Green Finance—The Environment Friendly Finance

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Abstract

As per *Inter Governmental Panel on Climate Change (IPCC)* report global atmospheric concentrations of carbon dioxide, methane, and nitrous oxide have increased markedly as a result of human activities. Thus, emissions will continue to contribute to warming and sea level rise for more than a millennium. Increasing global temperature will cause sea level to rise, and is expected to increase the intensity of extreme weather events and to change the amount of precipitation. Such a threat to the Earth and its inhabitants is a matter of concern for every human being. Thus, attempt is required to be made by everyone to contribute towards the sustainability of inhabitable environment for years to come. So, in this respect the concept of green finance has emerged. It is a loan or investment that promotes environmentally positive activities such as the purchase of ecologically-friendly goods and services or the construction of green infrastructure. Green financing is to increase level of financial flows from banking, micro-credit, insurance and investment sectors to sustainable development priorities. A key part of this is to better manage environmental and social risks, take up opportunities that bring both a decent rate of return and environmental benefit and deliver greater accountability.

Keywords: Sustainable Development, Kyoto Protocol, Climate Change, Green Finance, Carbon Credits

1. Introduction

The paper focuses on one of the mechanisms which can provide an answer to the environmental threat that has become the most important concern for mankind for its sustainability. The environmental threat, referred to here, is a term which has become the topic of discussion in our daily lives i.e. *global warming*. It is a phenomenon which refers to the increase in the average temperature of the Earth's near-surface air and oceans and its projected continuation. The *Intergovernmental Panel on Climate Change (IPCC)* has concluded in its report that "most of the observed increase in globally averaged temperatures since the mid-twentieth century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations."[i] The IPCC is a scientific body tasked to evaluate the risk of climate change caused by human activity, established in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP), two organizations of the *United Nations*. The reasons behind global warming can be cited as the Earth's

climate changes in response to external forcing (viz. variations in its orbit around the Sun, volcanic eruptions and atmospheric *greenhouse gas* concentrations).

With this objective in mind the remainder of the paper is organized as follows. Section 2 narrates the concept of green finance followed by Section 3 which relates the Green Funds System presently in vogue. Section 4 lays down the emergence of a new agreement for reduction of green house gases i.e. Kyoto Protocol. The concept of carbon credits as laid down in Kyoto Protocol is explained in Section 5. Finally, conclusion is given in Section 6.

2. Concept of green finance

The term green finance has a wider meaning. *It refers to the financial incentive that is provided with an objective of reduction of the greenhouse gases and thereby enabling the society to fight against the consequences of global warming.* The focus is on promoting the environmental and ethical quality of our society on financial terms. The object of financing the scheme is to improve the living environment by funding innovative environmental technologies and investing in nature and the landscape. The scheme provides financial help to *green projects* which are new projects providing a significant and immediate environmental benefit covering a broad range of activities, from high-tech environmental innovation to low-tech improvements in the area of nature and the landscape. Thousands of projects from environmentally friendly greenhouses and wind turbines to organic farming and afforestation have been implemented with funds provided by the investors. As a result of this innovative financial product new environmental technology found its way on to the market and is now widely accepted. Moreover, though it is innovative but still the green investment is green investment is profitable for people and the environment.

3. Green Funds Scheme

3.1 Green Funds Scheme—An Outline

The Green Funds Scheme is a tax incentive scheme launched in 1995 by the Dutch government to encourage green initiatives. Such a scheme enables individual investors to put money into green projects that benefit nature and the environment. The significance of such an environmentally beneficial scheme was implemented by many banking and financial institutions viz. ABNAMRO Bank, ASN Bank, ING Bank and so on. The following are the components which play an important role in establishing the green fund scheme and ensuring its successful continuation.

- *Government* which establishes the legislations that contain the conditions governing the projects;
- *Financial institutions* that acts like a financial intermediary to provide the funds to the borrower.

- *Company* and the personnel associated with such a company and
- *Individual investors* who provide the funds to such green projects in return of the provision of tax advantages.

Thus, in short the Green Funds Scheme provides a situation where all the parties involved are benefited. It facilitates the initiators of the green projects by providing them with cheaper loans, opens an innovative avenue of investment for the investors who can expect a reasonable rate of return along with tax benefits and at the same time it resolves an important question before mankind by immensely benefitting the environment and protecting it from further degradation. In other words, individuals who invest in a green fund or save money with financial institutions practicing *green banking* receive a rate lower than the market interest rate but the tax incentive compensates for this. In their turn, the banks charge green projects a low interest rate. Netherlands has introduced a unique method of funding environmental projects that has been engineered to protect the environment through financial aids.

3.2 Components of Green Funds Scheme

The scheme becomes complete by the interactions of the various elements or components that make up the core of the funding scheme[ii]. An endeavour is made in the following paragraphs to lay down the meaning and significance of such components.

- *Government—*

The government wants a clearer focus on environment and energy issues when investment decisions are made. Its main purpose is to increase the availability of private capital for green investment and promote greater involvement on the part of private investors and banks.

The main objective behind implementation of such tax incentive provisions is to encourage the investors to accept a lower interest rate or dividend on their investment which can be compensated by the tax benefits obtained by them. Thus, the tax incentives would depend upon the rules and regulations as imposed by the government of the countries in which the financial institution providing green funds is domiciled.

- *Financial institutions—*

Since the introduction of the scheme, the demand for green savings and investment opportunities has risen sharply and the larger banks have now broadened their range of green products. Though financial institutions are commercial institutions, but this scheme provides an opportunity to such institutions to show their concern for a sustainable environment. The banks apply for green certificates for companies wanting to launch green

projects and finance them with money from individual investors. The Green Funds Scheme has had a catalytic effect on progress towards more corporate social responsibility (CSR) in the banking sector.

