 - The bank continuously develops innovative ways to finance entrepreneurs, businesses. and sustainable initiatives.

Second: Triodos Bank and Sustainable Financing **Policy**

Triodos Bank's Financing Policy

Triodos Bank's financing approach differs significantly from traditional banks, as it only finances sustainable projects that contribute to a better world. This means that the bank does not fund fossil fuel projects, arms trade, or any environmentally harmful activities. Instead, it focuses on financing projects that have positive social and environmental impacts. The bank offers various financing options, including loans, mortgages, and investments, to support sustainable businesses and projects.

Triodos Bank has established a dedicated sustainable finance fund (TSFF), a renewable fund that invests its capital and reserves for the public good. The Board of Directors of this fund developed an operational policy plan, which was approved in a board meeting held on February 13, 2023. If necessary, policy adjustments are made annually. [(Triodos Bank Sustainable Financing Policy Report, 2024)]

TSFF Fund Budget

Table (01): TSFF Fund Budget (2021-2024) – Triodos

Currency: Euro (€)

Bank

		11	il .	ll .
Category	2021	2022	2023 (Forecast	2024 (Forecast
Total Equity	19,928,0 00	5,638,00 0	5,400,00 0	7,400,00 0
Total Outstandin g Debt	3,991,00 0	7,685,00 0	8,350,00 0	12,350,0 00
Subordinat ed Loans	1,125,00 0	2,250,00 0	2,625,00 0	4,625,00 0
Convertibl e Loans	200,000	160,000	120,000	120,000
Senior Loans	916,000	3,525,00 0	3,480,00 0	5,105,00 0
Impact Loans	1,000,00 0	1,000,00 0	1,000,00	1,000,00 0
Other Investment s	750,000	750,000	1,125,00 0	1,500,00 0
Receivable s & Deferred Assets	824,000	870,000	-	-
Liquidity	19,835,0 00	33,513,0 00	32,000,0 00	26,000,0 00
Short- Term Liabilities	952,000	1,097,00 0	-	-
Total	43,626,0 00	46,609,0 00	45,750,0 00	45,750,0 00

Third: The Impact of Triodos Bank on Sustainable

Triodos Bank has had a significant impact on sustainable financing. In 2023, the bank recorded an increase in sustainable financing by €460 million, bringing the total to €11.1 billion (compared to €10.6 billion in 2022). Additionally, the bank's equity position increased by €37 million, reaching €1.289 billion (2022: €1.252 billion). The total assets under the bank's management grew by €649 million in 2023, reaching €23.2 billion. This growth was driven by an increase in the total balance sheet, which expanded by €376 million to €16.2 billion (2022: €15.8 billion), mainly due to the growth of its mortgage portfolio in the Netherlands.

Furthermore, the funds under management increased by €273 million, reaching €7.1 billion. This was primarily attributed to rising share prices, which compensated for the trend of outflows.

Total liabilities increased by 2%, primarily due to a rise in bank deposits, as repurchase agreements and liquidity facility transactions were completed in 2023 with a total value of €450 million.

Triodos Bank has financed more than 46,000 projects worldwide, including renewable energy, organic farming, and sustainable housing. Its total assets have exceeded €17 billion, making it one of the largest sustainable banks in Europe. The bank serves as a leading example of sustainable finance, and its commitment to sustainablity has helped build a strong reputation as a sustainable financial institution.

The following table summarizes these statistics:

Table (02): Triodos Bank's Financial Overview (2022-2023)

(Amounts in million euros)

(Minounts in inition cures)			
Category	2023	2022	
Cash & Cash Equivalents	2,141	2,581	
Loans & Advances to Customers	11,080	10,620	
Debt Securities at Cost	2,188	1,690	
Other Assets	767	909	
Total Assets	16,176	15,800	
Deposits from Banks	670	337	
Customer Deposits	13,759	13,816	
Subordinated Debt	260	260	
Other Liabilities	198	135	
Total Liabilities	14,887	14,548	
Total Equity	1,289	1,252	
Total Equity & Liabilities	16,176	15,800	

Source: (Triodos Bank, 2023)

Fourth: Triodos Bank's Strategy and Future Goals Triodos Bank has adopted a set of strategies and future objectives to advance a sustainable economy. Some of these key strategies and goals include:

