



*The role of green financial institutions in achieving sustainable development: A vision in the possibility of its application in Iraq*

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**Abstract**

Since the second half of the 1980s, after the publication of the ICRC's report on environment and development (1987), the issue of sustainable development has occupied a prominent place in economic literature. Over the past few decades, the shifts in the global economy from the liberalisation, opening up and accelerating the pace of globalisation. Globalisation has increased competition among countries without considering the adverse effects and serious consequences on the environment and the depletion of resources, which deprives the right of future generations.

The international financial institutions have tried to address this imbalance by seeking sources of financing and investment in economic activities that preserve the environment. Additionally, it works to achieve a balance between the interests of present and future generations, thus making development and sustainable growth.

The research seeks to show the role played by green financial institutions to achieve sustainable development through the provision of financial resources with the Iraqi perspective.

**Keywords:** sustainable development, sustainable growth, green financial institutions, green bonds.

**Introduction:**

Sustainable development is a guarantee of steady progress and the best alignment of resources and needs. Over the past few decades, the transformation of the global economy from the liberalisation towards globalization has intensified competition among countries. It has increased production without considering the adverse effects and serious concerns on the environment and the depletion of resources, which robs the right of future generations. Putting the economy on a sustainable development track requires an unprecedented shift in investments away



from polluting, greenhouse, etc. Hence the international financial institutions try to address this imbalance by seeking financial sources and investment in economic fields to preserve the environment for sustainable growth.

**Objective of the research:** The research aims to demonstrate the role of green financial institutions (through the use of green financial instruments) in achieving a sustainable economy that ensures the right of present generations to live decent without harming the right of subsequent generations.

**Research hypothesis:** Green financial institutions and their derivatives have a pivotal role in promoting sustainable development to preserve the rights of generations in light of the successive and rapid changes in the global climate.

**Research Problem:** The economic progress achieved at the global level led to a significant depletion of natural resources, and the accompanying neglect of the environment, which led to the decline of the progress. Therefore, sustainable development needs new and innovative tools to maintain sustainability.

### **1- sustainable development. A conceptual framework**

The issue of economic growth has clearly emerged as an economic concept since the end of the Second World War. The researcher explained that the issue of development is more complicated than a shortage of financial resources, besides these resources, there is the issue preservation of the environment.

It also became clear that development is not merely an economic issue that is exposed to economic quantities of production, investment and savings, or exports and imports, or industrial strategy or other. Economists have studied, it as a complex social issue, where the economy overlaps with politics and law, and play social, technological and demographic factors that cannot be neglected.<sup>(1)</sup>

In light of these developments, countries and institutions are beginning to realize that putting the global economy on a sustainable development path requires an unprecedented shift in investments towards technologies and models for sustainable growth and development.

Although the environmental issues are not new, the researchers have recently begun to understand their complexities. In the past, the concerns



have been focused on the effects of development on the environment. Today, we need to be equally concerned with the ways in which environmental degradation can put down or reverse economic development.<sup>(2)</sup>

After the integration of the term sustainability, as a new concept at the global level, which led to a significant improvement in the development approach. It became necessary to develop all ideas related to the economic field in general and the development field, in particular, has shifted from economic and social direction to sustainable development that takes into account the environmental dimension and future generations.<sup>(3)</sup>

The concept of sustainable development was first addressed in 1987 by the Brundtland Commission, which defined it as meeting the needs of the current generation without compromising the needs of future generations. It is a set of policies and activities geared towards the future. Enable all members of the community to expand their capabilities to the possible extent and employ them to ensure the achievement of a benefit acquiring future generations. Thus, the term sustainable development is not limited to growth, but beyond, as it refers to a wide range of issues require a multifaceted approach.<sup>(4)</sup>

The will of all countries are required to manage the environmental issues and preserve development threaten. Environment and development are not two separate challenges, but are inextricably linked. Development cannot be based on a crumbling ecological resource base, nor can the environment be protected when growth falls from costing. Destruction of the environment, these effects cannot be addressed separately by fragmented institutions and policies, because they are intertwined in a complex system of causes and effects.<sup>(5)</sup>

The concept of sustainable development has arisen as a result of the imperfect growth and development that did not provide the basis for judging the costs and benefits of different policies. The deterioration in the environmental situation at the global level has led to the need to integrate the environmental dimension in development and development planning.<sup>(6)</sup> Consequently, many seminars and conferences on environment and development were held, and sustainable development was defined through several definitions, all in one sense, namely that



sustainable development should be concerned with meeting the needs of present generations without prejudice to the needs of future generations.

