

ROLE OF BANKING SECTOR IN FINANCING RENEWABLE ENERGY PROJECTS

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ABSTRACT

This paper describes the role of financing framework in the field of renewable energy source. The pivotal challenge lies in the absence of groundbreaking financing solutions that can provide substantial funds at reduced interest rates and extended periods—an imperative hurdle for India's sustainable energy aspirations. A sound financing framework is a catalyst for the growth of renewable energy. It enables projects to move from conception to implementation, attracts a variety of investors, and contributes to the overall development of a sustainable and competitive renewable energy market. The main objective of this article is to shed light on a robust and sound financing framework.

Keywords:

Banking, Renewable Energy Sector, National Clean Energy Fund, Financing system

INTRODUCTION

The renewable energy sector is undergoing substantial growth globally, driven by several favorable factors that underline its growing importance in the energy landscape. Public awareness and support, coupled with emerging trends, highlight the sector's pivotal role in the transition toward a sustainable and resilient energy future [1-2]. As India strives to lift millions of people out of poverty and promote industrialization, the renewable energy sector has emerged as an important sector in providing employment. With this, this sector is contributing to job creation, economic growth, and fostering new business models [3].

Energy transition initiatives, decentralized systems, energy storage integration and corporate sustainability goals are reshaping the sector. It is of paramount importance to develop renewable energy sources as reliable and sufficient energy sources. For this, renewable energy sources need to be financially supported. The financing sector plays an important role in supporting renewable energy sources. Along with this, favorable policies and incentives provided by the government and financing sector are playing an important role in these projects revival, establishment and development of these projects [4]. This paper has been discussed in detail in the following sections.

1. Different schemes to encourage the banking sector's involvement in financing renewable energy projects

Various countries have different schemes to encourage the banking sector's involvement in financing renewable energy projects. These schemes are often implemented to promote sustainable and eco-friendly practices [5-6]. Here, in following section some common types of schemes are discussed-

1. Green Finance Initiatives:

Some countries have established green finance initiatives that encourage banks to allocate funds specifically for environmentally friendly projects, including renewable energy.

2. Interest Subsidies:

Governments may provide interest rate subsidies to banks or financial institutions that offer loans for renewable energy projects. This reduces the financial burden on borrowers.

3. Tax Incentives:

Financial institutions investing in or financing renewable energy projects might be eligible for tax incentives or credits. This can include tax breaks on income generated from renewable projects.

4. Risk Mitigation Measures:

Governments may introduce measures to mitigate the risks associated with renewable energy investments, making it more attractive for banks. This can include partial risk guarantees, insurance schemes, or other risk-sharing mechanisms.

5. Credit Enhancement:

Governments or international organizations may offer credit enhancement mechanisms, such as loan guarantees; to boost the creditworthiness of renewable energy projects and attracts financing.

6. Capacity Building:

Some schemes focus on capacity building within the banking sector. This involves providing training and resources to financial institutions to better understand and assess the risks and opportunities associated with renewable energy financing.

7. Regulatory Support:

Governments might implement regulatory frameworks that create a conducive environment for renewable energy investments. Clear and supportive regulations can encourage banks to participate in financing such projects.

These vary widely from country to country and from country to country, as well as the country's government, religious centers, institutions, or financial resources in a specific area.

2. Schemes related to renewable energy financing in India

India is also promoting renewable energy and banking sector involvement. Also actively working on various initiatives and schemes to encourage [6-8].

Some of the major initiatives and schemes related to renewable energy financing in India are discussed in the following section and are as follows:

1. Priority Sector Lending for Renewable Energy:

The Reserve Bank of India (RBI) includes renewable energy under the priority sector lending, ensuring that a certain percentage of bank lending is directed towards these projects.

2. Indian Renewable Energy Development Agency (IREDA):

IREDA plays a crucial role in financing and promoting renewable energy projects in India. It collaborates with financial institutions to provide loans and financial assistance for renewable energy initiatives.

3. Green Bonds:

The issuance of green bonds has gained traction in India. These are debt instruments specifically earmarked for financing green projects, including renewable energy.

4. Interest Subsidies and Incentives:

The government offers interest subsidies and incentives to banks and financial institutions involved in financing renewable energy projects. This helps make such projects more financially viable.

