Expansion of green finance to achieve a green economy

The importance and future direction of green finance

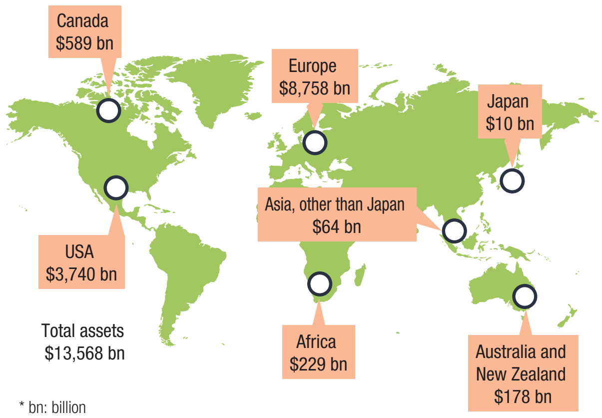
A report by the Central Environment Council asserts that it will not be possible to cover future costs of renewable energy and energy-saving technology with public funds alone. Consequently, private investment must be attracted to the environmental field to fund projects using environmental technology that has already reached the commercial application stage. Financial instruments are receiving much attention as a means of promoting such schemes.

Green finance is expected to have two distinct roles in this process. First, when businesses and other entities are attempting to adopt environmentally-friendly corporate behavior, green finance can promote such initiatives by evaluating and providing support for such behavior. Secondly, green finance can be a means for investing directly in businesses that reduce environmental impact. For the first of these roles, investors need a way for financial decision-making to reflect the nonfinancial considerations—such as environmental, social and governance considerations—that cannot be readily taken into account for investment and finance that is primarily short-term. For this reason, it is essential to promote corporate disclosure of environmental information, thereby enabling investors to evaluate environmental risks and opportunities. The second of these roles is necessary to the development of businesses involved in preserving the environment, repositioning such activities as promoters of economic growth rather than the conventional view of them as a cost. One key to achieving this is the promotion of green finance that encourages private investment in the environmental field, bringing in money that would otherwise be stagnating.

Promotion of environmentally-friendly corporate behavior through financing

There are growing public expectations toward various aspects of corporate behavior, and the manner in which a company responds to social issues has the potential to affect its value. When investors and financial institutions commend and support corporations that practice eco-friendly management by proactively incorporating nonfinancial information (including environmental considerations) into their financial decision-making, that represents an opportunity to promote the incorporation of environmental considerations into corporate businesses. Ultimately it is also a means for investors and financial institutions to improve their long-term profitability through enhancement of the corporate value of investees or borrowers. The inclusion of nonfinancial information such as *environment*, *society*, and *governance* factors in investment analysis and financial decision-making lies at the heart of the *ESG* investing techniques that are rapidly becoming more significant, particularly in Europe and North America.

Asset size of ESG investing by region



Source: Global Sustainable Investment Review 2012, compiled by Ministry of the Environment

Trends in promoting ESG investing

New trends are emerging in ESG investing. During deliberations of a council of experts that commenced in August 2013, dialog between institutional investors and investees contributed to the completion of Principles for Responsible Institutional Investors—Japan's Stewardship Code. These principles are intended to promote sustainable corporate growth and thereby to revitalize the Japanese economy overall.

ESG and responsible investment have also been the topic of deliberation in Japan's Council on Economic and Fiscal Policy as well as the Panel for Sophisticating the Management of Public/Quasi-public Funds.

General principles of the Japanese Stewardship Code

So as to promote sustainable growth of the investee company and enhance the medium- and long-term investment return of clients and beneficiaries,

