



INSIGHTS INTO EGYPT'S REFRIGERATION AND AIR CONDITIONING FINANCE LANDSCAPE



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1. Introduction

1.1. Aim and scope of this summary report

This summary report provides an assessment of the finance sector in Egypt regarding the Refrigeration and Air Conditioning (RAC) sector. The discussion covers the Country's economic and financial overview, giving a broader perspective. The finance sector in Egypt comprises commercial banks (regulated by Central Bank of Egypt - CBE) and non-banking financial institutions (and Non-banking financial institutions (regulated by the Egyptian Financial Regulatory Authority - FRA), . The report provides a broad overview of green financing projects and infrastructure. The project team evaluated various financing approaches and mechanisms for financing sustainable cooling solutions applicable to end-user groups – individual consumers and commercial and public sectors. Apart from the desktop research from the secondary sources of information, a few interviews have been used to gather the information from the primary sources.

1.2. Data collection approach

The data for this report has been collected from various primary and secondary sources.

- Primary data was gathered through expert interviews (in-person and / or over phone / virtual meetings). About 5 commercial banks were contacted for in-person interviews to get information. These interviews were conducted with bank officials, which provided adequate details for the study.
- Secondary data was obtained from a diverse set of publications covering banking sources e. g. Central Bank of Egypt, multilateral institutions such as The World Bank, IMF and EBRD. Also, national level regulatory, and other policy documents were referred to.

Data on financing of RAC sector is not available as the sector does not receive adequate focus. Besides, banks and financial institutions are not required to categorize finance into this category. Due the data situation mentioned, in this report acknowledges data gaps and data from different sources that results in discrepancies.

2. Key findings and recommendations

Egyptian banking and finance sector is vibrant, with many commercial banks (37 banks) and institutions providing services. On the other hand, the banks are adequately capitalized and have strong asset quality with an NPL ratio of 3.4% and 1.3% ROA. The banking sector represented 91% of the total assets of the financial system at the end of the fiscal year 2022/23. The largest share of loans is directed towards corporates (71.2%), while the rest went to retail (17.5%) and the MSME sector (11.3%). The credit portfolio continued to grow and provide financing to all economic sectors, with total loan disbursement of around EGP 4.1 trillion in FY 2022/23 and EGP 3.1 trillion in FY 2021/22. Loans granted for consumer purposes were mostly concentrated into personal loans (80.7%) and minor mortgages (9.9%).

RAC sector in Egypt is multifaceted with both imports of components and exports of systems. Egypt imports air conditioning systems and commercial refrigeration systems as well as components of respective systems such as chillers, fan coils and compressors. Egypt assembles almost 92% of the air conditioning systems sold in the country with imported components. Local refrigeration equipment manufacturers produce display cabinets, chest freezers and refrigerators. Egypt exports single split AC systems to a few countries, including UAE, Saudi Arabia, Tunisia, etc. Egyptian commercial banks finance imports as well as exports through conventional financial products (trade finance products) such as LCs and export credit. RAC value chain finance has been established over the years. Egyptian financial sector is well equipped to facilitate interventions to be developed and implemented. Banks are receptive and open to exploring new financing products to facilitate sustainable cooling solutions.

Egypt's financial sector is dynamic and positioning itself as a frontrunner in applying sustainable finance principles. Regarding the financing of green projects, Egyptian banks have made good progress.

The Central Bank of Egypt (CBE) is steadfast in its commitment to bolstering the Small and Medium-sized Enterprises (SME) sector through various initiatives designed to enhance financial inclusion and stimulate economic growth. Acknowledging the pivotal role of the SME sector in contributing to the Gross Domestic Product (GDP) and its capacity for generating employment, the CBE has implemented preferential interest rates and established compulsory lending quotas for financial institutions. This strategic approach ensures that SMEs are afforded the necessary financial support in order to aid the existing projects for development, expansion, replacement, and renewal (including EE measures).