Overall, there is a consensus that sustainable development refers to a wide range of issues and requires a multifaceted approach to economic, environmental, human and institutional capacity management. This information contains the current state affairs, trends and pressure points, and the impact of overlaps. The indicators allow decision-makers and policymakers to monitor the progress towards sustainable development.<sup>(7)</sup>

The Commission on Sustainable Development of the Earth Summit has published a book on sustainable development indicators, which comprises about 130 indicators classified into four main categories or dimensions such as, economic, social, environmental and technological<sup>(8)</sup>

First: The Economic Dimension: This dimension includes the current and future implications of economic activity on the environment.

- Per capita consumption of natural resources: In developed and mainly industrialised countries, the average per capita consumption of oil, gas and coal is twice as high in developing countries. Solo and Hartock stated that use is sustainable if it is maintained or increased over time. If it falls below its level or decreases over time, this consumption is unsustainable.

- Poverty eradication: Sustainable development, in developing countries, is concerned with channelling resources for optimal exploitation to improve and raise living standards in these countries. Local demand for agricultural products, manufactured goods and services will increase as the population grows, requiring the satisfaction of the basic needs of individuals in those goods and services in developing countries.

- Reducing income inequality: Sustainable development aims to reduce disparities in the distribution of countries between the rich and the poor. Thus, it requires that economic and social policy be directed to invest the available resources and equitable distribution among all to ensure their rights. These resources in the form of investments, goods and services in a sustainable manner reduce pressure on the environment.

Second: The social dimension: This dimension includes the social requirements for achieving and maintaining sustainable development:

- Good governance: It is one of the essential elements of sustainable development. It is required to choose democratically and encourages participation in governance by all members of society. The achievement





of this goal will be reflected in the political and economic decisions that will be in the interest of community.

- Providing health and education services: It is one of the fundamental objectives of sustainable development to provide essential health services and educational programs from the initial stages to the higher steps. Additionally, the acquisition and development of knowledge of individuals is a crucial goal of sustainable development.

- Population growth and distribution: This means to control the population growth and pay full attention to the welfare and composition of the family in general. Moreover, it works to distribute the population between urban and rural areas in a planned order to protect the green environment of agricultural land and reduce pollution in central cities.

Third: The environmental dimension: The environmental dimension of sustainable development means to achieve the economic well-being of present and future generations through preserving the environment from pollution and enabling it to provide a standard of living that continuously improves over time.

- Conservation of water resources: Sustainable development aims to preserve water uses by reducing wastage, constructing dams for storing water and protecting groundwater, as well as improving water and sanitation networks and improving drinking water quality.

- Protecting the climate from global warming: It means to avoid the actions that bring significant changes in the global environment. Different radiations, nuclear and chemical residues lead to adverse effects on the planet.

Fourth: Technological dimension: It is necessary to use the knowledge and modern technological methods to achieve society and sustainable economy development. The following are the most essential pillars of sustainable development: <sup>(9)</sup>

- Use of advanced technology and cleaner than industrial facilities.
- Reduce the emission of gases, hydrocarbons and global warming.

Generally, sustainable development aims to improve the living standards of individuals by taking care of their health, protecting the surrounding environment from pollution, and efficient use of resources. It leads to improve the economic competitiveness of the country in the long term, that is, sustainable development requires the integration and integration of several economic, environmental and health factors. The most important goals that sustainable development seeks to achieve are as follows: <sup>(10)</sup>