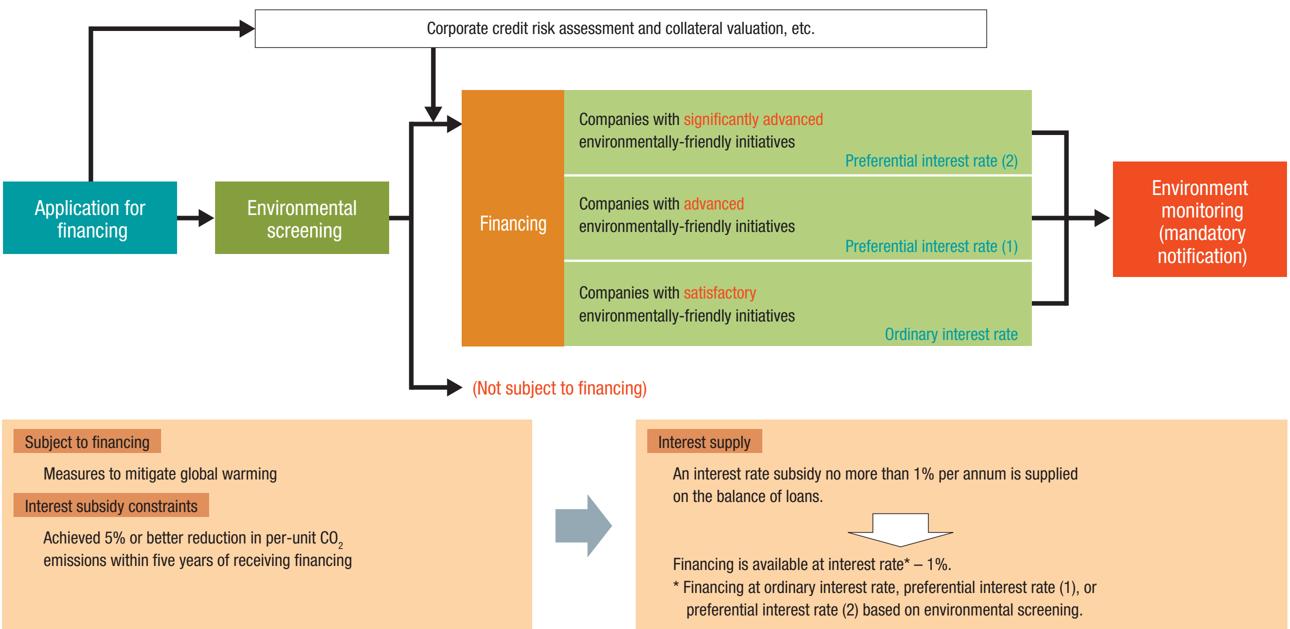
1. Institutional investors should have a clear policy on how they fulfill their stewardship responsibilities, and publicly disclose it.
2. Institutional investors should have a clear policy on how they manage conflicts of interest in fulfilling their stewardship responsibilities and publicly disclose it.
3. Institutional investors should monitor investee companies so that they can appropriately fulfill their stewardship responsibilities and support the sustainable growth of the companies.
4. Institutional investors should seek to arrive at an understanding in common with investee companies and work to solve problems through constructive engagement with investee companies.
5. Institutional investors should have a clear policy on voting and disclosure of voting activity. The policy on voting should not be comprised only of a mechanical checklist; it should be designed to contribute to the sustainable growth of investee companies.
6. Institutional investors in principle should report periodically on how they fulfill their stewardship responsibilities, including their voting responsibilities, to their clients and beneficiaries.
7. To contribute positively to the sustainable growth of investee companies, institutional investors should have in-depth knowledge on the investee companies and their business environment and capabilities to appropriately engage with the companies and make proper judgments in fulfilling their stewardship activities.

Source: Principles for Responsible Institutional Investors: Japan's Stewardship Code

Environmental financing

Initiatives for evaluation and support of corporate environmental management are becoming more frequent in financing, as well. In 2004, the Development Bank of Japan introduced the Environmental Rating Loan, the world's first loan program to incorporate a system for using environmental ratings through preferential interest rates determined in accordance with eco-ratings established by evaluating a company's environmental management. In 2007, Japan started a project for subsidizing interest payments on environmental-rating loans. Boosted by such initiatives, environmental-rating loan programs now seem to have achieved a certain level of penetration, with a number of financial institutions having similar programs in place.