A cornerstone of these efforts is the CBE's provision to enable SME lending at favourable interest rates, including a 5% rate for certain loans, with the objective of democratizing access to finance for SMEs. This initiative is pivotal in fostering the sector's growth and durability. It should be noted, however, that the options for lending at 8% and 11% have since been phased out, aligning with the evolving financial landscape and the CBE's adaptive strategies to meet the sector's needs. Additionally, for specific working capital loans, a ceiling has been set at 12%, further underscoring the CBE's intent to support SMEs effectively. These measures collectively aim to galvanize the SME sector, crucial for the economy's sustained health and expansion.

The Ministry of Finance recently issued the first sovereign green bonds in Egypt and the MENA region. "Green Finance" is perceived as one of the important topics, gaining more recognition and attention, which is in favour of financing sustainable cooling technology options. The support towards green financing comes from the international funds either via on- or direct lending to local partner financial institutions (PFIs).

Most commercial refrigeration systems manufacturers belong to SMEs. The Medium, Small and Micro Enterprises Development Agency (MSMEDA) was launched in April 2017 –which replaced the Social Fund for Development- as an additional support to finance SMEs either through direct or indirect loans.

The Cool Up programme evaluated financing approaches suitable for financing sustainable cooling options for each end-user group in Egypt. These were primarily integrated through the Cool Up network and literature on the international experience in financing energy efficiency, including the vast literature on the subject.

Revolving green credit is Egypt's most practical financing approach, followed by a positive list that is easy to implement in the commercial and residential sectors. Public sector organizations could use the public-private partnership (PPP) approach for sustainable cooling projects. Besides, there is substantial scope to use the PPP approach for district cooling projects. Commercial banks can play a significant role in terms of sources of finance for the purpose.

The Cool Up programme proposes to work closely with financing institutions/banks and other stakeholders such as chamber of commerce in Egypt. Once selection of sustainable cooling technology options is completed, it is envisaged to focus on securing financial and other data needed for undertaking feasibility studies.

The following diagram illustrates all elements associated with the financing of the value chain of RAC products (as applicable for residential and small commercial customers):



Figure 1: Principal elements of value chain financing

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3. Recent Trends in wider Green Finance in the Country

Egypt's financial sector is very active and positioning itself as a frontrunner in applying sustainable finance principles. The Central Bank of Egypt (CBE) is working to adapt and apply the UNEP FI Principles for Responsible Banking across the entire banking sector. The six Principles (Alignment, Impact, Clients and Customers, Stakeholders, Governance, and targets set, and finally, Transparency and accountability) have been adopted as the core components of Egypt's future sustainability framework. FRA announced the launching of a new think-tank and training centre, "the Regional Center for Sustainable Finance (RCSF)" that shall promote sustainable financial literacy in different countries in the MEA region, especially in countries where Egyptian NBFIs have growth and expansion potential.





Many Egyptian banks are adopting and promoting global standards on sustainable finance. The AAIB (Arab African International Bank) and CIB (Commercial International Bank) have endorsed the UNEP FI Principles for Responsible Banking. They have been involved in the development of the sustainable banking framework. The AAIB is also a signatory of the Equator Principles and other banks of the UN Global Compact. The National Bank of Egypt (NBE) has issued its first sustainability report in line with the Global Reporting Initiative (GRI)

Standards. The report highlighted that the Bank channelled \$ 150 million into climate action projects in addition to EGP 3.38 billion into social activities.¹ In light of recent developments within the National Bank of Egypt's (NBE) environmental portfolio and its collaboration with International Finance Institutions (IFIs), the allocation for green credit lines designated for renewable energy and energy efficiency measures are approaching the \$500 million mark. MOSTADAM platform, conceived by AAIB, UNDP and the Egyptian Corporate Responsibility Center, is the first platform in the MENA region aimed specifically at promoting sustainable finance products and services.