Triodos Bank's Strategy

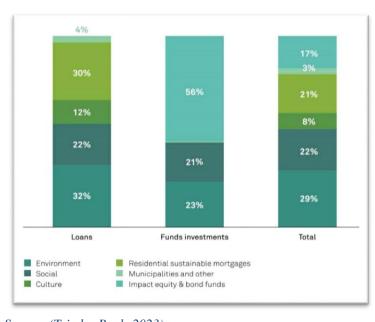
To meaningfully contribute to a net-zero economy, strong action is required, as stated by the Triodos Sustainable Finance Foundation (2024):

- Transforming Financial Mechanisms and Methods:
 - Triodos Bank aims to redefine financial services by proving that values-based banking and impact investing can be both commercially strong and resilient. The bank strives to offer financing options, including loans and mortgages, to promote a sustainable, transparent, and diverse financial sector, ensuring that money is used to drive positive change.
- Environmental & Social Impact of Renewable
 Energy Projects:
 Triodos Bank recognizes the negative
 environmental impact of fossil fuel-based
 energy and the benefits of renewable
 technologies. In 2023, the bank financed over

- €2 billion in solar and wind energy projects, contributing to the transformation of the energy sector. The 2023 annual report transparently outlines the potential environmental and social impacts of the bank's renewable energy portfolio, emphasizing risk mitigation in compliance with environmental and social regulations.
- Sustainability at the Core of the Bank:
 At its core, Triodos Bank seeks to maximize sustainability, recognizing that profitability is only a means to achieving a greater sustainable goal. While profit is an important efficiency measure, the bank ensures that it never comes at the expense of sustainability.
- Environmental Responsibility:
 The bank ensures that profits are not generated at the expense of the environment. It supports its customers in creating positive environmental change within their shared ecosystems.
- Cultural Transformation: Triodos Bank acknowledges that culture and customer awareness can drive positive change, fostering creativity and innovation in business and providing opportunities for continuous personal development.
- Social Impact: Businesses financed by Triodos Bank are dedicated to improving and enriching the lives of millions, addressing inequality and injustice, and developing communities.

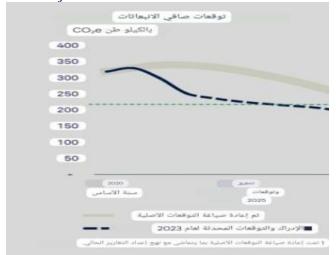
The following figures illustrate these strategies: Figure (02): Loan & Investment Fund Allocation Across Key Sectors

(Environment, Social Sector, Culture, Sustainable Residential Mortgages, Equity & Bond Fund Impact, Municipalities – since 2020)



Source: (Triodos Bank, 2023)

Figure (03): Projected Net Emissions (2020–2030) in Kilotons of CO₂



Source: (Triodos Bank, 2023)

2-3. Riyad Bank and Sustainable Transformation

First: Introduction to Riyad Bank's Sustainability Efforts Riyad Bank, one of the largest and most established financial institutions in Saudi Arabia, was founded in 1957 and ranks third in terms of total assets. In 2018, the bank launched a five-year transformation strategy (2018–2022). By 2021, its capital had reached 30 billion SAR, with foreign ownership of shares increasing to 10%.

The bank operates banking and investment services both domestically and internationally, offering a comprehensive financial system for individual and corporate clients. It finances commercial and industrial projects and extends its services to include Islamic banking products.

Over the past two years, Riyad Bank has successfully embedded a sustainability-driven culture, which is now yielding positive results. The goal of this transformation strategy is to help partners and society at large achieve their aspirations while positioning itself as the most trusted and business-oriented financial partner. Riyad Bank aspires to be the best bank in Saudi Arabia by 2025, focusing on four key pillars:

- Most Profitable: Aiming to be the most profitable bank in Saudi Arabia compared to its peers. (Riyad Bank, February 2022)
- Most Efficient: Striving to be the most efficient and effective bank in the Kingdom.
- Preferred Choice: Seeking to be the best bank for customers and the best workplace for employees.
- Digital Empowerment: Aiming to be the most advanced, innovative, and digitally empowered bank in Saudi Arabia.

To reinforce corporate social responsibility (CSR) and sustainability, Riyad Bank launched the "Bokra" (Tomorrow) Initiative in 2019, implementing distinctive projects that align with the bank's strategy, operations, the United Nations Sustainable Development Goals (SDGs), and Saudi Vision 2030. Bokra is built on four pillars:

- 1. Economy
- 2. Environment
- 3. Knowledge
- 4. Society

Second: Rivad Bank and Sustainable Finance

Riyad Bank has adopted a comprehensive approach to promoting financial sustainability, emphasizing the importance of Environmental, Social, and Governance (ESG) principles, while prioritizing the commercial viability of its banking activities.