Overview of environmental financing



Source: Ministry of the Environment

Expansion of green investment

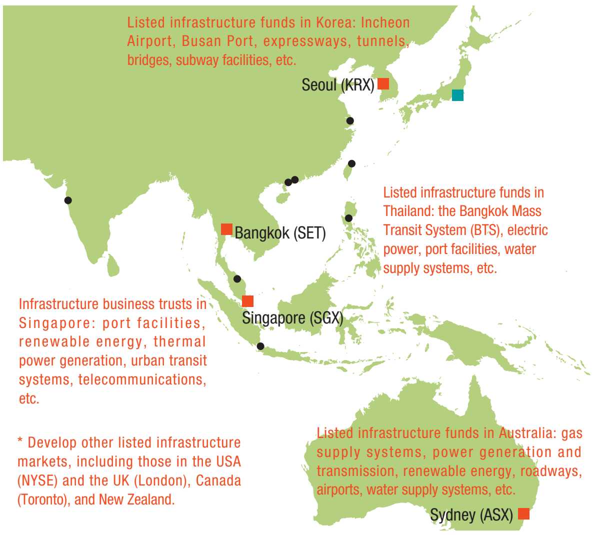
The expansion of green investment is indispensable to achieving a green economy, but there are a variety of issues to be resolved. For example, despite the scale of additional investment needed in the future, if there is still only a limited number of investors undertaking green investment, and the supply of funding in the environmental field has yet to reach sufficient levels. Also, with regard to renewable energy sources, the potential returns of wind or geothermal power generation simply do not justify the investment risks, which include technical hurdles, the high risks involved in development and construction of facilities, and susceptibility to the vagaries of weather and natural disaster. Additionally, lack of performance records in renewable energy or other environmental fields increases the difficulty of evaluation and making the decision to invest or finance.

Increased green investment is needed to solve issues such as the limited number of investors, imbalances between risk and return, and a lack of information and evaluation expertise necessary to making the decision to invest.

Initiatives toward creation of a listed infrastructure market

In other countries, funds have been organized to attract private investment for infrastructure upgrades and operation, and these funds are listed on stock exchanges. In Japan, as well, the Japan Exchange Group is planning the creation of a listed infrastructure market, and is currently studying the legislation required to set up areas offering investment opportunities for listed infrastructure funds, such as renewable energy facilities. Simplification of the buying and selling of holdings in green investments is expected to reduce liquidity risk and holds promise to invigorate green investment.

Examples of listed infrastructure funds in overseas markets



Source: Tokyo Stock Exchange, Inc. Report by the Study Group on the Listed Infrastructure Market

Broader use of community investment funds

Another method for expanding the range of green investment is to solicit investment from individual investors. With the inception of Feed-in Tariffs and increased deployment of renewable energy, there have been more initiatives for community investment funds that procure funding for renewable energy projects by soliciting modest investments from a large number of individual investors. For example, Japan Green Fund Co., Ltd. (JGF) has procured more than 2 billion yen in investment from individual investors nationwide for the construction of 11 wind power plants.

One characteristic of those who participate in community investment funds is that their motivation for investing is not based solely on the pursuit of profit but includes a desire to contribute to society and invest in the local community. Accordingly, community investment funds can be said to offer a social return in the form of an invigorated local economy.

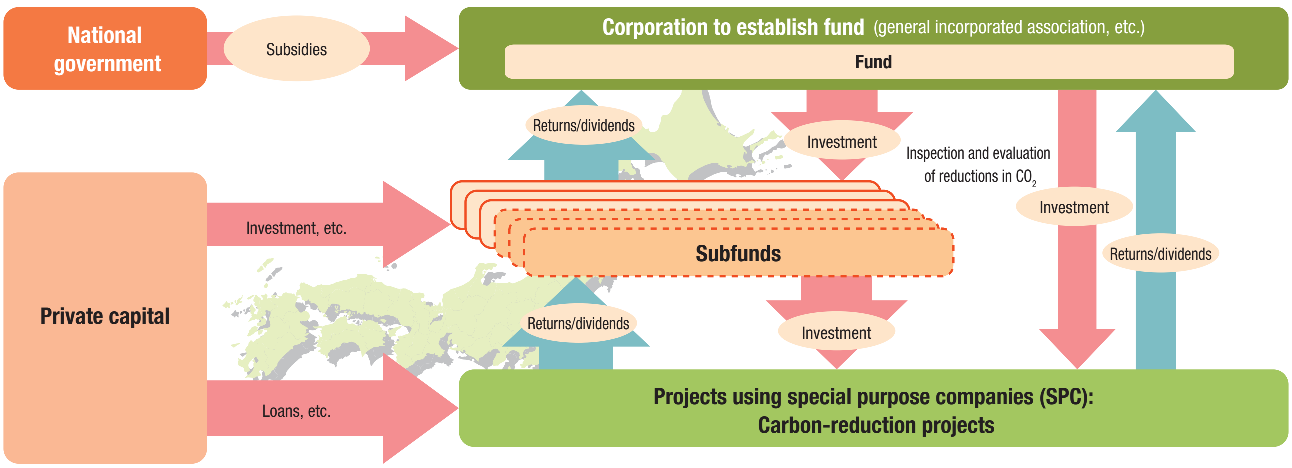
Creation of fund to promote local low-carbon investment