International Financial Institutions (IFIs) cooperate with local banks to promote investments in the RE and EE projects. In addition, special instruments like the Green Climate Fund (GCF) are directing growing attention to the same sector. In general, "Green Finance" is perceived as one of the important topics to gain more recognition and attention. An important concept was communicated through EBRD (GEFF-Egypt), which emphasized that green financing should address two main areas, reducing the risk of banks and supporting companies to be more productive. The total value of green credit lines facilitated by the European Bank for Reconstruction and Development (EBRD) in Egypt is on the verge of reaching \$750 million. This marks a significant commitment to environmentally sustainable projects in the region, with the EBRD harbouring future plans to expand these credit lines further, underscoring a forward-looking approach to enhancing green finance in Egypt.

The CBE is highly interested in the topic, confirmed by opening the specialized division for sustainability topics. However, for the CBE to perform its role as regulator, it needs to become more acquainted with these topics, build its capacities (also through peer-to-peer learning), and exchange experiences with other banks. There is a need for a platform of best practices for Egypt to develop its sustainable finance model and recognize it as a national scheme/model before issuing related regulations. There is a need to start with a framework and link green financing with financial inclusion and conclude these steps by announcing an initiative for Green Finance.

The Ministry of Finance recently issued the first sovereign green bonds in Egypt and the MENA region to speed the transition to a green economy. The bonds provide Egypt with an innovative funding vehicle for eco-friendly and green projects such as clean transportation, renewable energy, energy efficiency,

¹ Nassar, Marwa (12/14/2021): NBE's 1st sustainability report: \$150 m for climate action projects. CSR Egypt. Available online at https://www.csregypt.com/en/nbes-1st-sustainability-report150-m-for-climate-action-projects/.

pollution reduction and control, sustainable water and wastewater management and climate change adaptation. The size of Egypt's first green bond issuance by 2020 has reached USD 750 million for five-year maturity (Governmental Issuance). The allocation of intended expenditures for Egypt's green projects emphasizes a strong focus on environmental sustainability, with nearly 54% dedicated to sustainable water and wastewater management and the remaining 46% aimed at clean transportation initiatives. The net proceeds from these projects, conforming to the criteria for Eligible Green Projects, will be utilized either to finance new ventures or to refinance existing ones, in whole or in part. This includes a wide range of investment, operational, and tax expenditures that contribute to the country's climate change mitigation and adaptation efforts. However, state disbursements to local agencies or authorities raising funds through capital markets, like Green Bonds sales, are not considered eligible. Eligible project categories encompass clean transportation, renewable energy, pollution prevention and control, climate change adaptation, energy efficiency, and sustainable water management, reflecting a comprehensive approach to tackling environmental challenges.

IFC-CIB Green Bond (Private Bank Insurance)

Through a partnership involving the International Finance Corporation (IFC) and the Commercial International Bank (CIB), a green finance initiative has been established in Egypt, totalling \$100 million, with \$65 million contributed by the IFC. This endeavour is aimed at promoting the construction of green buildings through loans offered at market interest rates, alongside performance-based incentives. The concessional co-investment is designed to provide a concessionally level up to 2.2% of the IFC's \$65 million investment. Specifically, the IFC's investment in CIB's inaugural green bond underpins this initiative, directing funds towards green building construction and energy efficiency projects in the industrial sector, thus fostering sustainability in Egypt's built environment.

CIB's green bonds are intended to finance or refinance, in whole or in part, new or existing projects within CIB's portfolio, adhering to conditions such as a \$50 million cap on refinanced projects and a two-year lookback period from the bond's issuance date. The bonds support a broad spectrum of projects, ranging from energy efficiency in various sectors to renewable energy generation and sustainable transport, aiming at enhancing environmental sustainability across diverse dimensions.

The FRA recently issued regulations (July 2021) for mandatory ESG reporting and climate disclosures in order to attract climate financing from IFIs. These regulations will apply to all companies listed on the Egyptian Stock Exchange as well as non-banking financial institutions having an issued capital or net ownership rights of more than EGP 100million. Companies with an issued capital or net ownership of more than a 500 million EGP listed on the stock exchange and engaged in non-banking financial activities will be required to submit a more comprehensive disclosure related to the financial impact of climate change in accordance with the Task Force on Climate-Related Disclosures (TCFD) along with the annual reports and annual financial statements. The implementation of these regulations will provide key information on sustainability measures for companies and climate risks within the business environment which will help IFIs in their environmental and social risk assessment as well as strengthen the company's financial systems.²

² Sustainable Stock Exchanges Initiative (7/15/2021): Egyptian FRA: Mandatory ESG and Climate Disclosure Regulation. Available online at https://sseinitiative.org/all-news/egyptian-fra-issued-mandatory-esg-and-climate-disclosure/.