Through its Bokra strategy, the bank plays a vital role in strengthening Saudi Arabia's economy by providing capital and influencing businesses and clients across different economic sectors through its products and services.

Despite the global financial crisis of 2008, the financial sector has recovered but continues to struggle with rebuilding stakeholder trust. Riyad Bank views sustainability efforts as a golden opportunity to demonstrate responsible banking practices and create a positive impact through sustainable finance.

Third: Riyad Bank's Sustainable Banking Products (Riyad Bank, 2022)

A- Sustainable Sukuk

In 2021, Riyad Bank initiated the issuance of its firstever AT1 (Additional Tier 1) Sustainable Sukuk denominated in US dollars, with a total value of \$750 million, making it the first sustainable Sukuk of its kind globally. The annual profit rate was set at 4%, marking the lowest credit spread achieved by any Sukuk in GCC banks

The subscription order book coverage ratio reached 4.3 times, indicating a 4.3-fold increase in demand for sustainable Sukuk, which underscores investor confidence in the bank's strategic direction, board of directors, and management team.

To structure this issuance as a sustainable Sukuk, Riyad Bank developed its first-ever Sustainable Finance Framework, based on social and sustainability principles advocated by the International Capital Market Association (ICMA). This framework covers a wide range of eligible sustainable financing systems, aligned with Riyad Bank's ambition to become a regional leader in Environmental, Social, and Governance (ESG) initiatives. The bank aims to drive green and social development in Saudi Arabia in line with Vision 2030

and its flagship sustainable financing program, particularly the Bokra Strategy.

Furthermore, the framework complies with global best practices and was externally reviewed by Standard & Poor's (S&P) Global Ratings, which confirmed its alignment with all sustainable finance principles. S&P positively assessed the bank's use of proceeds, highlighting the strong alignment of each category with its broader sustainability agenda.

B- Green Banking and Renewable Energy

In alignment with its 2025 strategy to position Riyad Bank as a leader in the Saudi banking sector while fulfilling its environmental responsibilities, the bank launched green and renewable energy banking initiatives in parallel with the Saudi Green Initiative (SGI).

By providing sustainable financing, Riyad Bank contributed to the Saudi Green Initiative and renewable energy sector by launching nine (9) programs under its Green and Renewable Banking Program, in line with Saudi Vision 2030, as shown in the following table:

Table 03: Green and Renewable Banking Program in Alignment with Vision 2030

Angimient with vision 2000				
Program	Focus Area			
Smart Green Buildings	Housing, office spaces, and commercial projects			
Green Supply Chains	Sustainable project supply chains			
International Green Investments	Cross-border sustainability projects			
Eco-Friendly SMEs	Small and medium-sized businesses			
Green Industries	Local factories and sustainable industrial projects			
Green Energy	Solar and renewable energy sales			
Green Land Development	Landscaping and environmental conservation projects			
Green Transport	Sustainable and eco-friendly transportation projects			
Green Fintech	Digital solutions and startup financing for green technologies			

(Source: Riyad Bank, 2021)

C- Syndicated Loans for Green Projects

Reaffirming its strategic commitment to investing in green projects and renewable energy, Riyad Bank successfully provided several major syndicated loans to finance solar energy projects and specialized energy firms.

Additionally, the bank has supported numerous largescale projects and emerging industrial entities that are green-finance-driven through syndicated loans. A notable example of its leadership in green financing is its key partnership with the Red Sea Development Company (RSDC) in renewable social sustainability. Riyad Bank played a pioneering role in green financing, contributing SAR 2.95 billion to the syndicated facility granted to RSDC

Riyad Bank's Agreements and Initiatives in Sustainable Finance

Agreement with Sahara Technology for Renewable Energy Investments

In 2021, Riyad Bank signed an agreement with Sahara Technology to support and promote investments in renewable energy projects. This program aims to:

- Support businesses in transitioning to ecofriendly and energy-efficient products.
- Strengthen Saudi renewable energy initiatives.
- Encourage the production of green products and services.
- Accelerate the adoption of energy-efficient green products and services.

Furthermore, Riyad Bank's recent collaboration agreement with King Salman Energy City (SPARK) highlights the bank's commitment to sustainability through innovative solutions while prioritizing the well-being of society in both the present and the future.