In order to overcome obstacles related to imbalances between risk and return, especially for projects and businesses that have difficulty obtaining credit, the procurement of capital by trustworthy public agencies and the provision of risk management per investment by public agencies is an effective means of attracting private capital.

In 2013, Japan established a fund to provide finance to low carbon projects initiated at the local level. The purpose of this fund is to provide support for businesses that hold promise for both reducing carbon levels and revitalizing the community. This initiative came about due to a number of factors, including the fact that a significant portion of local entrepreneurs attempting to establish businesses that would contribute to reduced carbon levels lacked not only sufficient capital but also a credit rating strong enough to obtain loans from financial institutions. Another factor was that the length of time necessary for payback of investment makes these businesses high-risk investments, which greatly limits their supply of private capital.

Through this fund, local businesses contributing to reduced carbon levels can receive badly needed capital, and the provision of risk management enabled them to increase their capital-to-asset ratio and facilitate procurement of capital.

Overview of fund promoting investment in low carbon projects at the local level



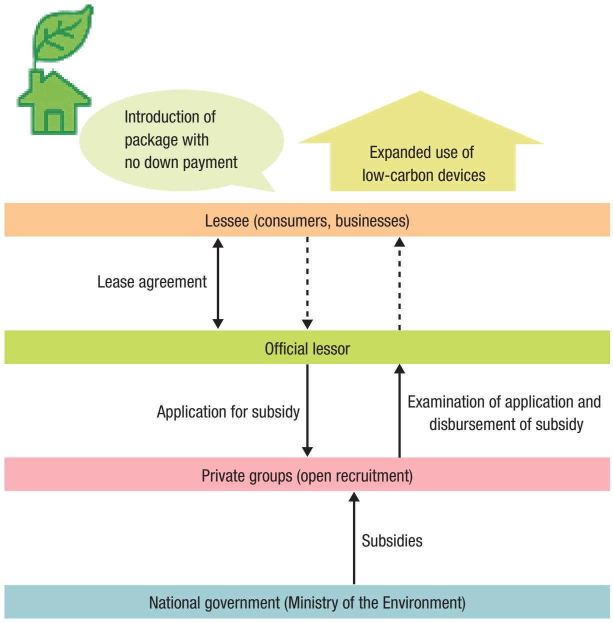
Source: Ministry of the Environment

Financial initiatives to reduced initial costs of investment

In order to reduce emissions of greenhouse gases, it will be necessary to accelerate reductions in emissions from the residential and commercial sector, which has seen rapid increases, as well as to promote not just green investment from investors but capital investment in highly-efficient energy-saving devices by individual consumers and corporations. Nevertheless, the initial costs of investment for the introduction of low-carbon devices are significant enough to be a burden to individual consumers as well as small- and medium-size businesses.

Leasing is one effective means of reducing the burden of these initial costs of investment while promoting increased use of low-carbon devices. Japan has implemented programs to support the introduction of low-carbon devices by leasing them. This project is expected to result in an annual reduction of about 30,000 tons of CO_2 as well as have a ripple effect of about 30 billion yen on the economy.

Promotional scheme for eco-leasing to consumers and businesses



Source: Ministry of the Environment