

Exploring Sustainable Bank Financing in Algeria: A Content Analysis of Interviews, Reports, and Websites from Selected Banks.

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Abstract:

This study aims to assess the current state of banking practices in Algeria regarding sustainable development by comparing the disclosures and services of local banks with those of Arab and foreign bank branches operating within the country. Through content analysis of responses to semi-structured interviews, annual reports, and official websites from an enrolled sample, the study discovered significant differences in sustainability development disclosures between local public banks and foreign private banks. The absence of clear policies and regulations supporting sustainability in Algeria is the main reason for these differences. This study suggests that Algerian banking should make more concerted efforts to align with international standards and participate in regional and global sustainability initiatives.

Keywords: sustainability; banking systems; Bank services; International initiatives.

JEL Classification Codes: Q01; B26; G24; F55.

1. Introduction

The intensification of environmental crises over the past century, particularly climate change driven by excessive carbon emissions has led to a rise in global awareness across both developed and developing nations. In response, numerous agreements initiatives, legal regulations, and conferences have emerged, most notably the 2015 Paris Agreement on Climate Change. This agreement emphasizes environmental sustainability as a key pathway to achieving broader sustainability goals. Article 2 specifically calls for aligning financial flows with carbon reduction targets and for fostering development that accounts for climate change impacts.

Recognizing the critical role of the financial sector including banks, fund managers, insurance companies, investors, and a broad spectrum of international and professional organizations in leading efforts to advance climate goals and achieve net-zero targets. Interest in green and sustainable finance has grown, aiming to redirect capital flows toward companies and investments aligned with procedures and technologies that foster a more sustainable world. This commitment extends beyond companies alone, as various stakeholders and active parties have mobilized to ensure a smooth, effective transition toward environmental, social, investment, and financial sustainability.

Like many other governments in developing countries, the Algerian government has found itself faced with the necessity of participating in sustainability initiatives and aligning with international shifts in this area. This is especially relevant given that, following the beginning of recovery from the impacts of the COVID-19 pandemic, Algeria achieved significant, comprehensive economic and financial indicators between 2022 and 2023. Specifically, the country's economic growth increased from 3.6% in 2022 to 4.2% in 2023, compared to global rates of 3.5% and 3.2% for those years, respectively. Additionally, the inflation rate declined from 9.29% to 7.84% during this period. Algeria also maintained an interest rate of 3%, considered one of the lowest among MENA countries. Moreover, the M2 money supply experienced a 6% increase in 2023, reaching a total of 24,330 billion DA.

The new Government Action Plan introduced a broad array of reforms aimed at facilitating the transition to a more diversified and sustainable economy while enhancing governance and social cohesion. Key areas of focus include the mining sector, such as iron and phosphate, alongside exploring innovative solutions to reduce the country's reliance on gas for electricity generation by investing in solar energy, as noted in the Bank of Algeria's 2023 report.

In the same year, a new legislative framework was established with the issuance of *Law No. 09-23* on June 21, 2023, regarding the Monetary and Banking Law. This law sets forth a modernization agenda for the banking system, emphasizing the need to create new financial initiatives and adapt money market intervention tools to align with the specific requirements of Islamic finance and encourage green finance. It also mandates transparency through the disclosure of accounts, accounting data, statistics, and reports to all relevant stakeholders. Further legal and regulatory frameworks accompanying this law include key provisions such as:

- **Investment Law 22-18** establishes the Algerian Agency for Investment Promotion, aligning with the government's policy to abolish the 51-49 partnership rule in order to encourage foreign direct investment.

- **Executive Decree No. 22-167** regulates the framework applies to institutions classified for environmental protection within the context of sustainable development.
- **Economic Real Estate Law 23-17** outlines the procedures for granting economic real estate aimed at facilitating the completion of investment projects.
- **Opening the Capital of Public Banks** has commenced with the two largest public Banks, the Algerian Popular Credit Bank (CPA) and the Local Development Bank (BDL). This initiative, authorized by Visa No. 2024/01 dated January 18, 2024, issued by the Commission for the Regulation and Control of Stock Exchange Operations (COSOB), allows for the sale of up to 30% of their capital.

The objective is to invigorate the Algiers Stock Exchange, enhance its activity, increase its contribution to mobilizing savings, and raise its capitalization level. This move aims to promote financial inclusion and provide opportunities for investors to participate in financing the national economy based on their capacities, ultimately leading to profits and added value.

Together, these factors contribute to the potential for the Algerian state, along with its public, financial, and banking institutions, to meet development challenges that align with contemporary realities and advancements. The focus is on incorporating sustainable development in all its dimensions while striving to create a more attractive investment climate.

Research Problem: Based on the preceding discussion, the current study is formulated around the following problem: **What is the extent to which banks in Algeria can provide sustainable services?**

Research Hypothesis

As a preliminary response to the research question, the following hypothesis is proposed:

- There is a disparity in banking sustainability practices between local public banks and foreign private banks, stemming from differences in the sustainability policies adopted by local and foreign institutions.

Research Objectives

This study aims to achieve several key objectives:

1. Identify the legal and regulatory environment, along with financial, monetary, and banking policies in Algeria.
2. Identify the various banking institutions operating in Algeria, including both local and foreign banks (Arab and European).
3. Assess the capacity of banks operating in Algeria to promote sustainable development through the services they offer to customers.

Significance of the Study

This study emphasizes Algeria's efforts to enhance its economy, environment, and society through a comprehensive set of policies and laws. It aims to address the disparities in sustainable banking practices between local public banks and foreign private banks by fostering collaboration with foreign experts from leading sustainability-focused banks. The study seeks to draw valuable lessons and experiences that can inform the development of more effective banking practices in Algeria.

Study Methodology

The research adopts a descriptive-analytical approach, utilizing content analysis of data gathered from personal interviews, annual reports, and official websites of the selected banks included in the study sample. This methodology enables a thorough examination of the existing practices and capabilities of the banks operating in Algeria regarding sustainability.

Structure of the Study

To achieve the study objectives, highlight its importance, and address the identified problem, the study is organized into two main axes:

- 1. Theoretical Part:** This section covers theoretical concepts related to sustainable banking financing and outlines the most significant international initiatives supporting these practices.
- 2. Practical part:** This part presents a case Study of various banks operating in Algeria, analyzing their ability to achieve sustainability through the diverse services they offer.

This structured approach will provide a comprehensive understanding of the current state of sustainable banking in Algeria and identify areas for improvement.

2. Concepts on Sustainable Bank Financing

2.1 The Concept of Sustainable Banking:

Historically, the banking industry has been characterized by slow progress, low transparency levels, a strong focus on profit maximization, and a marginalization of innovation. This approach often resulted in a disconnect from the real economic variables that support effective financial decision-making. However, recent environmental, economic, and societal shifts have accelerated the development of legislation, laws, and regulations aimed at promoting sustainability within banks (Alshummari & mohammad, 2024, p. 303) .

Banking sustainability is defined as the services and products offered by banks that, alongside their economic implications, also consider the environmental and social impacts of their operations (Bouma & Jeuken, 2001, p. 101). Furthermore, it encompasses the use of bank financing to create positive and lasting value for society and the environment while also achieving ethically sound financial profits (Biswas, 2011, p. 33). This evolving definition reflects a growing recognition of the importance of integrating sustainability into banking practices, highlighting the need for banks to align their strategies with broader societal goals.