- Develop the standard living of the population by focusing on the relations between the activities of the society and the environment through the measurements of the environment quality, reform and rehabilitation and develop a relationship of integration and harmony.
- Enhance the awareness in the population of the existing environmental problems as well as developing their sense of responsibility towards them. It encourages the citizens to participate actively in finding appropriate solutions through their participation in the preparation, implementation, follow-up and delivery of sustainable development programs and projects.
- Respect for the natural environment and therefore, sustainable development is the one that accommodates the sensitive relationship between the natural environment and the built environment. Moreover, it develops this relationship to become a relationship of integration and harmony.
- Achieve the exploitation and rational use of resources. Sustainable development deals to prevent depletion or destruction of limited resources and encourages their reasonable use and employment.
- Link the modern technology to the goals of society for sustainable development attempts to employ advanced technology to serve the purposes of society, through raising awareness of the population on the importance of technology in the developmental field. Additionally, it helps to use the new and available technology in improving the quality of life and achieving desired objectives, without leading to risks, or at least controlling these effects.
- Make a continuous and appropriate change in the priorities of society through a proper method. It allows achieving a balance through which economic development can be activated, on all environmental problems.
- Achieve technical, economic growth to preserve the natural capital, which includes natural and environmental resources, which in turn requires the development of institutions and infrastructure to manage the risks. It ensures equality in the sharing of wealth between current and successive generations. A set of indicators to assess sustainable development are:<sup>(11)</sup>
- Average GDP per capita: This indicator is one of the crucial signs used to measure the robustness of the economy and evaluate performance. This indicator is calculated by dividing GDP by the total population. It also loses its importance as the proportion of the people whose actual income



is far removed is significant, but it is an essential component of the quality of life according to the United Nations.

- Exports of goods as a percentage of imports of goods: This indicator shows the relationship between the semen economy with other economies in the world, and the components of the index are exports and imports of the country. This indicator reflects the variation in the exchange rate and international competitiveness, and trade liberalization, in general, may have effects. Alternatively, this indicator can have adverse effects by increasing the unsustainable use of resources when environmental costs of production are not taken into account.
- The proportion of official assistance in GNP: This includes official development assistance and /or soft loans provided by the formal sector to some countries and regions in order to promote development within a year Divided by GNP multiplied by 100, this indicator is an essential measure of the contribution of states to the international partnership in development. It measures the levels of assistance, facilitating the conditions that aim to achieve global growth. When official development assistance flows from donor countries are measured, this includes bilateral payments from concession funds to developing countries and multilateral institutions.
- Net foreign investment as a percentage of GDP: This indicator is calculated according to the following formula:
- Foreign investment ratio = net direct investment / GDP multiplied by 100 This indicator measures the stimulus in economic development, an important financial element in accelerating the pace of development.

## 2- the concept of green financial institutions and strategies

Over the past three decades, the world economy has witnessed spectacular technological, technological and informational developments. In contrast, the world economy has faced many challenges and difficulties.

These challenges have changed the perception of how sustainable development and sustainable growth can be achieved. The success requires the adaptation of the facts, and the development of appropriate strategies to achieve them.

In this context, international financial institutions such as the World Bank, the International Monetary Fund and others are beginning to find solutions to these challenges, which pose an imminent threat to economic



stability, and have started to devise solutions by shifting towards a green economy in an attempt to mitigate the severity of environmental challenges and changes.

Green financial institutions (green banks, green financial markets, asset management companies, green insurance companies, green pension funds, etc.) are one of the most recent innovations that finance green economic activities by offering long-term loans at low-interest rates.

Green finance, as part of green banking, contributes significantly to the green industry and green economy, and is part of a global initiative by a group of stakeholders to save the environment.

There have been many definitions of green financial institutions. Some have defined them as all forms of investment or loaning that take into account the environmental impact and promote environmental sustainability. Important aspects of green finance are sustainable and banking investments. Investment and lending decisions are made based on environmental screening. Risk assessment to meet sustainability criteria, as well as insurance services covering environmental and climate risks.<sup>(12)</sup>

Or institutions that provide low-cost and long-term financial resources through the use of various financial mechanisms (stocks, bonds, etc.) to use it in financing environmentally friendly and low-emission projects such as renewable energy projects, clean water supply projects, wastewater treatment plant, solid waste disposal and disposal plants. Hazardous waste, biogas plant ... etc.<sup>(13)</sup>

It is clear from this that the concept of green financial institutions revolves around their ability to provide the necessary financial resources from different institutions, whether public or private, in investments that respect and preserve the environment (environmental considerations have started to play a significant role in financing projects).

These institutions seek to support green growth and sustainable green development and achieve a balance, harmony and integration between the environment and the economy.