Moving forward, Riyad Bank intends to mandate the integration of Environmental, Social, and Governance (ESG) criteria in all new products and services.

Fourth, Riyad Bank's Initiatives in Sustainable Finance Riyad Bank launched two key initiatives: "Namul Litusna'" (We Finance to Manufacture) and "Nastathmir Litusna'" (We Invest to Manufacture), aimed at supporting and financing local industries with a total investment of SAR 6 billion.

Table 04: "We Finance to Manufacture" and "We Invest to Manufacture" Initiatives

Initiative	Target Sectors	Investment Value
01 - We Finance to Manufacture (Financing the localization of 50 products)	Transportation.Machinery and	SAR 4 billion
02 - We Invest to Manufacture (Financing investment funds for industrial development)	equipment Pharmaceuticals	

(Source: Riyad Bank, 2021)

Other Key Initiatives: Among the additional initiatives undertaken by Riyad Bank are: (Riyad Bank, February 2022)

A. Memorandum of Understanding for Establishing and Developing "Masar" Business Center

Riyad Bank signed a Memorandum of Understanding (MoU) with Umm Al-Qura Development and Construction Company to establish and develop the Masar Business Center.

The Masar Center is designed to provide financial and non-financial programs, supporting both public and private sector projects, catering to corporate investments and individual investors. The center focuses on business enablers, which include 15 key elements:

- Business establishment
- Operations
- Logistics services
- Partnerships
- Humanitarian business
- System solutions
- Digital transformation
- Supply chains
- Intelligence and innovation
- Green environment
- Renewable and clean energy
- Local content
- Efficiency and optimization
- Corporate clients
- Regulations and procedures

B. Implementation of Islamic Banking Principles

Islamic banking refers to a financial system that complies with Shariah principles, ensuring the development of an Islamic economy. One of the key rules of Shariah is the prohibition of interest (Riba) in any financial transaction, both for the lender and the borrower. Additionally, Islamic banking prohibits any commercial activities involving goods or services deemed impermissible under Shariah law.

As part of this commitment, Riyad Bank has implemented a strong and effective Shariah governance framework, aligned with the Shariah Governance Framework for Local Banks in Saudi Arabia, issued by the Saudi Central Bank (SAMA). This framework ensures an effective internal control environment and guarantees that Islamic banking transactions comply with Shariah principles.

Riyad Bank places great emphasis on Islamic banking principles and has an esteemed Shariah Committee that reviews all Islamic banking products and activities to ensure compliance with Shariah ethics and regulations. The bank strictly adheres to the committee's recommendations and refrains from offering any services prohibited by the Shariah Board.

Islamic Banking Achievements (2021)

- Riyad Bank held nine (9) meetings between the Islamic Banking Division and the Shariah Committee.
- The meetings resulted in the approval of 18 Islamic financial products and solutions.
- The bank expanded its portfolio of Islamic products, offering a range of financing and investment solutions tailored to the needs of clients and Riyad Capital customers.
- In alignment with Vision 2030, which aims to increase Saudi household savings rates, Riyad Bank responded to rising financial awareness by providing more customized Islamic banking services.
- The Riyad Saudi Equity Fund, compliant with Shariah principles, won the "Best Islamic Equity Fund 2021" award at the Global Islamic Finance Awards (GIFA).

C- Supporting Financial Inclusion:

Riyad Bank dedicates its efforts to achieving its goal of being an inclusive institution committed to serving all customers without discrimination based on race. nationality, religion, profession, or gender. There is no doubt that technology-driven innovation has greatly facilitated financial inclusion, especially with the widespread use of smartphones. Banks have increasingly been able to provide accessible and cost-effective digital financial services that reach previously unbanked populations. Rivad Bank is committed to contributing effectively to all sectors of the economy, placing support for micro, small, and medium enterprises (MSMEs) at the top of its priorities. The bank offers a range of products and services tailored to their specific needs and supports these businesses through the "Kafalah" program, which provides government-backed guarantees to facilitate financing for SMEs that may face challenges in securing funds through conventional banking channels. In this regard, Riyad Bank was the first to finance small enterprises upon the launch of the "Kafalah" program.