2.2 The Concept of Sustainable Financing

Sustainable finance refers to the practice of incorporating non-financial information specific environmental, social, and governance (ESG) criteria into investment decisions within the financial sector. This approach promotes more long-term investments in sustainable economic activities and projects (European commission, 2021). Consequently, sustainable bank finance involves the provision of financing options and services by banks that cater to all relevant stakeholders interested in environmental and societal outcomes. The concept of sustainable bank finance is grounded in two key theories:

2.2.1 Stakeholder Theory: This theory posits that companies can foster strong relationships with their stakeholders by addressing their diverse goals and ensuring their satisfaction. By doing so, companies not only enhance their reputation with banks, but also maintain a positive impact

on their external environment. This relationship ultimately confers legitimacy, competitive advantage, and sustainable performance to the company (Bose, 2017, p. 278).

2.2.2 Agency Theory: Agency theory emerges from the urgent need to enhance corporate performance in a manner that allows shareholders to assess the behavior and performance of a company. This theory addresses the issue of information asymmetry between shareholders and management, which poses a significant challenge in the reporting process (Briem & Wald, 2018, p. 1469). Both stakeholder and agency theories emphasize that transparency is essential and serves as a crucial factor in improving public accountability. Furthermore, transparency enhances integrated reporting and ensures the right to access information for various stakeholders, including shareholders and banking institutions that finance investment projects (Hamad, Draz, & Lai, 2020, p. 03).

In the current landscape, banks have become increasingly aware of their role as intermediaries between depositors and borrowers who prioritize social and environmental services. They are working to create banking value by focusing on implementing sustainability initiatives while still attending to financial and financing aspects.

3. The Importance Of Sustainable Bank Financing

Sustainable finance aims to enhance the performance of banks by providing more efficient and effective services. It encompasses the financing, operation, and risk management of projects in critical areas such as environmental protection, clean energy, sustainable transportation, and sustainable buildings. By implementing policies that facilitate the transition to a sustainable economy, banks can also access various incentives (Omri, 2021, p. 53). The significance of sustainable finance extends beyond the development of banking products and services designed to achieve the goals of sustainable development. It also involves mitigating several key risks, including:

3.1 Credit Risk: This refers to the potential inability of borrowers to repay loans when due, often resulting from their failure to comply with legal and regulatory requirements aimed at protecting the environment and society. Additionally, borrowers may lack the necessary licenses, such as ISO certifications or activity exploitation licenses for investment projects, particularly in classified establishments whose operations have confirmed or potential impacts on the surrounding natural environment.

3.2 Reputation Risks: In a competitive landscape where institutions strive to establish a strong ethical reputation by safeguarding the environment and society, banks and banking institutions face reputation risks. If they fail to thoroughly audit the activities and reputations of their borrowers, as well as the integrity of their environmental management systems, banks may be viewed as complicit, at least morally in undermining the safety of the environment and the health of society (Abbas Ahmad, 2019, p. 139)

4. Goals of Banking Sustainability

Sustainable finance seeks to achieve several key Goals, Including (Hadidi, 2021, p. 83):

4.1 Reducing Paper Usage: This involves a strong emphasis on electronic transactions and recycling waste materials, such as paper and plastic, used within banking institutions.

4.2 Enhancing Environmental Audits: Banks focus on auditing the safety and environmental health systems of their clients, particularly those initiatives aimed at reducing energy and water consumption through the adoption of Renewable alternatives.

4.3 Creating Green Jobs: Sustainable finance aims to develop innovative approaches to address unemployment, such as promoting green jobs that serve as a bridge between eradicating extreme poverty and hunger while achieving environmental sustainability.

4.4 Financing Environmental Investments: This goal entails providing funding for investments related to environmental Transition and sustainability for eligible borrowers, as part of the bank's commercial credit activities.

4.5 Promoting Responsible Business Practices: Sustainable finance helps to cultivate a perception of responsible business, aligning with ethical customer expectations, and facilitating compliance with emerging regulations.

5. Principles of Banking Sustainability

For banking sustainability, a set of principles approved by the World Bank Association includes (Jurin, 2012, p. 139):

5.1 Sustainable Banking: This principle emphasizes that banking services should serve as a means of managing saved and invested money to achieve financial profits while ensuring alignment with the three dimensions of sustainability Development environmental, economic, and social.

5.2 Updating the Business Climate: Banks are encouraged to motivate economic operators to contribute to the sustainable real economy. This involves building strategic relationships with these operators and enhancing their capabilities to effectively diagnose, understand, and analyze their economic activities. Additionally, banks should assist operators in forecasting to address the legal and regulatory challenges posed by climate change, while also responding to the diverse social demands from various stakeholders, including the population, governments, and non-governmental organizations.

5.3 Transparency and Comprehensive Governance: Sustainable banks maintain a high level of transparency in their management practices and the preparation of sustainability and integrated reports. This transparency is vital for keeping pace with the evolving needs and interests of various stakeholders who are both influential and affected by the bank's operations.

To achieve these principles, it is essential for banks to adopt a culture of sustainability, recognizing it as a critical input in decision-making processes. This commitment to sustainability will enable banks to contribute positively to their communities while maintaining financial viability.

6. Indicators of Banking Sustainability

Studies on banking sustainability indicators have shown considerable variation in their approaches. Some research has focused on accounting-based indicators, such as Return on Assets (ROA) and Return on Equity (ROE), while others have utilized market-based indicators like Earnings Per Share (EPS) and Return on Investment (ROI). However, empirical findings suggest that accounting-based indicators tend to be less complex and more straightforward in reflecting

the economic realities of banks. These indicators also demonstrate a stronger predictive capability. Moreover, the methods for measuring the economic dimension through accounting-based indicators are more indicative of long-term sustainability. They highlight the economic value and financial benefits that banks provide to both the environment and society. This focus on Accounting Indicators emphasize the importance of natural and industrial capital, ensuring that current economic activities do not exert undue pressure on the resources and capabilities of future generations (Alshummari & mohammad, 2024, p. 311). This perspective underscores the critical role of accounting metrics in fostering a more sustainable banking approach.

7. Green Bonds as a Mechanism to Facilitate the Shift to Sustainability

Green bonds represent an effective financing mechanism that provides advantages for both issuers and investors while also helping to mobilize private capital from developed countries to stimulate growth the Less Developed Regions. There is a growing interest among investors in environmental, social, and governance (ESG) factors, driven by significant challenges arising from the lack of tools to accurately value natural resources and the depletion of these resources.

The first green bond was issued in Europe in 2008, and since the adoption of the Paris Climate Agreement in 2015, the green bond market has expanded remarkably. At 2019, bond issuances reached a record high of over \$250 billion, with projections for 2020 indicating that issuances could range between \$350 billion and \$400 billion. Green bonds differ from traditional bonds in that they are specifically designed to fund projects that provide expected environmental benefits. However, despite their advantages, green bonds do not fully address the financing needs required for a comprehensive ecological transition (Ntsama & Yan, 2021, p. 63).

This distinction highlights the importance of integrating multiple financial instruments and strategies to achieve broader sustainability goals.