Areas of green finance cover improvement of environmental degradation (air pollution, deforestation treatment, biodiversity loss, soil conservation, clean energy, renewable energy projects, green housing,





rural and environmental tourism, pharmaceutical waste recycling, energy efficiency improvement and heat utilisation projects).<sup>(14)</sup>

For successfully aligning the financial system with sustainability objectives, financial management must target the following goals:<sup>(15)</sup>

- Raise awareness among regulators and market participants in the financial sector regarding environmental and climate risks.
- Develop the capacity of the financial industry to analyse and manage environmental risks through knowledge building and participation.
- Build capacity in the financial industry to develop sustainable financing practices and new lending tools to finance sustainable projects such as renewable energy.
- Promote transparency through ESG disclosure requirements.
- Provide incentives, if needed, to banks and non-governmental financial institutions to finance green projects.
- Support the development of new market sectors, such as the green bond market or climate risk insurance.
- Develop long-term sources of local currency refinancing for banks to enable them to extend long-term credit.

For achieving these goals, there is a need for dialogue among all relevant local stakeholders. Public financial institutions including central banks, development banks and public pension funds can play an important role in developing and promoting adaptation to new green financial products. International initiatives and networks, the Sustainable Banking Network, the Sustainable Stock Exchanges Initiative, the G7 Initiative on Climate Risk Insurance and the G20 Green Finance Study Group, help countries to benefit from international expertise.<sup>(16)</sup>

The following strategies are needed to attain green finance:<sup>(17)</sup>

- Allocate a political environment to encourage green investment
- Increase public and private sector investments.
- Identify appropriate projects for green finance.
- Identify issues and approaches for green finance.
- Define the role of different credit rating agencies in promoting and supporting green finance institutions.

The objectives of the green financial institutions are as follows:<sup>(18)</sup>

- Develop strategic plans to finance green projects.
- Create awareness and build capacity for staff on green finance.



- Dissemination of information on green projects, project plans, unit costs, etc.
  - Create awareness among potential entrepreneurs and identify appropriate projects to invest in.
- 3- the relationship of green financial institutions to sustainable development.

Green financial institutions are crucial to spreading a culture of transition to an economy free from the consequences of global warming and climate resilience. This type of innovation helps create fair and green jobs and build prosperity, enhancing countries' ability to build resilience and respond to the effects of climate change, and more markets. Khadra helps financial markets diversify costs and distribute risks for investors interested in environmental and climate issues.

International financial institutions and multilateral banks have begun to devise financial instruments and products to meet the challenges of environmental pollution, catalyzing the trend towards a low-carbon, environment-friendly economy.

Financial institutions take a variety of forms, which may be public institutions, maybe private institutions, and possible joint institutions, and these institutions provide the necessary monetary resources to serve the process of achieving the transition towards a green economy and conservation and low emissions, by:

First: Providing essential financial resources to build an advanced infrastructure:

Massive investments in green and flexible infrastructure are estimated to be needed worldwide. For example, the infrastructure gap in developing Asia from the Asian Development Bank was assessed to reach \$ 26.2 trillion between 2016 and 2030 or \$ 1.7 trillion. Annually, of the \$ 26.2 trillion that needs to be invested by the 45 member countries of the Asian Development Bank, \$ 3.6 trillion is explicitly required to mitigate and adapt to environmental pollution. 56% of energy investment is needed, 32% For transportation, 9% for no As for Southeast Asia alone, the 2015 ASEAN Investment Report estimates that US \$ 110 billion per year is needed to invest infrastructure in energy, transport, ICT, water and sanitation in ASEAN until 2025. <sup>(19)</sup>

Second: Providing financial resources for the establishment of low-emission projects and preserve the environment, and this represents the



most prominent role of these institutions. New financial provides financial needs.

