

CSR REPORT **2013**

Climate Change



Sumitomo Mitsui Trust Group's Eco-Trustution

The Group has coined the word "Eco-Trustution" to represent its environmental financial business based on the concept of providing solutions to ecological issues through the use of our trust function. We will continue to develop and provide solution-based financial instruments and services.

Solutions that use the unique functions of a trust bank

ECO
Trustution
エコ・トラステューション

Editorial policy

The CSR Report 2013 consists of a full report, a digest report, and four feature booklets on *Climate Change*, *Natural Capital*, *Responsible Investment*, and *Environmentally Friendly Property*. Through fiscal year 2012 (ended March 2013), we only published a full CSR report annually, but to enable readers to obtain a deeper understanding of our Group's proactive initiatives we have decided to publish a digest version of our CSR report along with feature booklets from this fiscal year. You can visit our website to view our other CSR initiatives: <http://www.smtb.jp/csr/>

* This booklet introduces various initiatives and activities by our Group, led by Sumitomo Mitsui Trust Bank.

Investment in
Environmentally
Friendly
Companies
(Responsible
Investment)

Financing for
Environmentally
Friendly
Companies
(Environmental
Rating Loans)

Support for
Energy Efficiency
(Renewable
Energy, Energy
Conservation)

Valuation of
Natural Capital
(Biodiversity)

Support for
Smart City
Projects

Support for
Environmental
Friendliness in
Real Estate

Addressing Climate Change

Basic Policy of the Sumitomo Mitsui Trust Group

According to the World Meteorological Organization, average annual global surface temperatures in the past few years have been in line with the 2001-2010 average, the warmest decade on record. Around the world, the intensity and frequency of extreme weather and related effects, including more intense hurricanes and typhoons, more frequent droughts and floods, melting Arctic Sea ice, and rainforest destruction, have raised concerns about climate change. In Japan, an increase in heavy rainfall events has led to flood damage, landslides, and other hazards, and has been accompanied by record-high summer temperatures.

In the belief that addressing climate change problems is essential for the creation of a sustainable society, the Group has formulated "action guidelines for mitigating climate change" and it considers this issue Eco-Trustution's most important task in promoting efforts to tackle climate change.

As Japan confronts the problem of shutdown nuclear power plants, efforts by both energy suppliers and energy users are vital to dealing with climate change. The Group will continue to develop high-value-added financial solutions businesses that leverage its capabilities and know-how as a trust bank.

Action Guidelines for Mitigating Climate Change

1. Implementation of Measures and Support to Help Mitigate Climate Change

In addition to actively taking measures to reduce greenhouse gas emissions in our own business operations, we are making efforts, as a corporate citizen, to support activities that mitigate and adapt to climate change.

2. Provision of Products and Services

We are working on developing and providing products and services that help mitigate climate change. Our financial functions are being leveraged to promote energy conservation and encourage the use of renewable energy.

3. Collaboration with Stakeholders

We engage in dialogue and cooperation with our stakeholders as we work to mitigate climate change.

4. Education and Training

We will ensure that these guidelines are fully implemented at group companies, and will actively conduct education and training to mitigate climate change.

5. Information Disclosure

We will actively disclose information related to our efforts to mitigate climate change.

Financial Products and Services to Help Solve Climate Change Problems

P8

Promoting Energy Saving and CO₂ Reduction in Cities and Buildings

P4

Spread and Growth of Renewable Energy

P12

Support for Energy Efficiency

P20

Evaluation of Corporate Climate
Change Mitigation Efforts in Financing

P19

Evaluation of Corporate Climate Change
Mitigation Efforts in Responsible Investment (RI)

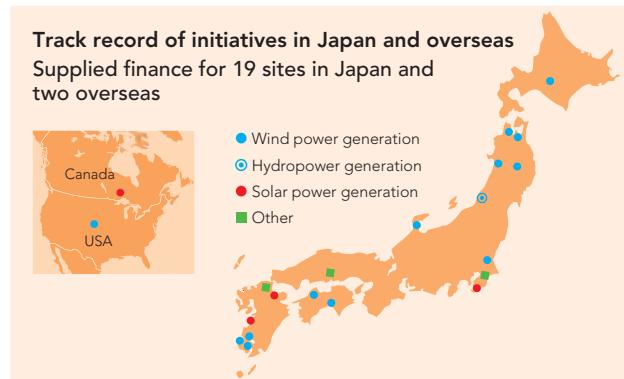
Spread and Growth of Renewable Energy



Renewable Energy Financing

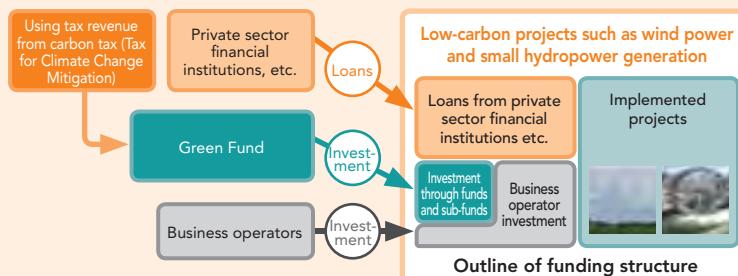
The Group promotes the adoption of renewable energy such as wind and solar power through project finance and other measures.