8. International and Regional Initiatives in the Field of Sustainable Bank Financing

8.1 UNEP Finance Initiative (UNEP FI)

Established in 2019 through a partnership between founding banks and the United Nations, UNEP FI has garnered support from over 345 banks, representing total assets of approximately USD 98.7 trillion, which accounts for about 54% of global banking assets. Signatory banks commit to incorporating sustainable practices across all areas of their business, including strategic, portfolio, and transactional levels. UNEP FI has cultivated a large network of banks, insurers, and investors aimed at catalyzing collective action throughout the financial system to foster more sustainable global economies. For more than three decades, it has facilitated the connection between the United Nations and financial institutions, working towards shaping a pioneering framework for sustainability. This effort has led to the creation of the Principles for Responsible Banking framework, designed to align core strategies in decision-making, lending, and investment with the United Nations Sustainable Development Goals (SDGs).

The Principles for Responsible Banking consist of six key principles aimed at achieving the overarching goals, vision, and ambitions within the realm of sustainable finance:

8.1.1 Alignment: Ensure that banks' strategies align with the SDGs and the broader objectives of society.

8.1.2 Impact: Increase the positive impacts of banks on the environment and society, and reduce negative impacts.

8.1.3 Client Accountability: Work collaboratively with clients and customers to encourage sustainable practices.

8.1.4 Transparency and Disclosure: Provide transparent and Comprehensive reporting on sustainability impacts, risks, and opportunities.

8.1.5 Governance: Incorporate sustainability into governance frameworks and decision-making processes.

8.1.6 Collaboration: Engage with stakeholders to promote sustainable finance initiatives and practices.

By adhering to these principles, signatory banks commit to playing a crucial role in transitioning towards a more sustainable financial system that supports economic growth while prioritizing environmental and social responsibility (UNEPFI, 2021).

 PRINCIPLE 1: ALIGNMENT We will align our business strategy to be consistent with and contribute to individuals' needs and society's goals, as expressed in the Sustainable Development Goals, the Paris Climate Agreement and relevant national and regional frameworks.	 PRINCIPLE 2: IMPACT & TARGET SETTING We will continuously increase our positive impacts while reducing the negative impacts on, and managing the risks to, people and environment resulting from our activities, products and services. To this end, we will set and publish targets where we can have the most significant impacts.	 PRINCIPLE 3: CLIENTS & CUSTOMERS We will work responsibly with our clients and our customers to encourage sustainable practices and enable economic activities that create shared prosperity for current and future generations.
 PRINCIPLE 4: STAKEHOLDERS We will proactively and responsibly consult, engage and partner with relevant stakeholders to achieve society's goals.	 PRINCIPLE 5: GOVERNANCE & CULTURE We will implement our commitment to these Principles through effective governance and a culture of responsible banking.	 PRINCIPLE 6: TRANSPARENCY & ACCOUNTABILITY We will periodically review our individual and collective implementation of these Principles and be transparent about and accountable for our positive and negative impacts and our contribution to society's goals.

Figure N01: Principles of UNEPFI

Source: UNEPFI

8. 2 Net Zero Banking Alliance (NZBA)

The Net Zero Banking Alliance (NZBA) is an initiative launched in 2021 by a group of 43 banks, representing one of the key outcomes of the COP26 Climate Conference. This alliance is dedicated to transforming banking portfolios to achieve net-zero greenhouse gas emissions by 2050. Since its inception, the NZBA has allocated significant resources to enhance banks' capabilities to support clients in their decarbonization efforts and to develop innovative solutions for sustainable and transitional finance. Currently, the alliance comprises more than 140 leading global banks from 40 countries, collectively representing nearly 40% of global banking assets.

The NZBA aims to align with the objectives of the Paris Agreement, particularly the goal of limiting global warming to 1.5°C (UNEPFI, 2021) . In April 2024, UNEP FI announced the second edition of its guidelines for setting climate targets for banks, following updates to the

initial three-year edition. These guidelines outline essential principles for member banks, which must adhere to the following:

8.2.1 Guiding Principle 1: Each bank must individually and independently identify and disclose both long-term and medium-term targets that support the achievement of net-zero greenhouse gas emissions by 2050.

8.2.2 Guiding Principle 2: Banks are required to establish an emissions baseline and Annually measure and report on the emissions profile of their lending, investment, and capital markets activities. This includes disclosing the scope and boundaries of the asset classes and sectors covered, as well as the measurement methods and metrics used at the portfolio, asset class, or sector level.

8.2.3 Guiding Principle 3: Banks must use widely accepted science-based decarbonization scenarios to set long-term and medium-term goals that are consistent with achieving net zero by 2050.

8.2.4 Guiding Principle 4: Regular reviews of targets are essential to ensure consistency with current climate science.

These principles provide a framework for banks to not only set ambitious climate targets but also to demonstrate accountability and transparency in their efforts toward sustainability (UNEPFI, July 2024, p. 12). Through these commitments, the NZBA aims to drive significant progress in the global banking sector's transition to a low-carbon economy.

8.3 organization of Economic Co-Operation And Development OECD and The United Nations Framework Convention On Climate Change UNFCCC

Since 2015, at the request of donor countries, the Organization for Economic Co-operation and Development (OECD) has been conducting analyses to track progress towards the United Nations Framework Convention on Climate Change (UNFCCC) goal. This goal aims for developing countries to mobilize \$100 billion annually for climate action in developing countries. These analyses are grounded in robust accounting frameworks and rely on the best available data to provide a comprehensive overview of financial resources mobilized for climate action. The OECD's analyses identify four distinct sources of climate finance provided by developed countries to less developed nations:

8.3.1 Public Bilateral Climate Finance: This source primarily consists of funds from bilateral aid agencies and development banks dedicated to climate-related projects.

8.3.2 Multilateral Public Climate Finance: This includes contributions from multilateral development Banks and multilateral climate funds aimed at addressing climate challenges in developing countries.

8.3.3 Officially Supported Climate-Related Export Credits: Provided by official export credit agencies in developed countries, these credits support climate-related projects in developing nations.

8.3.4 Private Finance Mobilized through Public Climate Finance: This category encompasses private investments that are catalyzed by bilateral and multilateral public climate finance efforts.

Developed countries have committed to maintaining the collective mobilization target of \$100 billion per year until 2025. Following this period, a new collective quantitative goal (NCQG)

for climate finance is expected to be established, informed by the outcomes of ongoing negotiations slated to conclude at COP29 at the end of 2024 (OECD, 2024, p. 22). This continued commitment underscores the importance of collaborative efforts to enhance climate resilience and sustainability in developing countries.

8.4 The Sustainable Banking and Finance Network (SBFN)

Established in 2012, the Sustainable Banking and Finance Network (SBFN) serves as a voluntary community for financial sector regulators, central banks, ministries of finance and the environment, and industry associations from emerging markets dedicated to advancing sustainable finance. As of June 2024, the SBFN boasts 93 member institutions from 71 countries, collectively representing at least US\$68 trillion, or 92 percent, of total banking assets in emerging markets. The SBFN aims to achieve two primary objectives (SBFN, 2023) :

8.4.1 Improving the Management of Environmental, Social, and Governance (ESG) Risks:

This includes enhancing the handling of climate-related risks across the financial sector.