Of the 1,874 signatories to the Principles for Responsible Investment (6.5%) coming from Asia, about 122 financial institutions have signed up to global sustainable finance initiatives. Signatories include asset holders, investment managers and professional services, partners. Of the 57 insurers that have globally signed the FI Principles for Sustainable Insurance of the United Nations Environment Program (UNEP), 8 of them from Asia (14 per cent), according to the 2016 Global Sustainable Investment Review, total sustainable investment assets Managed in a US \$ 52 billion in 2016 (excluding Japan).<sup>(20)</sup>

Japan is the fastest growing market for sustainable investments with sustainable investment assets increasing from \$ 7 billion to \$ 473.6 billion between 2014 and 2016. This increase in sustainable assets can be explained by changes in Japan's sustainable investment market, as well as increased reporting and sustainable investment activities from institutional asset owners.<sup>(21)</sup>

On the other hand, the most recent development has been the creation of Green Bonds by international financial institutions, and financial institutions have started trading in the financial markets to face environmental degradation and mitigate it. Almost 12 years after the issuance of the first bond, the green bond markets saw strong momentum, rising from about \$ 800 million in 2007 to about \$ 155.5 billion by the end of 2017.

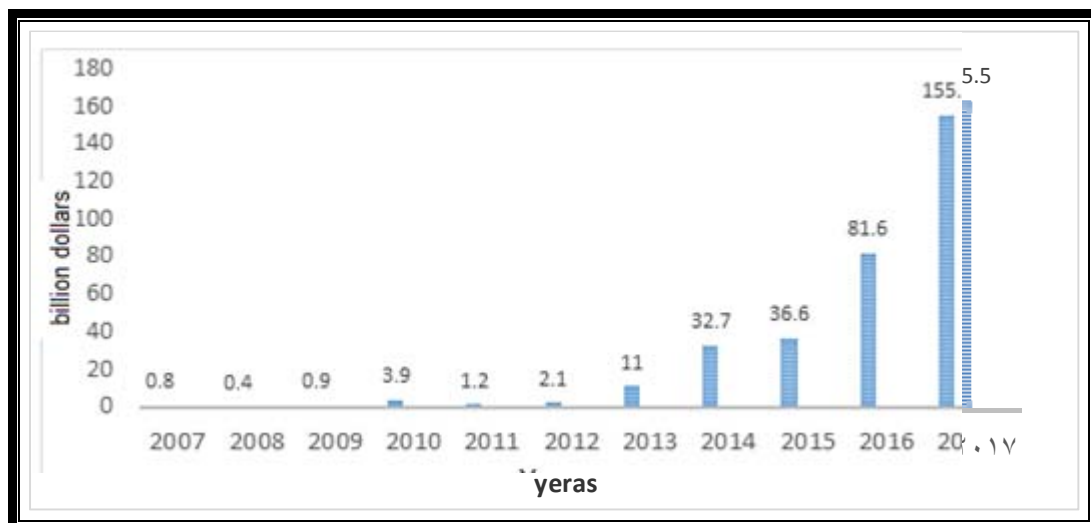


Figure (1) The volume of green bond issues for the period 2000-2017 globally (US \$ billion)



The form of work of researchers based on:

– Green Bonds Highlights, Climate Bonds Initiative, Different numbers.

The form of research work based on: Green bond markets have become more important as a source of long-term financing in green investments around the world. In Asia, China was the largest issuer of green bonds in 2016 with a total green bond issue of 248.6 billion yuan (the US \$ 37.1 billion). The following chart shows the green lending from Chinese banks as a share of total bank assets for the period 2007-2016.