D- Innovation in Financial Products:

The bank has set its strategic ambitions, aiming to become the best bank in Saudi Arabia by 2025. To achieve this vision, Riyad Bank has focused on creating value through innovation—an approach that has yielded tangible results since 2021. The bank has leveraged its existing products and services to enhance the customer experience. By fostering a culture of innovation among its employees, Riyad Bank encourages creativity. In 2021, the bank launched the "Mulhem" program, which recognizes and rewards employees for ideas that enhance operational efficiency and profitability. This initiative has motivated employees from diverse backgrounds and experiences to generate a wide array of innovative ideas. In this context, the bank also conducted its first innovation boot camp, designed to help employees refine their ideas into viable business models suitable for customer offerings. Riyad Bank plans to expand its innovation process to involve customers in the coming year, allowing them to participate in improving existing products and developing innovative solutions.

Through its innovation-driven efforts, Riyad Bank has gained a competitive edge in the banking sector, creating new avenues for maximizing internal operations and corporate culture. Additionally, the bank has benefited from the emerging wave of fintech startups, strengthening its reputation as a technology-friendly financial institution. Thanks to initiatives such as the open innovation platform and digital contracts, Riyad Bank has invested in various projects that enhance the infrastructure for open banking services. These efforts align with the new trends set by the Saudi Central Bank and focus on delivering premium services that generate value for the bank. The bank's initiatives are based on a strategic and proactive approach, aiming to address challenges before they arise.

E- Developing Innovative Financial Solutions Through Riyad Bank's "Wasl" Platform:

In July 2021, Riyad Bank launched "Wasl," a simulation platform designed for entrepreneurs and innovators, expected to play a pivotal role in advancing the Financial Sector Development Program in line with Saudi Vision 2030. The platform provides entrepreneurs and financial professionals with real-time experimental data, enabling them to:

- Develop software and applications that simulate financial data.
- Utilize banking communication tools to help build innovative business models.
- Access instant and seamless verification processes.
- Benefit from high security standards and technical support.

The platform fosters an environment that enables local talent to innovate and develop digital banking services and fintech solutions, driving economic development and accelerating innovation for future generations. It is also expected to create future opportunities for collaboration between financial institutions and fintech companies to develop innovative financial solutions and cutting-edge banking applications for Saudi Arabia's financial sector.

Riyad Bank is one of the leading financial institutions in Saudi Arabia that actively supports digital transformation initiatives. It was the first bank in the country to launch a venture capital fund worth SAR 100 million dedicated to fintech investments. Additionally, the bank has formed strategic partnerships with various global innovation platforms.

R- Key Achievements of 2022

Riyad Bank achieved a record-breaking performance in 2022, setting unprecedented milestones that elevated its

key indicators to new heights. This success was driven by the effective execution of its strategy, a commitment to forming fruitful partnerships, fostering innovation, and creating sustainable value for shareholders and stakeholders. The bank focused on delivering efficient digital banking services, with some of its notable accomplishments including:

- January: In collaboration with Restart, Riyad Bank set a Guinness World Record for the longest solar-lit road in Riyadh, using more than 468 solar-powered streetlights.
- February: Issued the world's first additional Tier 1 sustainable sukuk.
- June: Opened new centers dedicated to supporting small and medium enterprises (SMEs).
- August: Introduced innovative hedging solutions for its clients, marking the first time such solutions were offered for consumer goods. Additionally, the bank signed a Memorandum of Understanding with the Afaq Khadra Environmental Association to plant 4,000,000 trees over the next 10 years.
- November: Awarded the "Excellence in SME Banking Services" by the Open Banking Forum in recognition of its unique contributions to tailored financial solutions for SMEs.
- Riyad Bank also became the official sponsor of the Purchasing Managers' Index (PMI), one of the most significant business indicators for the sector. This initiative is expected to enhance the bank's reputation and showcase its strong financial performance through a monthly report titled Riyad Bank PMI Index.

S- Riyad Bank Wins the Award for Best Innovation in Digital Banking in Saudi Arabia for 2023

In recognition of its leadership in digital banking, Riyad Bank received the Best Innovation in Digital Banking Award in Saudi Arabia from the Middle East & Africa Magazine during the recent Banking Technology Awards held in Dubai. This event honors banks and fintech companies that adopt the latest smart banking solutions to enhance their growth opportunities.

The award highlights Riyad Bank's achievements in digital banking, reinforcing its role as a key driver of smart digital transformation within the banking industry in Saudi Arabia and the broader region.

Digital banking and smart transformation are among Riyad Bank's strategic pillars. The bank has launched a wide range of initiatives and solutions that have reshaped the banking industry in Saudi Arabia, propelling it toward innovation and leadership. Riyad Bank continues to build on its strong foundation of advanced technologies, smart applications, and a robust suite of digital banking services, solidifying its position as a pioneer in the sector.