4. Opportunities for Financing of Sustainable Cooling Technologies

Although many innovative financing products and services are used worldwide to finance the RAC sector, Cool Up selected the most viable and applicable ones for each segment (residential, commercial, and public). Cool Up discussed how these options are feasible to scale up financing of sustainable cooling technology options in Egypt.

4.1. Sources of finance, financing mechanisms and business models

Financing Sustainable Cooling Options (Technologies and Products) can be broadly considered an extension of financing energy efficiency. Besides, the focus is on financing the RAC sector, including RAC products and equipment. This document focuses on financing three principal end-user segments, a) residential, b) commercial, and c) public sector concerning RAC products.

The following table provides an overview of different financing products applicable to energy efficiency products/projects in the sectors under discussion.

Financing Products	Residential	Commercial	Public Sector
Grant	•	•	•
Credit (conventional debt)	•	•	•
Short Term Debt	•	•	
Long Term Debt	•	•	•
Lease (Rental)	•	•	•
Credit Guarantee		•	•
Partial Credit Guarantee		•	•
Pension Funds (Bonds)	•	•	•
Bonds (Green Bonds)	•	•	•

Table 1: Financing products for financing energy efficiency

Source: Manual of Financing Mechanisms and Business Models for Energy Efficiency, Basel Agency for Sustainable Energy (BASE) (2019)

The Cool Up has shortlisted financing mechanisms as per end-use sectors, based on the local FI's familiarity in terms of applicability, procedures, risks, and commonly used guarantees in financing used in other economic sectors and retail clients in the country. As a starting point, these mechanisms be used to upscale the sustainable cooling sector in Egypt.

The following table provides a list of all sources of finance for energy efficiency projects:

Table 2: Sources of finance for energy efficiency projects

Sources of Finance	Residential	Commercial	Public Sector
Commercial Banks	•	•	
Development Banks	•	•	
Non-banking Financing Companies	•	•	
Micro Finance Institutions		•	
Private Equity Funds/Venture Capital		•	
Housing Finance Institutions	•		
Leasing Companies	•	•	
Guarantee Agencies/ Institutions	•	•	•
Crowd Funding Institutions	•	•	
National Financing Institutions	•	•	•
Bilateral Financing Institutions	•	•	•
International Financing Institutions	•	•	•

Source: Manual of Financing Mechanisms and Business Models for Energy Efficiency, Basel Agency for Sustainable Energy (BASE) (2019)



The role of international financial institutions (IFIs) in sustainable development financing (and sustainable energy) in developing countries and transitional economies cannot be disputed. Sustainable finance banks and FIs to offer new products such as renewable energy (RE), energy efficiency (EE), microfinance and low-income housing. This promotes sustainable development and helps partner banks to differentiate themselves. The most important characteristic of these institutions is high (AAA) credit ratings and a broad membership of borrowing and donor countries. These institutions operate independently but have shared objectives of poverty reduction and improving people's living conditions, promoting regional cooperation, and contributing to sustainable development.

4.2. Financing mechanisms and business models for sustainable cooling

Given various financing models around the world, there are a few shortlisted mechanisms for the Egyptian market based on the local FI's familiarity in terms of applicability, procedures, risks, and commonly used guarantees in financing used in other economic sectors and retail clients in the Country. Much experience has been gained in financing renewable energy and energy efficiency, which can cater to the RAC sector. The following table summarises indicative (and not exhaustive) financing mechanisms for end-user groups:

Financing Mechanisms	Residential	Commercial	Public
On-Bill financing	•		
Dealer Financing (Debt finance)		•	
Positive list (white list)	•	•	
Revolving green credit	•	•	•
Public-Private Partnership (PPP)			•