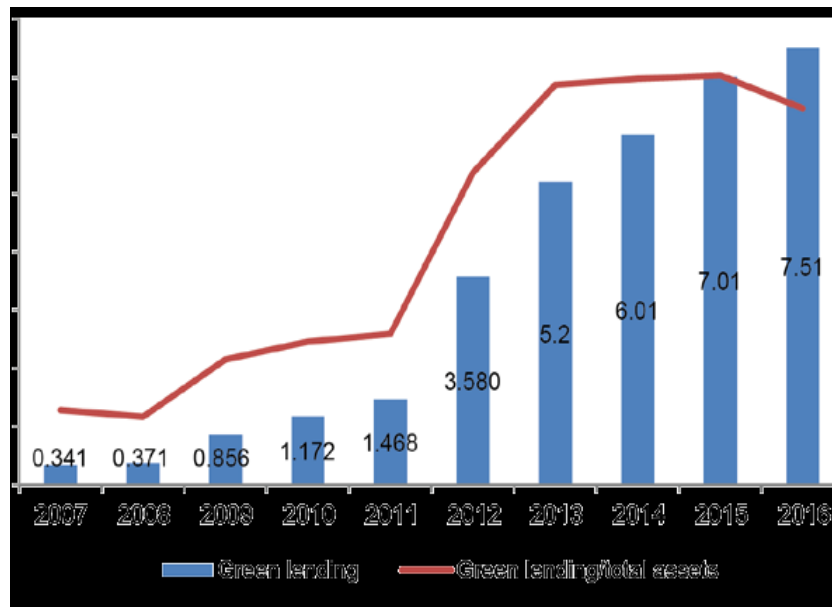


Figure (2): Green lending from Chinese banks as a share of total banking assets for the period 2007-2016 (RMB 1 trillion)

Source: Ulrich Volz, Fostering Green Finance for Sustainable Development in Asia, Asian Development Bank Institute, ADBI Working Paper Series, Tokyo, 2018, p9.

In India, climate bonds were first issued in 2015 to be used to finance renewable energy projects such as solar, wind, renewable energy, energy efficiency and biomass, and spread rapidly and some banks and institutions have issued many of these bonds, and inspired and encouraged the increasing popularity of green bonds stock market The Securities and Exchange Commission to create a more favourable environment for green bonds, and in 2016 developed a set of regulations, instructions and regulations for the work of these bonds. <sup>(22)</sup>

In South Korea, the first Asian green bonds were issued in 2013 by the Export-Import Bank of Korea, raising the US \$ 500 million. Indonesia saw its first environmentally friendly bond issuance in April 2014 with IFC support with a partial credit guarantee of residential development of





Rs 500 billion. Efforts are underway to develop green bond markets elsewhere in the region, and in March 2017 the Singapore Monetary Authority (SMA) launched a green bond grant plan covering costs up to S \$ 100,000 per issuance for an external review of available green bond issues. In September 2017, the ASEAN Capital Markets Forum, which brings together the capital market regulators of the 10-member Association of Southeast Asian Nations (ASEAN), launched the ASEAN Green Association (ASEAN) Green Standards, based on the International Capital Markets Association (ASEAN).<sup>(23)</sup>

The eurozone has also witnessed significant developments in the green bond market based on an extensive financial infrastructure. The EU market has seen participants and investors as well as increased support from EU institutions.

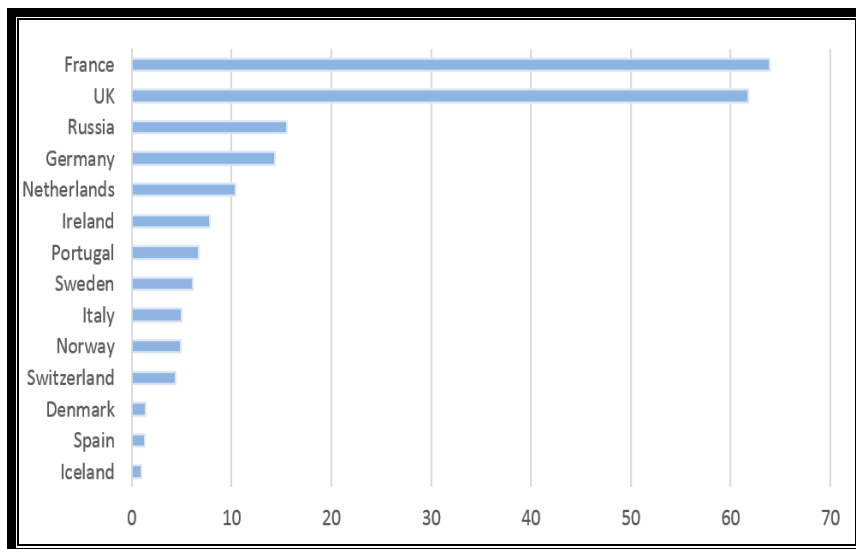


Figure (3) Geographical distribution of green bonds in Europe until 2016

Source: European Commission, Study on the potential of green bond finance for resource – efficient investments, the office of the European Union, Luxembourg, 2016, p24.