- *Company—*

Companies, in this respect, refer to organizations that invest in environmental technology or management. They want low-cost funding to facilitate projects which are often barely profitable. They are willing to make an investment in innovative environmental technology or in measures to make an investment environmentally benign, provided there is an incentive. This process requires sufficient capital which is sometimes difficult to collect considering the innovative and risky proposals of the project. Moreover, the investment may not provide adequate returns commensurate with the risks attached. The solution is provided by the Green Funds Scheme. The scheme covers a wide variety of projects—from new breeding grounds for birds to sustainable office buildings, from energy storage in aquifers to fermentation systems for biomass. The immediate advantage for companies operating green projects is an interest rate that is on average 1% less than the market rate. That can be a vital factor in any investment decision. Because green projects often involve innovative environmental technology in many cases that improves their international competitiveness. This has led to a growing awareness that the environment offers profit opportunities and that the environment and the economy can go hand-in-hand.

- *Individual investors—*

Individual investors can save money with a green bank by purchasing negotiable bonds, such as *green bonds*, green certificates or green banknotes. These have a fixed value, a fixed term (often 3, 5 or 10 years), and a fixed interest rate. The total amount is paid back to the investor at the end of the agreed term. Investors can also purchase shares in a green investment fund, either directly via the stock exchange or through the funds. These funds pay dividends, depending on the results that they achieve in lending money to green-certificate projects. Investors can always resell their shares, and the selling price is determined by standard market forces. Thus, the investors can choose from a variety of financial products, ranging from negotiable green bonds with a fixed term and interest rate to shares in green investment funds. All such funds are invested in government certified green projects.

The basic objective of such individual investors is obtaining a reasonable rate of return on the money invested. The tax benefit of such schemes is what attracts the majority of investors. This compensates for the lower interest or return paid by the green fund
as the ultimate return on green investments for the individual investor consists of interest or dividends. Taken together, this provides a return roughly comparable to what the market offers.

3.3 Impact of the Scheme

The launch of the Green Funds Scheme has made it clear that innovative environmental projects can be financed from individual capital. The essence of the scheme is a modest financial incentive that persuades

companies to make extra investments in the environment and motivates individuals to invest in the resulting projects. The banking sector is an obvious intermediary between individual investors and companies and organizations operating green projects. The scheme makes the investors active participants in achieving national environmental objectives. The capital they invest enhances the banks' corporate social responsibility. Banks, therefore, develop new green financial products, and ensure that green capital is deployed by actively searching for green projects.

4. Emergence of Kyoto Protocol

In order to protect the mankind from the adverse effects of climate change, The United Nations Framework Convention on Climate Change (UNFCCC or FCCC) was formed. It is an international environmental treaty produced at the United Nations Conference on Environment and Development (UNCED), informally known as the Earth Summit, held in Rio de Janeiro in 1992. The treaty is aimed at reducing emissions of greenhouse gases in order to combat global warming. On 11th December 1997 at the 3rd Conference of the Parties to the treaty, held in Kyoto, Japan an agreement was made named Kyoto Protocol[iii]. It is a protocol to the UNFCCC with the objective of reducing Greenhouse gases that cause climate change.

5. Concept of Carbon Credits

Carbon credits or Carbon Emission Reductions (CERs), are a direct result of *emission trading*. It is an administrative approach used to control pollution by providing economic incentives for achieving reductions in the emissions of pollutants[iv]. It is sometimes called cap and trade. A central authority (usually a government or international body) sets a limit or cap on the amount of a pollutant that can be emitted. Companies or other groups are issued emission permits and are required to hold an equivalent number of allowances (or credits) which represent the right to emit a specific amount. The total amount of allowances and credits cannot exceed the cap, limiting total emissions to that level. Companies that need to increase their emissions must buy credits from those who pollute less. The transfer of allowances is referred to as a trade. In effect, the buyer is paying a charge for polluting, while the seller is being rewarded for having reduced emissions by more than was needed. Thus, in theory, those that can easily reduce emissions most cheaply will do so, achieving the pollution reduction at the lowest possible cost to society.

Carbon credits are being traded in the emission trading scheme. As defined in the Kyoto Protocol carbon credits are one metric tone of carbon emitted by the burning of fossil fuels. Such credits can be exchanged between businesses or bought and sold in international markets at the prevailing market price. Credits can be used to finance carbon reduction schemes between trading partners and around the world. There are also many companies that sell carbon credits to commercial and individual customers who are interested in lowering their carbon footprint on a voluntary basis. These carbon off setters purchase the credits from an investment fund or a carbon development company that has aggregated the credits from individual projects. The quality

of the credits is based in part on the validation process and sophistication of the fund or development company that acted as the sponsor to the carbon project. Carbon credits create a market for reducing greenhouse emissions by giving a monetary value to the cost of polluting the air. Emissions become an internal cost of doing business and are visible on the balance sheet alongside raw materials and other liabilities or assets. Thus, carbon credits are generated by enterprises in the developing world that shift to cleaner technologies and thereby save on energy consumption, consequently reducing their greenhouse gas emissions. For each tonne of carbon dioxide (the major GHG) emission avoided, the entity can get a carbon emission certificate which they can sell either immediately or through a futures market, just like any other commodity. The certificates are sold to entities in rich countries, like power utilities, who have emission reduction targets to achieve and find it cheaper to buy offsetting certificates rather than do a clean-up in their own backyard.

6. Conclusion

Thus, it may be stated that several initiatives on the financial grounds have been taken to prevent the drastic climate change. Though all such steps are in its nascent stage of development but continuous implementation and monitoring of such financial products is expected to help mankind in preventing the disaster to the climate and the planet Earth.

Endnotes

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