S- Riyad Bank's Achievements in Q1 2024

Riyad Bank, the third-largest bank in Saudi Arabia by total assets, recorded a net profit of SAR 2,072.7 million by the end of Q1 2024, reflecting a 3% increase compared to SAR 2,019.6 million in the same period of 2023.

The following table presents a quarterly comparison (in million SAR):

Table No. (05): Comparison of Riyad Bank's Profit Growth in O1 2024

Growm II			
Change (%)	Q1 2024	Q1 2023	Item
1.2%	3,050.88	3,088.35	Net Special Commission Income
1.3%			Operating Income
25%	435.95	580.89	Provisions
2.6%	2,072.72	2,019.59	Net Income
/	3,000.00	3,000.00	Average Number of Shares
2.6%	0.69	0.67	Earnings per Share (SAR)
3.1%	0.66	0.64	Diluted Earnings per Share (SAR)

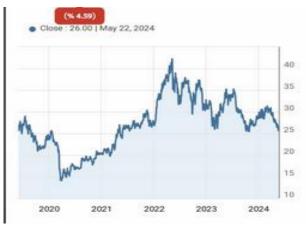
Source: Argaam, 2024

Key Insights from the Table

The data above indicates that Riyad Bank is consistently striving to increase its profitability. Nearly all key financial indicators improved in Q1 2024 compared to Q1 2023. The bank demonstrated noticeable growth in net income, operating income, and earnings per share, showcasing its strong financial performance.

Figure No. (03): Growth in Riyad Bank's Profits (2020-2024)

The figure below illustrates the fluctuations in Riyad Bank's profit levels from 2020 to 2024, highlighting a steady upward trend.



Source: Argaam, 2024

3- Discussion of Results

3.1. First Abu Dhabi Bank (FAB):

- Between 2021 and 2023, First Abu Dhabi Bank (FAB) financed environmental projects worth over AED 100 billion.
- The bank's sustainable financing projects have been distributed across various geographical regions:
- 57% in the United Arab Emirates,
- 21% in Saudi Arabia.
- 11% in Singapore,
- 5% in Bahrain,
- Additional projects in Europe, the Americas, and South Asia.
- 86% of the funding was provided through conventional financing, while 14% was through Islamic financing.
- ➤ By 2030, FAB aims to allocate AED 500 billion to sustainable environmental projects. This includes investments in:
- Renewable energy such as solar and wind power,
- Energy efficiency advancements,
- Sustainable water management,
- Initiatives to reduce carbon emissions.
- Expanding the sustainable financing target marks a significant achievement for FAB. In October 2021, the bank joined the Net-Zero Banking Alliance (NZBA), becoming the first bank in the Gulf Cooperation Council (GCC) to commit to achieving carbon neutrality by 2050.
- FAB's portfolio will include transition financing, which is crucial for heavy industries, extraction sectors, and hard-to-abate sectors. The bank will also offer early-stage climate solutions, including investments in hydrogen energy.

The above analysis demonstrates FAB's strong commitment to sustainable finance and its role in fostering a green economy.

3.2 Triodos Bank

Triodos Bank serves as a leading example of successfully integrating green investments and sustainability into its business model. The bank focuses exclusively on sustainable financing for projects that have a positive impact on both society and the environment. It offers a range of sustainable investment options, including renewable energy projects, organic farming, and sustainable housing. Notably, the bank financed 640 renewable energy projects, resulting in the elimination of 996,000 tons of CO₂ emissions (Triodos Bank Annual Report 2023).

Triodos Bank's commitment to sustainable financing has not only attracted investors but also generated significant profits, with a net profit of $\[mathcarce{}\]$ 77.2 million in 2023 (Triodos Bank Annual Report 2023).

The bank's approach to sustainable financing is based on three key pillars:

- First Pillar: Integrating Environmental, Social, and Governance (ESG) factors, emphasizing environmental risk management and corporate governance in lending, investments, and banking operations.
- Second Pillar: Managing climate risks, including risk disclosure, data provision, and reporting to help mitigate climate change and adapt to its effects.
- Third Pillar: Sustainable financing, which focuses on regulatory efforts and financial institutions' role in directing capital flows toward climate-supportive activities and the green economy.

Triodos Bank currently serves over 744,000 clients, managing €22.5 billion in total assets. It provides sustainable financing to 105 institutions across 44 countries worldwide. With its long-term commitment to clean environmental investments, Triodos Bank aims to achieve even greater sustainability milestones by 2030.