Table 3: Indicative Financing Mechanisms

4.3. Drivers, barriers, opportunities

The Egyptian financial institutions have had considerable experience financing RE and EE projects. With the Government's focus on building new cities, there is a new standard of sustainable development being spearheaded by Egypt in the region. The Central Bank itself is taking charge of revamping the financial sector with the integration of ESG within the operating parameters of banks. Following are some emerging stakeholders in the growing sustainability and green economy, of which RAC will be a part of:

- 1. The Central Bank of Egypt (CBE) has previously issued several initiatives with low interest rates to support green investments. The CBE issued a decree on July 18, 2021, aims at supporting financial and banking stability while achieving the goals of sustainable development and long-term stability for the economy, the environment and society as a whole. This decree introduces the concept of sustainable finance as well as setting mandatory requirements for sustainability reporting by the local banks. On November 3, 2022, the CBE issued the second sustainable finance decree. This decree is a complementary to the previous one and mandates local banks to incorporate sustainable finance policies, establish an independent department for Sustainability and Sustainable Finance, and to report its sustainability progress periodically to the CBE.
- 2. CIB has been working to embed ESG in its operations since 2011 and is a founding signatory of the UN principles for Responsible Banking. CIB was also the first Egyptian bank to issue a green bond (\$100m) which the IFC wholly bought. The bank itself commits to reducing its operational carbon emissions by 10% by 2025 and formal targets for cutting its financed emissions.³ The bank also

³ Furness, Virginia (2022): How Egypt is building a sustainable finance market. In Capital Monitor, 2/21/2022. Available online at https://capitalmonitor.ai/regions/middle-east-and-africa/how-egypt-is-building-a-sustainable-finance-market/.

frequently reports on its sustainability practices in the GRI format as well as its carbon footprint report.

- 3. The National Bank of Kuwait-Egypt (NBK-E) launched sustainable energy financing for mid-sized businesses through IFC. The bank provides a wide array of services and has a wide range of networks throughout Egypt. Based on its schemes on sustainable energy as well as attracting funds from EBRD for clean energy projects in Egypt, it is one of the emerging players that can play a role in this sector going forward.
- 4. The National Bank of Egypt itself is playing a critical role in galvanizing funds in the sustainable finance sector. According to the GRI standards, it has also started reporting on sustainability progress; In its first sustainability report in 2020, it highlighted \$150Million being channelled into climate action projects.⁴
- 5. In the project developer category, Gas Cool is an Egyptian company that operates in energy, power, district cooling and LED lights. Gas Cool was charged to set up the largest central cooling plant for the new administrative capital. Gas Cool was able to establish the first district cooling/heating project in Egypt at Smart Village with a contract duration of 50 years under a Build-Own-Operate mechanism.

Snapshot from Interviews

Al Ahli Bank of Kuwait – Egypt currently finance Refrigeration & Air Conditioning manufacturer or installer. The Bank has the willingness to offer financial instruments to commercial building owners. The in-depth interview with the Bank's representative indicated that in case there had been an agreement with one of the reputable organizations supporting energy-saving Ex; EBRD, the Bank would be able to offer a financial instrument with a longer repayment period along with lucrative pricing. The main barriers against the development of a sustainable cooling sector are perceived as consumer awareness, lack of sufficient data, emerging industries with no previous track record and interest rates.

To finance sustainable cooling for consumers, real estate developers, and commercial buildings the needs of a bank are questioned, and it is understood that i-) Pricing compensation from CBE and/or international organization, ii-) Positive market, technical and cash flow for the project, iii-) Collateral package to support defaulted clients.

Commercial International Bank (CIB) welcomed the technical assistance that can be provided by COOL UP for the Bank in this regard and clarified that the two departments in the Bank organizing the development and sustainable finance and both are interested in the project scope. They have Development Finance Dept and Sustainable finance Department for agricultural Developmental projects and for ECO, the interest rate is subsidized and for EPAP, there is a grant.

⁴ Nassar, Marwa (12/14/2021): NBE's 1st sustainability report: \$150 m for climate action projects. CSR Egypt.

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