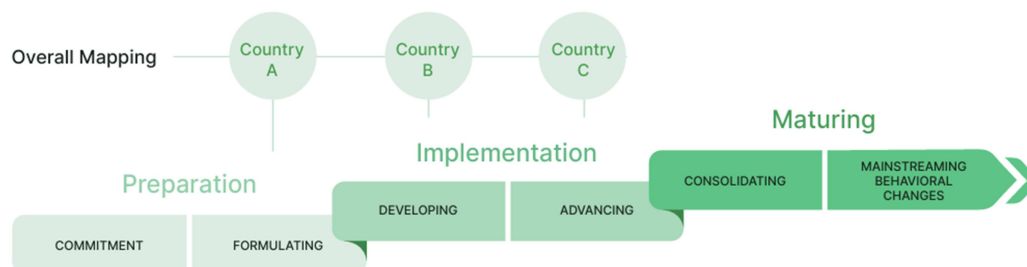
8.4.2 Increasing Capital Flows to Activities with Positive Environmental and Social

Impacts: This encompasses initiatives focused on both mitigation and adaptation strategies concerning climate change.

To support its objectives, the SBFN provides a platform for knowledge exchange and capacity building, offering tools, resources, and technical assistance designed to help members create and implement country-specific initiatives that promote sustainable finance at national, regional, and global levels.

One significant tool developed by the SBFN is the **Sustainable Finance Roadmap**, which employs a multi-stakeholder approach to identify opportunities and constraints, paving the way for strategic reforms. Additionally, the SBFN has created a **Progress Matrix** consisting of typical stages and milestones that countries follow (SBFN, Report , 2024, p. 15) . This matrix includes specific milestones that need to be achieved to progress to the next stage, enabling comparable assessments across different countries as shown in the figure below:

Figure N°02: Progress Matrix of SBFN



Source: SBFN report 2023.

8.5 Alliance For Green Infrastructure In Africa

The **African Green Infrastructure Alliance (AGIA)** is a \$10 billion initiative designed to fill the gap in bankable green infrastructure projects while promoting a just and equitable transition to net zero across Africa. This effort emphasizes a low-carbon and climate-resilient

approach and relies on robust partnerships with the private sector. Launched by the **African Development Bank** in collaboration with the **African Union**, **Africa 50**, and other partners including multilateral development banks, G7 countries, and philanthropic organizations AGIA has successfully mobilized over \$265 million to date.

The Alliance also aims to facilitate transformative green investments in various sectors, including renewable energy and green hydrogen projects. It will support sustainable transportation initiatives, such as electric mobility solutions, as well as solar and hybrid energy solutions tailored for heavy industries and logistics companies. Additionally, the Alliance will focus on energy storage, water and sanitation projects, and the development of new technologies (AGIA, 2024).

8.6 Arab Monetary Fund:

The Arab Monetary Fund is committed to supporting its member states in developing their financial sectors, thereby enhancing the financial stability and access to services across the Arab region. The Fund undertakes various initiatives aimed at promoting green and sustainable financing to achieve sustainable development goals in Arab countries. This includes utilizing a range of green financial tools and raising awareness about the significance of financial and monetary policies in fostering sustainable financing practices.

Additionally, the Fund has introduced the Green and Sustainable Finance Framework (AGSFF), designed to assist central banks and ministries of finance in Arab nations in transitioning towards green financing and effectively managing climate change risks in alignment with the Fund's vision and strategy. This framework adheres to the four main components of the Green Bond Principles 2021 (GBP), the Community Bond Principles 2021 (SBP), and the Sustainability Bond Guidelines 2021 (SBG) established by the International Capital Markets Association (ICMA), as well as the Green Loan Principles 2021 (GLP) and the Social Loan Principles 2021 (SLP) from the Lending Markets Association (LMA). The Arab Bank's Sustainable Financing Framework has been assessed by Standard & Poor's (S&P), which confirmed its compliance with the aforementioned principles (Arab banc, 2023, p. 21).

9. Challenges Of Banking Sustainability In Developing Countries:

Numerous problems and challenges impede progress toward sustainability, often tied to several criteria, including the need for global coordination, engagement with decision-makers and influential stakeholders, and the absence of a clear mechanism for forecasting future environmental conditions and their societal impacts. The following factors also contribute to these challenges (Jain & Sharma, 2023, p. 11) :

9.1 Lack of Technological Infrastructure: This is a significant barrier, exemplified by inadequate access to high-speed internet networks. To overcome this, governments and relevant ministries must invest in developing robust technological infrastructure to ensure fast and reliable connectivity.

9.2 Security and Privacy Challenges: These pose a major obstacle to adopting financial technology, necessitating stringent measures to safeguard customer data and mitigate cyber threats.

9.3 Financial Awareness and Education: Enhancing public awareness and education regarding the benefits and applications of financial technology is essential. This can be achieved through awareness campaigns and training programs aimed at both customers and banking staff.

9.4 Limited Legislation and Regulatory Gaps: The absence of a comprehensive regulatory and legal framework hinders the effective application of financial technology. Collaboration between government entities and financial institutions are vital to creating appropriate legislation and policies that support the safe and efficient use of financial technology.

9.5 Lack of Awareness Regarding Environmental Risks: There remains a limited understanding of how environmental and climate risks can threaten the financial sustainability of businesses and entire sectors, including the Viability of banks themselves. This is particularly concerning given that lending and investment horizons are typically short-term, while many risks are long-term.

9.6 Absence of Mandatory Environmental Risk Analysis and ESG Disclosure Requirements: This gap may deter lenders and investors from pursuing sustainable opportunities for fear of losing competitive advantages.

3. The practical part

After outlining the main theoretical concepts of the study and reviewing significant regional and international initiatives in sustainable banking financing, as well as the contributions of international organizations, this section will examine the Algerian context. It will identify current banking practices and the prospects for establishing sustainable financing. A descriptive and analytical approach will be employed, utilizing content analysis techniques across several tools used in this study, including:

- Semi-structured interviews (conducted both in-person and via phone) with officials and executives of from the participating banks.
- An assessment of disclosure levels through annual reports and the official websites of the banks.

Before analyzing the study sample, we will explore the investment climate and the volume of registered investment projects, as well as the amounts invested, referencing statistics from the Algerian Agency for Investment Promotion over recent years, presented in the following table:

Table N°01 : Investment projects in 2023 and funding patterns. * Billion DA

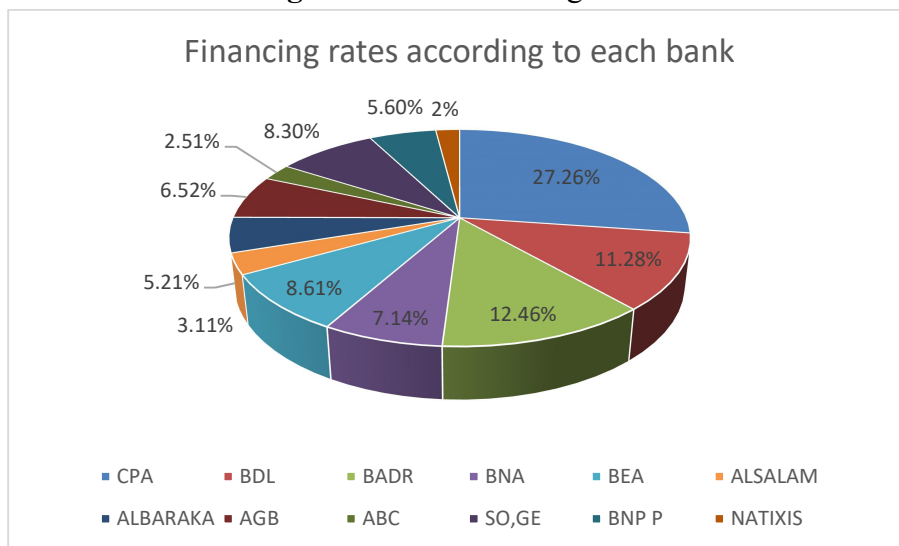
Sector	Number Of Projects	Ratio	Amounts *	Ratio	Type Of Financing	
					Self	Bank Loans
Agriculture, Farming And Fishing	1060	13.02 %	504.93	16.36 %	11.6 %	88.4 %
Public Works And Construction	1544	18.97 %	664.19	21.52 %		
Various Industries	4295	52.77 %	1763.56	57.14 %		
Health	172	2.11 %	41.04	1.33 %		