3.3 Riyad Bank

In recent years, Riyad Bank has emerged as a leading financial institution in Saudi Arabia in the field of sustainable financing. The bank has taken several steps to adopt financial policies that promote sustainable development and environmental conservation, including:

- A. Commitment to Environmental Standards: Riyad Bank strives to comply with international and local environmental regulations, financing projects that reduce carbon emissions and promote renewable energy usage.
- B. Support for Solar Energy and Green Buildings: The bank actively finances projects in solar energy and sustainable real estate.
- C. Partnerships and Initiatives: Riyad Bank has collaborated with various local and international sustainability initiatives.
- D. Transparent Reporting: The bank issues regular sustainability reports, reinforcing transparency and accountability.

Thus, Riyad Bank's sustainable financing strategy demonstrates a positive and long-term commitment to sustainability, positioning it as a key player in green banking in Saudi Arabia.

3.4 Comparison of Experiences

First Abu Dhabi Bank (FAB) in the United Arab Emirates has financed over AED 100 billion in environmental projects between 2021 and 2023. The bank aims to increase its sustainable financing portfolio to AED 500 billion by 2030. This highlights FAB's strong commitment to green financing and the promotion of a sustainable economy by offering financial services and products tailored to support environmentally sustainable projects. These investments include

renewable energy sources such as solar and wind power, energy efficiency advancements, sustainable water management, and initiatives to reduce carbon emissions. Triodos Bank, on the other hand, serves over 744,000 clients, managing $\[mathebox{\ensuremath{\ensuremath{6}}}\]$ billion in assets and financing 105 sustainable institutions across 44 countries. The bank is dedicated to creating a cleaner environment through sustainable investment and financing in various sectors. By 2030, Triodos Bank expects to achieve even better sustainability results.

Riyad Bank, in an effort to reinforce social responsibility and sustainability, launched the "Bokra" (Tomorrow) Initiative, which aligns with Saudi Vision 2030 and the United Nations Sustainable Development Goals (SDGs). Since 2019, the bank has implemented various sustainability-driven initiatives.

In July 2021, Riyad Bank introduced "Wasl Platform", a simulation platform designed to support entrepreneurs and innovators. The platform is expected to play a significant role in advancing the objectives of the Financial Sector Development Program (FSDP) under Saudi Vision 2030.

Additionally, in 2021, Riyad Bank issued its first-ever AT1 sustainability sukuk, denominated in USD 750 million, marking the first sustainable sukuk issuance in the region.

Based on online reports and desk research, it is evident that these banks are heavily invested in green financing. Sustainable financing has become a key mechanism for driving the green economy, and banks play a critical role in this transformation through various initiatives, commitments, and financial mechanisms. This confirms the growing shift toward sustainable finance, green economy development, and environmental sustainability in the banking sector.

Conclusion

The shift of banks toward sustainable finance has become increasingly noticeable, reinforcing the link between sustainable financing and the green economy. By adopting sustainable finance policies, banks can play a crucial role in achieving sustainable development and strengthening the green economy, leading to long-term environmental, social, and economic benefits. To ensure the continuity of this approach, collaboration between governments, banks, financial institutions, and society is essential to achieve common sustainability goals.

After analyzing the experiences of First Abu Dhabi Bank, Triodos Bank, and Riyad Bank, it is evident that these banks have made long-term commitments toward sustainable financing, aiming for milestones between 2030 and 2050. Sustainable finance serves as a key mechanism for green economic growth. The study highlights key factors that banks should focus on when adopting sustainable finance:

- Integration of Environmental, Social, and Governance (ESG) Factors: Managing environmental risks and governance principles in lending, investment, and banking operations.
- Reducing Carbon Emissions: Complying with international and local environmental standards, financing projects that reduce emissions, and promoting renewable energy.
- Enhancing Resource Efficiency: Ensuring sustainable economic resource utilization, optimizing natural resource management, and minimizing waste.
- Climate Risk Management: Developing risk management frameworks to address climate change impacts, improving disclosure practices, and maintaining transparency through data reporting.
- Diversification in Banking Services: Innovating sustainable financial products to support entrepreneurs, SMEs, and sustainable business initiatives.
- Commitment to Green Finance: Expanding financial services that support environmentally sustainable projects, including investments in solar energy, wind power, energy efficiency, water management, and carbon reduction initiatives.