The EU green bond market is generally developed due to well-established funding infrastructure, active participation of EU-based organizations and political support, yet there are significant differences in the development of the green bond market across EU member states, mainly due to the differences in the development of the national bond market and policy frameworks. The EU green bond market is led by multilateral development banks (such as the European Investment Bank and the European Bank for Reconstruction and Development), municipalities, companies, etc.



Based on the significant developments and the rapid growth in the green bond markets, these markets are expected to play an essential role in the transition towards a low-emission economy.

To, achieve sufficient funding for mitigation and adaptation costs, IFIs and multilateral banks should:<sup>(24)</sup>

1. More sovereign issuances from developed and emerging economies as more governments seek to finance climate-friendly infrastructure and encourage investors to enter green capital markets.
2. Progress in common international standards and definitions for green bonds, with the launch of a European sustainable finance rating expected in the first half of 2018.
3. Regulators will continue to innovate with further guidance, regulations and incentives being developed.
4. Pressure the banking sector to increase green lending and switch to green finance to help achieve the Paris objectives.
5. Increased linkages between green bonds, green investment and the SDGs, particularly as a funding source for goals 6, 7, 9, 11, and 13, but the aim is to keep the volume of issuances doubled by the end of 2020.

In this context, these institutions have been able to mobilize and direct financial resources towards environmentally friendly and low-emission investments, and there is a looming glimpse of the horizon. By integrating sustainability goals into financial decision-making, we not only reduce our environmental footprint or social inequality, but also reduce the impact of long-term risks on global environmental hunting in general, and the stability of the financial system in particular.

#### 4- Environmental sustainability .. Necessity to sustain development

The importance of financial institutions in the process of achieving growth and economic development of any country has become self-evident, as most economic literature (especially recent ones) on the importance of institutions as one of the most critical elements of development and growth, and financial institutions retain a leading role in the economic system through the financing of economic activities (Production, investment, trade) as well as creating incentives for saving.

The Green Economy Initiative was announced by the United Nations Environment Program (UNEP) in late 2008. The initiative consists of a



set of components aimed at supporting, analyzing and formulating policies aimed at investing in the green sectors on the one hand, and on the other hand the greening of unclean and non-environmentally friendly industries. For existing projects, it is required to pre-plan the transition towards a green economy, through the renewal of technologies. It ensures their adaptation to a clean environment and the requirement of the same results for new projects.<sup>(25)</sup>

The green economy represents the environmental dimension of sustainable development as well as the economic and social dimension. The green economy aims to link the requirements of achieving all kinds of development with the protection of the environment. Rio + 20 Conference stressed that the green economy is one of the essential tools to make sustainable development and enhance its capacity. It aims to manage natural resources in a sustainable manner, increase the efficiency of using resources, reduce waste and reduce the harmful effects of development on the environment. It also aims to achieve economic prosperity and social security. The principle of the relationship between the green economy and sustainable development is the relationship of the part with the whole sustainable development can be achieved only through the achievement of environmental rehabilitation and environmental protection, where the latter is an integral part of the development process.<sup>(26)</sup>

In Iraq, interest in the environment and sustainable development has begun to be evident through the adoption of policies aimed at this, and the issuance of several plans for sustainable development and human development and environmental development, and the law has strengthened attention to regulations for the exercise of activities, especially those concerned with human life and the environment. 2005 to formulate environmental policy to ensure the protection of the environment from pollution and maintain cleanliness, in cooperation with the regions and governorates not associated with the territory.<sup>(27)</sup>

However, this is not enough on its own, if not accompanied by application on the ground, the environment of Iraq is heavily polluted at all levels (air, water and soil) as a result of the conditions experienced by Iraq over the past half century, wars, terrorism and the remnants of weapons used in it had a negative impact in The environment reflected on human life and health.