Tourism	136	1.67 %	30.86	1 %		
Transport	285	3.5 %	57.53	1.54 %		
Other Services	648	7.96 %	34.25	1.11 %		
The Total	8140	100 %	3086.4	100%		100%

Source : Algerian Agency For Investment Promotion.

Regarding the sources of bank loans, data collected from the investors' registrations at the AIPA's decentralized single windows indicate that project owners have approached various banks to secure financing for their medium- and long-term investment needs. This information is illustrated in the following figure:

Figure N° 03: Financing rates.



Source : AIPA

Study Sample: To achieve a more comprehensive and realistic analysis, 13 out of 28 banking and financial institutions in Algeria were contacted, comprising 20 banks and 8 financial institutions. The breakdown of the study sample is as follows:

Presentation of Algerian Banks in the Study Sample:

- **Ownership:** (Indicate the distribution between public and private banks)
- **Year of Establishment:** (Provide the establishment years of the selected banks)
- **Capital :** (Outline the capital of each bank)
- **Number of Branches and Windows:** (Specify the total number of branches and service windows for Each bank)
- **Number of Employees:** (Detail the workforce size for each bank)

Table N°2: Information about banks.

* Billion DA

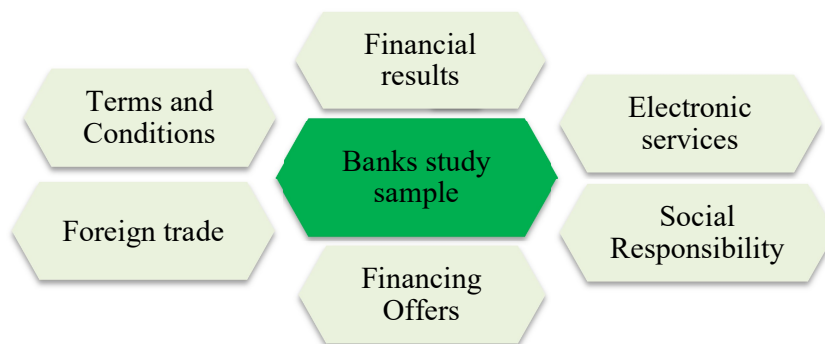
N°	Bank Name	Ownership	Year Of Establishment	Number Of Branches And Windows	Capital*	Number Of Employees
01	Cpa	Local Public	1966	264	200	4451
02	Bdl	Local Public	1985	177	63.66	4500

03	Bar	Local Public	1982	340	144	8000
04	Bna	Local Public	1966	227	150	6000
05	Béa	Local Public	1967	117	230	3961
06	Hello	Private Foreign	2008	25	20	694
07	Agb	Private Foreign	2003	61		1074
08	Abc	Private Foreign	2010	24		391
09	Al Baraka	Private Foreign	1991	26		511
10	Trust Bank	Private Foreign	2003	43		572
11	General Society	Private Foreign	2000	104		1580
12	BNP Paribas	Private Foreign	2002	49		1003
13	Natixis	Private Foreign	1999	26		800

Source: Designed by The Researcher Based On The Data.

The previous table presents the banks included in the study, detailing key information about ownership (5 local banks and 8 foreign banks), expérience, and capital size. Notably, foreign banks are required to maintain a fixed capital of 20 billion dinars, which complies with legal regulations for foreign bank approval. Additionally, the table highlights their operational scope, indicating a total of 1,483 employees across branches and sub-agencies, out of 1,649 bank agencies. This demonstrates that the sample encompasses 90% of the study population within its operational scope.

3.1 Aspects Studied: The study addressed a range of elements, as illustrated in the following figure:



3.2 presentations Of Study Data:

After conducting a series of meetings and interviews with executives and employees of the banks included in the study, as well as acquiring the annual financial reports and statements for most of

these banks, we complemented our findings by reviewing their official websites. This approach aimed to gather the necessary data, which is presented in the following order:

3.2.1 - The Net Financial Results for the Last 3 Years: This serves as a crucial indicator of profitability. The table below summarizes the net financial results for the years 2021, 2022, and 2023 based on the financial reports:

Table N°03 : Net Financial Results.

*Million DA

N°	Bank Name	2021	2022	2023
01	Cpa	20.603	30.441	37,700
02	Bdl	8.1	8.5	17
04	Bna	23	46.7	59.2
05	Béa	68.620	71,812	43.646
06	Hello	3.062	3.389	4.392
07	Agb	4.624	4.912	4.927
08	Abc	2.004	1558	1765
09	Al Baraka	3.091	2.053	5.018
10	Trust Bank	4.257	4.022	3.953
11	General Society	8.005	8.223	9.504
12	BNP Paribas	2.800	3.186	4.665
13	Natixis	3.069	3.854	4.329

Source: designed by the researcher based on data available in annual reports and financial statements.

Following the initial recovery from the COVID-19 pandemic in Algeria, all banks began to implement modern strategies that align with the current landscape, emphasizing the need to update financial sustainability practices to achieve positive ethical outcomes. Except for Badr Bank, which lacks sufficient data, local public banks rank highest in terms of profitability. This success is attributed to their substantial capital employed, the number of branches and agencies, and their experience, with the most recently established bank dating back to 1985. In contrast, foreign private banks have also demonstrated strong performance, largely due to significant demand for their services from the Algerian community in France.

3.2.2 Electronic Services: The quality And number of Electronic Services Provided by Banks Variations they are the quality and range of electronic services offered by banks vary significantly, reflecting their role in commercial and marketing competition to attract a larger share of customers and investors. These services streamline daily banking tasks while prioritizing the protection of personal data to enhance the security of both individuals and

institutions. In addition to electronic withdrawal operations and remote banking, the key electronic services provided by banks illustrated in the following image:

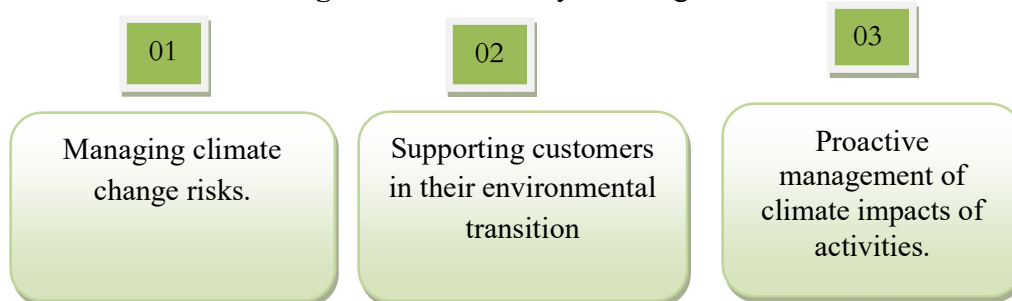
The CPA offers a suite of four services, including Mobile CPA, e-Banking, e-CP@, and EDI data exchange. Following this, BNP Paribas stands out as the first bank in Algeria to implement SWIFT services alongside e-Notif, SMS banking, and e-Leasing. BNA Bank also provides two key services, notably the innovative contactless payment solution, Wimpay BNA, launched on May 28, 2024. This service utilizes artificial intelligence and interacts through a smart chat interface, offering various packages like Serein, Privilège, Famille, Pro, Corporate, and Store. Additionally, BEA features its service, "BEA-Net," along with Elsalam Moubachir, while AGB Bank continues to enhance its offerings.