Key Findings by Bank First Abu Dhabi Bank (FAB) – UAE

- Reducing emissions through green bond issuance to align with the net-zero strategy.
- Launching a sustainable demand deposit account to help corporate clients achieve their ESG goals.
- Increasing sustainable financing by 80%, targeting AED 500 billion by 2030.
- Introducing the region's first sustainability index in collaboration with Mastercard to help businesses meet sustainability goals.
- The bank's strategic increase in green finance reflects its commitment to UAE's sustainable vision and global sustainability objectives.

Triodos Bank – Netherlands

- Its mission is to make money work for positive social, environmental, and cultural change.
- Expanding investment funds to provide direct sustainable investment opportunities in inclusive finance, sustainable energy, organic food, agriculture, and green companies.
- The first bank to join the global campaign for an international Fossil Fuel Non-Proliferation Treaty.
- Recognized as the most active clean energy coordinator globally.
- Prioritizing five key sustainability transformations: energy, food, resources, society, and well-being.

• Focusing on high-impact sectors, such as green buildings, nature-based solutions, ICT, renewable energy, and manufacturing sustainability.

Riyad Bank – Saudi Arabia

- Adhering to Islamic banking principles, ensuring financial transactions comply with Sharia law.
- Promoting financial inclusion, particularly for youth and people with disabilities.
- Driving financial innovation through the "Wasl Platform", launched in May 2021 to support entrepreneurs and innovators.
- Fostering a sustainable procurement strategy.
- Enhancing community investment through the "Bokra" initiative, aligning with Saudi Vision 2030 and the UN Sustainable Development Goals (SDGs).

Recommendations

- Encouraging banks to support renewable energy and eco-friendly technologies, raising awareness about their societal benefits.
- Integrating governance standards in investment decisions, ensuring transparency and disclosure of environmental and social impacts.
- Reviewing policies, laws, and banking regulations to facilitate the adoption of sustainable finance and prevent issues like greenwashing.
- Imposing carbon taxes and directing revenue toward sustainable projects.
- Developing financing programs to support sustainable projects, particularly for SMEs.
- Establishing dedicated sustainability and green finance departments within banks.
- Aligning banking operations with international environmental guidelines and sustainability standards

References

- 1. https://www.argaam.com. (2024). Récupéré sur https://www.argaam.com.
- 2. Abu Dhabi Bank. (2023). Report 2023.
- Damien, B., Elise, D., Yvonne, L., & Nilskizer, G. (2023). Financing Sustainable Development: Insights from Ghana, Indonesia, Mexico and Senegal. Research at the Institute for Sustainable Development and International Relations (IDDRI.
- https://sigmaearth.com/ar/first-abu-dhabibank-pledges-aed500-billion-in-green-financeby-2030/. (2024). Retrieved from https://sigmaearth.com/ar/first-abu-dhabibank-pledges-aed500-billion-in-green-financeby-2030/.
- 5. https://www.bankfab.com/en-ae/about-fab/group/in-the-media/fab-to-provide-over-

- aed500-billion-usd135-billion-in-green-finance-by-2030. (2024). Retrieved from https://www.bankfab.com/en-ae/about-fab/group/in-the-media/fab-to-provide-over-aed500-billion-usd135-billion-in-green-finance-by-2030.
- Katrin, K. (2011). Banking as if Society Mattered: The Case of TriodosBank. the Community Innovators Lab(CoLab) at MIT's Department of Urban Studies and Planning.
- 7. Rayan, J., Tom, B., Katherine, H., Laurence, u., & Nick, L. (2020). Treating ecological deficit with debt. The practical and political concerns with green bonds,. Geoforum journal.
- 8. Riyad Bank. (2021). Environmental and Social Governance Report 2021, Bakra, Riyad Bank.
- 9. Riyad Bank. (2022). RESPONSIBLE FINANCE FOR A SUSTAINABLE AND

- PROSPEROUS SOCIETY. ESG REPORT 2022
- 10. Riyad Bank. (2023). rapport2023.
- 11. Riyad Bank. (February 2022). Sustainable Finance Framework.
- 12. Triodos Bank. (2023). Triodos Bank Policy Plan 2023.
- 13. Triodos Bank. (2024). Triodos Bank Sustainable Finance Policy Plan 2024.
- 14. Triodos Sustainable Finance Foundation. (2024). Triodos Sustainable Finance Foundation Policy Plan 2024.
- 15. Zoëlle, v. (2023). (sustainable finance in financial Institutions: A Literature Review of the Integration of ESG Factors and Balancing Profitability Goals).