Even the oil sector, which has played a significant role in the process of economic and social development in Iraq for decades, which accounts for more than 96% of revenues, at the same time must pay attention to the adverse effects of this sector on the Iraqi environment, represented by air pollution resulting from burning The associated gas and the non-production and use of oil derivatives of international standards, and sabotage in the lines of transport of oil and its derivatives and the outbreak of fires that lead to increased rates of air pollutants in the air, in addition to other factors contribute to air pollution in sweat, the massive increase in the number of vehicles The use of fuel that does not meet the environmental standards for transport and traffic, and the use of citizens to burn waste as an alternative to poor waste collection process, as well as over-cutting of trees and forest areas in general and palm in particular, which in turn reduces green spaces and increases air pollution.<sup>(28)</sup>

In this area, green investment is an effective remedy for the problems of air pollution resulting from the use of energy in its traditional form, it can invest in renewable energy generation (such as wind and solar power) and thus can maintain energy sources and uses as clean and efficient energy sources, and this type of investment Helps increase growth in income and employment driven by public and private investments that reduce carbon emissions and pollution and increase the efficiency of consumption of natural resources and energy sources. This type of investment needs to be stimulated and supported by the state. To enter into environmentally friendly investments and to reform economic policies to create a climate conducive to such investments and projects.

In the area of food security, it is expected that the number of souls of Iraq in 2030 will be 60 million people, as a result of population increase ranging from 2.66% to 3%, offset by a new threat of complete drought of the Tigris and Euphrates in 2040 due to the total dams built on the rivers and exceeded Neighboring countries over the Iraqi rights to water, as well as the lack of a clear strategy for rural development and encourage farmers to return to their farms and land that they abandoned for various reasons, in addition to the apparent lack of water management (drinking and watering), which makes Iraq threatened by comprehensive famine and lack of drinking water supply will lead To expose the total life of the Iraq brings together to direct threats, as well as undermining the development and finish off the achievements.<sup>(29)</sup>





Therefore, the requirements of resettlement of the farmer in his land and the return of those who migrated by providing the needs of decent living for the farmer and the provision of life requirements of schools, health centers, hospitals, energy sources, etc., as well as providing financial support for the farmer to restore the agricultural sector to its position in economic life Sustainability in this sector.

Access to a healthy state of dealing with the inputs and outputs of green financial institutions requires a sophisticated banking system capable of keeping abreast of developments in the international financial markets in particular and the banking sector in general, and noted in Iraq that the banking system is still underdeveloped and not keeping up with these developments, as the techniques used Obsolete, as well as the typical management methods, and sagging non-responsive administrative owners skillfully with modern technological changes, and the absence of a suitable environment for dealing with customers, and poor marketing of non-traditional banking products, all of which make banking and administrative systems that Banks are not able to cope with modern banking systems, in terms of some indicators, such as the rise in the value of doubtful debts, which amounted to about 3079.7 billion dinars in 2015, which constituted a burden on financial stability, where the credit default rate of government banks reached 67.1%.<sup>(30)</sup> This has to be the development of the banking sector to keep pace with developments in the rest of the world and work to provide financing for green projects, and the adoption of environmentally friendly projects to t invest in the environment a way to lay the foundations of the green economy.

## Conclusions and recommendations

### First: Conclusions

1. The environmental challenge has become one of the most significant challenges facing the world economy in the twenty-first century, impeding the achievement of the Millennium Development Goals.
2. Green financial institutions have demonstrated an excellent capacity to provide and mobilizes financial resources to mitigate the effects of environmental degradation.
3. Despite its short life, the green bond markets have witnessed increased growth and full acceptance from international financial institutions, banks and private investors. The size of these bonds amounted to about \$ 155.5 billion in 2017 compared to \$ 800 million in 2007.



4 - The environment of Iraq today suffers from pollution significantly as a result of the wars fought by Iraq, pollution included water, air and soil, as well as incorrect practices in factories and oil extraction has also worked to increase the intensity of pollution.

5. The economic environment in Iraq remains underdeveloped, especially in the banking and investment sector, which in turn slows the growth and development process.

## Second: Recommendations

1- Urging banks, banks and financial institutions to establish sub-banking units responsible for providing soft loans to finance green projects.

2 - The need to work to address the shortcomings of the green financial institutions to be able to mobilise the necessary financial resources to transition to a sustainable economy.

3 - The need to work on the development of global and international initiatives on the environment and its role in the economy, and to provide and invent innovative financial tools and products that can provide financial resources.

4 - work on the exploitation of gas associated with the extraction of oil, because of the effects of harmful to the environment, and the exploitation generates additional income for Iraq, can be put these projects for investment as environmentally friendly projects.

5 - To benefit from the experiences of leading countries in the field of banking services, and activate the role of green investments and green bonds, as one way to contribute to achieving sustainable development.

## Margins

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