AGB Bank has achieved several international certifications that demonstrate its dedication to maintaining the highest global standards and enhancing the quality of banking services for its customers. These include ISO 9001 for quality management, ISO 27001 for information security management, and ISO 20000 for IT service management with AGB Online. AGB is recognized as the first bank in Algeria to offer Visa and Mastercard cards. Trust Bank features the TB@Net chatbot and TrustConnect services. Natixis provides the MyDigiBank service alongside Banxy, which is Algeria's first mobile bank launched in 2018. ABC Bank also offers the Quickly service for rapid transactions and has introduced ABC Digital for seamless banking experiences. Additionally, SG Bank has received PCI DSS (Payment Card Industry Data Security Standard) certification, underscoring its commitment to safeguarding customers' sensitive information and adhering to regulatory requirements.

3.2.3 Social Responsibility: The banks involved in the study demonstrate varying levels of commitment to serving their communities and the environment, targeting both internal Stakeholders (employees) and external ones (customers and society). Their initiatives include sponsoring and organizing international and local conferences, and seminars focused on awareness and community health, financing charitable organizations, and supporting training sessions for both employees and customers. Key social responsibility initiatives are summarized as follows:

SG and BNP Paribas have established clear strategies and policies in this area, benefiting from their affiliation with two leading global financial groups. They have both received the award for Best Bank in Sustainable Finance for the years 2021 and 2022. SG Bank has outlined its strategy and policy regarding environmental and social responsibility, focusing on three priority areas to address climate change:

Figure N°03: Priority Funding Areas.



Source: Designed by the Researcher.

This approach also provided the necessary flexibility during the COVID-19 pandemic, allowing the bank's network of agencies to quickly adapt and respond to the emergency. They implemented a business continuity plan that emphasized proximity, quality of service, and personal support. On July 12, 2022, the bank signed a credit agreement for sustainable financing with Lafarge Algeria, a mixed cement company, worth 1.4 billion dinars. This agreement aimed to finance the company's operations through a bonus mechanism, which is supported by an environmental objective to reduce greenhouse gas emissions (CO₂). Additionally, the bank launched the Sustainable & Positive Impact Finance (SPIF) investment program at the end of 2022, which focused on financing low-carbon industries. The bank also provided advisory services to clients in specialized sectors such as chemicals and fertilizers, training their staff in social responsibility for a total of 46,775 hours, benefiting 1,127 workers.

Regarding BNP, the bank recently inaugurated a new branch in Algiers that employs sustainable construction techniques recognized for their high environmental quality. In 2021, it launched the Eco-Friendly Work Credit, followed by the Eco-Responsible Construction Credit in 2023. Additionally, the Visa Platinum Card is crafted from non-food, renewable organic materials. The bank also offers two eco-responsible credit services: Green Challenge and Green Talk. These services provide green financing for projects with a positive environmental impact, potentially covering up to 100% of costs associated with energy transition, recycling, waste reduction, and carbon emissions initiatives. BNP encourages its clients and partners to adopt a responsible savings and investment policy, allowing investors to actively support projects that contribute to environmental preservation through their savings.

On the other hand, El Baraka Bank is actively promoting responsible and sustainable Islamic banking through a range of innovative initiatives, including:

- **Enhancing Financial Inclusion:** The bank is focused on improving access to financial services through microfinance programs, a Zakat Investment Program, financing options for stay-at-home women, and participation programs. It also supports universities and institutions in scientific research and development, as well as training centers, particularly those that incorporate social responsibility into their curricula.
- **Investment Endowment:** El Baraka Bank employs *dénouements* as a tool for social financing and development. Through its endowment projects, the bank aims to finance the establishment and development of Islamic endowment properties. It places a strong emphasis on ensuring long-term financial sustainability across generations by establishing the Institute for Training and Education in Islamic Banking (IRFFI).

ABC Bank reaffirms its commitment to Environmental, Social, and Governance (ESG) principles, aligning with its parent group's policies by incorporating these standards into the Global Reporting Initiative (GRI) indicators and Key Performance Indicators (KPIs) in risk assessments. The bank is also focused on determining its carbon footprint and has initiated a talent training and recycling program. In December 2021, it launched its inaugural program, "Masterclass by Bank ABC," in partnership with "Injaz El Djazair," along with financial support for the Algerian Green Challenge initiative in collaboration with AGB Bank.

Similarly, CPA Bank positions itself as a "Citizen Bank par excellence." It has sponsored significant events, including the International Conference on Islamic Finance (TICIF 2024) and the 18th International Conference on Lung Diseases. Additionally, CPA Bank provides financial support to various associations that assist vulnerable populations, including those affected by chronic illnesses, autism, blindness, and disabilities. The bank also supports the Algerian Red Crescent in its humanitarian efforts.

3.2.4 Financing Offers For Investment Projects: The primary goal of banking institutions is to enhance operational dynamism while promoting savings. In this context, a range of medium- and long-term financing options has been established, utilizing both traditional and Islamic models aimed at small, medium, and large enterprises. For the year 2023, the total for medium- and long-term loans reached 6.503 billion DA, contributing to an overall total of 10.695 billion DA, with 680 billion DA specifically allocated for Islamic banking. According to the Bank of Algeria report, the key offerings can be summarized as follows:

CPA Bank holds a significant share of the market and offers two specialized financing products: Prolip, aimed at various companies, and Promad, which targets businesses in the health and pharmaceutical sectors. For small businesses, the bank provides short-term loans, such as Sahel Mahal and Sahel Nachati.

In the realm of Islamic financing, CPA Bank received its Sharia compliance certificate on September 15, 2020. This certification paved the way for a non-allocated investment account and a contract for equipment purchases through "*cost-plus financing*" known as Murabaha in Arabic, as authorized by the National Sharia Authority for Fatwa on the Islamic Financial Industry. The bank's offerings include leasing options leading to property ownership, cost-plus financing for equipment " or " equipment financing". As known in Arabic by Murabaha Tajhizat for loans, and the non-allocated investment account called Tanmia for investment or savings. The bank also engages in profit-sharing " or " investment partnership", as known in Arabic by Mudharaba, where it acts on behalf of the investor, sharing the profits generated from trading according to agreed-upon distribution ratios.