5. National Clean Energy Fund (NCEF):

The NCEF provides financial support to various clean energy projects, and financial institutions can access funds to support renewable energy initiatives.

6. Renewable Energy Credit Mechanism:

India has a Renewable Energy Certificate (REC) mechanism, which allows banks and other entities to trade in renewable energy certificates. This system provides additional revenue streams for renewable energy projects.

7. Accelerated Depreciation Benefit:

Companies investing in renewable energy projects can avail accelerated depreciation benefits, making these investments more attractive to financial institutions.

8. International Cooperation and Funding:

India collaborates with international organizations and financial institutions to secure funding and support for renewable energy projects. This includes partnerships with entities like the World Bank, Asian Development Bank (ADB), and others.

3. Role of sound financing sector in establishment of renewable energy field

Solid financing plays an important role in accelerating the development of renewable energy projects. Solid financing indeed holds a pivotal role in expediting the advancement of renewable energy projects. A robust and well-structured financing system is crucial to sustain the growth of the renewable energy sector. The complexities and capital-intensive nature of renewable projects, such as solar and wind installations, demand a financial framework that is not only sound but also innovative [7, 9].

A sound financing system ensures that renewable energy projects receive the necessary funding, offering larger sums at lower interest rates and for extended durations. This financial support becomes a catalyst for the deployment of renewable technologies, facilitating the transition towards cleaner and more sustainable energy sources [9-10]. Moreover, it attracts investments from various stakeholders, including institutional investors, private companies, and government entities, thereby fostering a conducive environment for the renewable energy sector to flourish. In essence, a well-structured financing system acts as a linchpin in driving the successful implementation and scalability of renewable energy initiatives. Therefore, it is essential that a financing system should be a sound financing system.

The key factors which are considered by solid financing systems for renewable energy sources are explained in the following points[11-14]:

1. Project Feasibility and Bankability:

Strong financing ensures that renewable energy projects are financially viable and bankable. It involves thorough feasibility study, risk assessment and financial modeling to attract funds from banks and investors.

2. Access to Capital:

Adequate financing provides developers and project proponents with the necessary capital to initiate and complete renewable energy projects. This includes securing funds for infrastructure, technology, and operational expenses.

3. Risk Mitigation:

Proper financing structures often involve risk mitigation strategies. Financial institutions and investors may require risk assessments and mitigation plans to ensure the long-term success of renewable projects, especially given the inherent uncertainties in the sector.

4. Scale and Number of Projects:

With sound financing mechanisms in place, the number and scale of renewable energy projects are likely to increase. This is because developers can access the necessary funds to implement projects, leading to a broader adoption of renewable technologies.

5. Innovation and Technology Adoption:

Financial support encourages innovation and the adoption of advanced technologies in the renewable energy sector. As projects become financially viable, there is an incentive to invest in cutting-edge technologies that improve efficiency and reduce costs.

6. Market Competitiveness:

A well-structured financing ecosystem fosters market competitiveness. This encourages developers and investors to offer more competitive pricing, making renewable energy solutions more attractive compared to conventional sources.

7. Government Incentives and Policies:

Governments often provide incentives and favorable policies to attract financing for renewable energy projects. This might include tax credits, subsidies, or other financial incentives that make investments in renewable energy more appealing to investors.

8. Attracting Private Investment:

Sound financing attracts private investment, not only from traditional lenders but also from institutional investors and impact funds. This diversification of funding sources contributes to the sustainability and resilience of the renewable energy market.

9. Community and Social Impact:

Financing structures can also address social and community impacts. Projects that consider social and environmental sustainability may find it easier to secure financing, and investors increasingly value projects with positive community engagement.

CONCLUSION

In conclusion, India's pursuit of its energy transition objectives necessitates an unwavering commitment to fostering an optimal ecosystem. This entails sustained policy interventions, a stable regulatory framework, enhanced coordination among stakeholders, and robust financial systems. The notable transformation in India's energy landscape witnessed over the last five years underscores the nation's realization of a cleaner energy future. India will be ready to realize its goal of achieving a sustainable and clean energy future in the near future.

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