BDL Bank and BNP Eljazayer stand out in their lending practices by entering into loan guarantee agreements with both the Small and Medium Enterprises Loan Guarantee Fund (FGAR) and the Investment Loan Guarantee Fund (CGCI). These agreements are aimed at promoting local industry, supporting import substitution, and generating local added value. They also focus on creating job opportunities for youth and university graduates while developing new skills, particularly in the fields of the knowledge economy and innovation. Importantly, all investment projects deemed to pose environmental or climate risks are excluded from these initiatives. Additionally, BDL Bank collaborates with the National Financial Leasing Company to offer a range of medium and long-term financial leasing loans. These loans are characterized by swift file processing and a favorable tax regime, which includes rent deductibility and a gradual reduction of the value-added tax rate.

In Addition To Medium-Term Loans For A New Category Of Institutions, Namely Self-Employed Contractors for Start-Ups (Startups) can benefit from specific financing options. For Islamic financing, the available formulas include Murabaha for investment and Mudaraba for

savers. Both Badr and BNA Banks stand out for their unique financing offers tailored to agricultural, farming, and marine fishing projects. One of their key products is the Challenge Loan, which is designed to foster new agricultural and livestock investments. This loan features a special condition of a 0% interest rate for the first five years.

Moreover, the Seasonal Companion Loan is fully supported by the state and aimed at financing farmers and livestock breeders organized in cooperatives or economic groups. There is also the Federal Companion Loan, intended to finance economic institutions structured as economic companies or cooperatives. Furthermore, BNA Bank specializes in the Marine Fisheries and Aquaculture Loan, providing targeted support for this sector. In the realm of Islamic financing, options include Murabaha for agricultural production, Sabil financing for medium-term loans, and various loans characterized by stringent environmental and biodiversity conditions. Key requirements for these loans include a technical environmental study, a license issued by irrigation services for water exploration, health accreditation, and a license from environmental services, particularly in cases of animal husbandry.

Banks such as BEA, AGB, Trust Bank, Alsalam, El Baraka, and AGB are actively implementing a unified strategy aimed at Islamic communities through responsible social financing. This is achieved through a range of specialized loans, including Murabaha, Ijarah, Istisna, and Musharaka. Notably, Islamic financing experienced a significant qualitative leap of 246% between 2020 and 2023. Additionally, ABC Bank has distinguished itself by launching an innovative financing product in 2022 called "Alburaq." This offering features a unique regulatory framework that separates its operations from the bank's traditional activities. It includes a commercial suite of 14 products designed per Islamic Sharia principles, catering to the needs of increasingly ethical customers and contributing to the country's economic, social, and environmental development efforts.

Finally, it is important to highlight that a conference titled "Green Finance: A Lever for Sustainable Development" was held in Algiers on October 27, 2021, at the Higher School of Banking. This event was organized by the Bank of Algeria in collaboration with the Embassy of the United Kingdom. Key figures in attendance included the Minister of the Environment, the Minister Delegate to the Prime Minister in Charge of Startups and the Knowledge Economy, the President of the National Economic, Social, and Environmental Council, as well as representatives from various banks. The conference aimed to raise awareness among banking stakeholders about the crucial role of green finance in achieving the goals set forth during the Twenty-Sixth Conference of the Parties to the United Nations Framework Convention on Climate Change.

3.2.5 Foreign Trade Services: In light of Algeria's focus on enhancing foreign trade, promoting exports, and exploring new markets, the banks involved in this study provide a range of services related to foreign trade for their clients. These services include bank settlements, documentary credits, documentary discounting, various export guarantees, and initiatives to attract immigrants to invest and save in both hard and local currencies.

Among the notable efforts are:

CPA Bank, which has established an international reputation through its connections with a network of global banking institutions, offers diverse financing options to facilitate foreign trade

operations. This support helps importers and exporters effectively manage the risks associated with non-payment for their goods. BDL Bank also provides financial investment options in both dinars and hard currency through its "DAT" deposit service. This service allows customers to transfer funds from a current account or hard currency account to a dedicated account, where interest is calculated proportionally over time.

BNA Bank has been recognized as the best financial institution in Algeria for two consecutive years by *Global Finance Magazine*. This accolade reflects its commitment to international expansion, highlighted by the establishment of branches in Senegal and Mauritania. The bank is actively exploring regional foreign markets to support Algerian exporters, particularly in the agricultural sector.

BEA Bank enhances its international operations by offering free transfers and optimal check-in services via the leading SWIFT network for international transactions.

Trust Bank provides a unique offering with its Bank Guarantee Mastercard Virtual, catering to clients needing secure online transactions. Both ABC Bank and Natixis facilitate two key services: the Internal Non-Resident Account (INR) and the External Convertible Dinar Account (CEDAC). The CEDAC is specifically designed for foreign companies that, while not residents, have a justified presence in Algeria through a commercially signed contract with a local legal entity. This account allows them to receive payments from the transferable portion of the contract. Additionally, SG and BNP Paribas offer the Standby Letter of Credit (SBLC), which serves as an international bank guarantee. They also provide international wire transfer services, ensuring rapid receipt and dispatch of funds across borders. This suite of services is essential for securing transactions, managing foreign exchange, and mitigating currency risks.

3.2.6 Conditions And Procedures: According to the *Doing Business* website's 2021 report, which compares Algeria with other countries in North Africa and the Middle East (MENA), the average number of procedures and documents required to conduct business in Algeria is 12, compared to the regional average of 6.3. The time taken to complete these procedures is approximately 18 days in Algeria, slightly better than the regional average of 19.5 days. For instance, CPA Bank requires a file that includes 22 documents, while other banks typically require between 6 to 14 documents. It is also notable that BNA Bank has established conditions in its agreement with the Small and Medium Enterprises Loan Guarantee Fund (FGAR) to ensure that the procedures do not exceed a maximum period of 30 days, including all associated services. In contrast, BDL Bank, in partnership with the National Financial Leasing Company, processes financing files in no more than 7 days.

3.3 Analysis Of The Results Obtained: The analysis of the field study data will follow the specified order, highlighting the various factors influencing the banking sector in Algeria:

3.3.1 Financial Results: Local banks, such as CPA Bank, benefit from their established reputation, significant state-owned capital, and long-standing presence aligned with local policies and cultural norms. Their familiarity with halal Islamic financing has allowed them to achieve positive financial outcomes, contrasting with foreign banks that may offer more innovative and sustainable financing options but lack local understanding.

3.3.2 Electronic Services: Several banking institutions, including BNP Paribas, ABG, and Natixis, excel in providing electronic banking services due to their Global and Regional leadership. They offer a comprehensive suite of services locally, but major local banks like CPA are striving to enhance their market share by leveraging their extensive experience. However, the limited internet infrastructure remains a significant challenge, restricting the range of services that can be effectively delivered to individuals and businesses.

3.3.3 Social Responsibility: The commitment to social responsibility is a key aspect of sustainable banking practices in Algeria. French banking institutions (SG, BNP, Natixis) and ABC Bank have demonstrated significant efforts in this area. Their internal initiatives focus on training and capability enhancement for employees and clients, while external efforts aim at achieving responsible financing in social and environmental contexts. This commitment enhances their competitive edge and enables knowledge transfer to other banks, which may primarily engage in charitable sponsorships.

3.3.4 Medium and Long-Term Financing Offers: Understanding the economic and financial dimensions of sustainable banking is crucial, particularly regarding financing options. Both traditional and Islamic financing is critical, with the latter gaining ground in loan offerings from local and foreign banks. Islamic financing is increasingly viewed as morally aligned with green financing principles, appealing to Algerian society and entrepreneurs. Interest-free loans, such as the Challenge Loan, are particularly attractive to those in the agricultural sector, which is vital to Algeria's economic landscape.

3.3.5 Foreign Trade: The government's new approach starting in 2020 aims to boost exports and regulate imports, leveraging Algeria's historical trade relations, particularly with Europe, where a large Algerian diaspora resides. This has prompted local and foreign banks to adapt their services to support foreign trade, enhancing connections with global payment systems like SWIFT and Mastercard. However, a robust regulatory and legal framework is necessary to safeguard transactions and ensure compliance with international standards.

3.3.6 Terms and Procedures: Administrative bureaucracy and stringent investment conditions previously hindered credit access and banking services. However, recent governmental reforms aimed at attracting foreign investment, including the removal of the 51/49 rule and efforts to digitize the administration, have contributed to easing these conditions. These changes have allowed banks to streamline the loan process and offer services more efficiently, bringing them closer to the operational standards of neighboring countries and Europe.

This structured analysis highlights the multifaceted nature of Algeria's banking sector, illustrating both the challenges and opportunities present within its current framework.

4. Conclusion

The diagnosis of the sustainable banking landscape for 13 banks in Algeria indicates that while progress has been made, the sector still lags behind its counterparts in the Gulf states and Europe. To enhance the application of sustainability in Algeria's banking sector, the following solutions are recommended:

- **Align Financial Systems with Sustainable Development:** Promote sustainable investments and develop financing mechanisms that support long-term environmental goals.

- Remove Barriers to the Real Economy: Address legislative gaps and enforce environmental regulations effectively, including the real price of energy materials and the gradual removal of subsidies.
- Develop Sustainable Lending Practices: Strengthen the capacities of banking institutions through a general policy framework and updated credit systems. Enhance prudential monitoring and evaluation of green loans and innovate guarantee mechanisms to support sustainable financing.
- Provide Incentives for Sustainable Financing Implement low-interest rates and simplify lending operations to encourage more sustainable projects.
- Create an Integrated Network of Stakeholders Establish a collaborative framework for communication and experience sharing among stakeholders concerned with sustainability.
- Learn from Leading Banking Institutions Utilize the experiences and best practices of successful banks in sustainable financing, especially those with operations in Algeria.
- Integrate Environmental and Social Risk in Credit Risk Assessments: Support banks in addressing environmental and social risks as key components of credit risk stress tests and ensure these results influence asset allocation and pricing strategies.
- Reduce the Cost of Financing Green Bonds: Implement measures to make green bonds more affordable, encouraging greater investment in sustainable projects.
- Encourage Institutional Investor Participation: Motivate institutional investors to finance projects that align with public interest goals and enhance their social responsibilities.
- Develop a Media and Disclosure Strategy: Create periodic Sustainability reports that assist capital owners in making informed sustainable investment decisions.
- Establish Rating Agencies for Sustainable Performance: Support the development of agencies that evaluate the sustainable performance of clients, including investors and issuers.
- Support Green Development Funds: Facilitate the establishment of various green development funds and promote their Operations in the market, including the development of green insurance products.

By implementing these recommendations, Algeria's banking sector can improve its alignment with sustainable development objectives and enhance its contributions to environmental and social goals. This strategic shift is essential for fostering a more resilient and responsible banking environment that supports sustainable economic growth.

5. Bibliography List:

1. Books:

- Jurin, R. (2012). *Principles of Sustainable Living: A New Vision for Health, Happiness, and Prosperity*. California, USA.
- Bouma, J. J., & Jeuken, M. (2001). *Sustainable banking: the greening of finance*. UK: Greenleaf publishing.

2. Theses:

- Omrani, A. (2021). Reform of the financial and banking system to reflect Algeria's sustainable development (doctorate). 53. ESGC, Algiers: Algiers 03 university.

3. Journal article:

- Abbas Ahmad, F. (2019). Banking Awareness and its Impact on Achieving Sustainable Banking. *Iraqi Journal of Administrative Sciences*, 16(63).
- Alshummari, S. H., & Mohammad, f. (2024, mai). The Impact of Determinants of Commercial Banks' Profitability on Banking. *European Journal of Science, Innovation and Technology*, 04(02).
- Biswas, N. (2011, june). Sustainable Green Banking Approach: The Need of the Hour. *Business Spectrum*, 1(1).
- Bose, S. (2017, December). Non-financial disclosure and market-based firm performance: The initiation of financial inclusion. *Journal of Contemporary Accounting and Economics*, 13(03).
- Briem, c. r., & Wald, A. (2018, june 19). Implementing third-party assurance in integrated reporting: Companies' motivation and auditors' role. *Accounting, Auditing and Accountability Journal*, 31(05).
- Hadidi, A. (2021). Banking sustainability and its role in improving the performance. *Economics books journal*.
- Hamad, S., Draz, M., & Lai, F. W. (2020, june). The Impact of Corporate Governance and Sustainability Reporting on Integrated Reporting: A Conceptual Framework. *SAGE Open*.
- Jain, P., & Sharma, B. (2023). Impact of green banking practices on sustainable environmental performance and profitability of private sector banks. *International Journal of Social Ecology and Sustainable Development*, 14(01).
- Ntsama, U. O., & Yan, C. (2021). Green bonds issuance: insights in low- and middle-income countries,. *International Journal of Corporate Social Responsibility*, 6(2).

4. Internet websites:

- AGIA. (2024). *Initiatives et partenariats*. Retrieved 09 01, 2024, from AGIA: <https://www.afdb.org/fr/themes-et-secteurs/initiatives-et-partenariats/alliance-pour-linfrastructure-verte-en-afrique>
- AMF. (2024). *Financial-sector/sustainable-finance*. Retrieved 08 14, 2024, from AMF: <https://www.amf.org.ae/ar/financial-sector/sustainable-finance>
- Arab, B. (2023). *ESG Report*.
- European, C. (2021). *Overview-sustainable-finance*. Retrieved 07 21, 2024, from European, Commission;: https://finance.ec.europa.eu/sustainable-finance/overview-sustainable-finance_en
- IFC. (2024, JUNE 27). *IFC and IFRS Foundation Announce Partnership to Improve Sustainability Reporting in Emerging Markets*. Consulté le 08 15, 2024, sur IFC: <https://pressroom.ifc.org/all/pages/PressDetail.aspx?ID=28254>
- SBFN. (2023, 09 13). *Sustainable banking and finance network data portal*. Retrieved 08 17, 2024, from SBFN: <https://www.sbfnetwork.org>
- UNEPFI, N. (Jully 2024). *Guidelines for Climate Target Setting for Banks version 2*.
- UNEPFI. (2021, 10 01). *Net Zero Banking Alliance*. Retrieved 08 12, 2024, from Unep fi: <https://www.unepfi.org/net-zero-banking/>
- UNPRI. (2024, 09 01). *About the PRI*. Retrieved from UNPRI: <https://www.unpri.org/about-us/about-the-pri>.

5. Reports

- OECD. (2024). *Climate Finance Provided and Mobilised by Developed Countries in 2013-2022, Climate Finance and the USD 100 Billion Goal*. Paris: OECD Publishing.
- PRI. (2024). *Principles of resânsible investment Annual report 2024*. UN global Compact.

- SBFN. (2024). *Report*. IFC.