Since the introduction in July 2012 of a feed-in tariff (FIT) scheme, where electricity companies purchase power generated by renewable sources at a fixed price, there has been a rush to build mega-solar power plants throughout Japan, and plans for a considerable number of wind power, geothermal power, and small hydropower projects have taken more concrete shape. The Group provides support in terms of financing to assist these efforts as well as projects overseas.



Supporting Use of a Local Low-Carbon Investment Promotion Fund

A fund to promote local low-carbon investment (the Green Fund) was established in June 2013 for the purpose of promoting locally led projects that contribute to the reduction of CO₂ such as renewable energy projects. The Group collaborates with renewable energy businesses, regional banks, and other partners to support these projects.



* Green Fund investment is less than one half of a project's total investment amount.

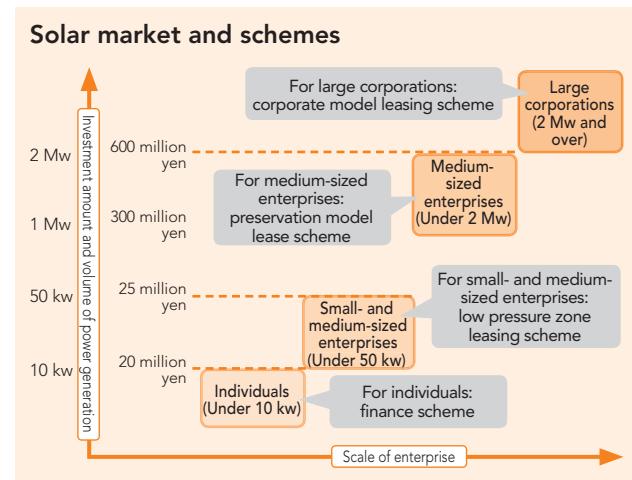
Solar Leases

The Group supports the introduction of solar-power generation equipment, both small and large scale, through a leasing model that spans the period from planning and building through to operation.

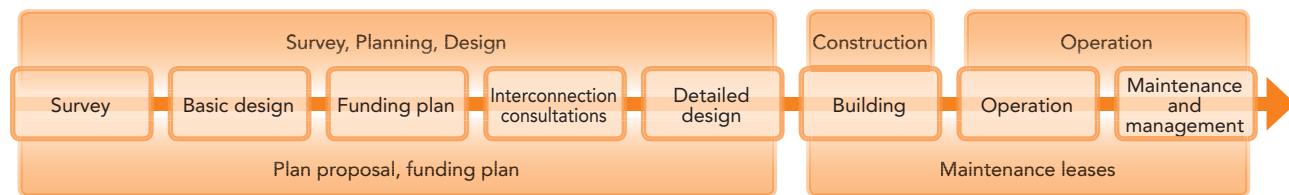
Sumitomo Mitsui Trust Panasonic Finance Co., Ltd. has put in place a total support structure for the series of processes relating to the introduction of solar power generation systems. This structure encompasses estimating the volume of power generated, design, funding plans, consulting on system interconnections, construction, operation, and maintenance and management.

With a wide range of schemes available to suit the site and buildings supplied by clients for the installation of solar-power generation equipment, we offer a one-stop service over the lease period with a choice of appropriate partners.

As of November 2013, we have provided financing for 33 large-scale solar power generating plants (including those in the planning stage).



Flow of one-stop services



Solar Loans (Sales finance)

The Group supports the introduction of solar power generation, Home Energy Management Systems (HEMS), household fuel cells, and storage batteries in ordinary homes.

Installation of solar-power generation equipment in ordinary homes is increasing dramatically due to growing awareness about solar power generation backed by national and regional government subsidy systems as well as a system for purchasing surplus electricity generated by solar power.*

Sumitomo Mitsui Trust Panasonic Finance provides financial backing for solar power by offering solar loans in collaboration with sales agents, construction companies, and others. Solar loans provided have been growing year by year, with 4.4 billion yen loaned in fiscal year 2010, 10.9 billion yen in fiscal 2011, and 14.8 billion yen in fiscal 2012. These loans are now a core product in the company's renovation loan lineup.

We will continue to provide financial support not only for solar power, but also for homes upgrading to smart energy by installing HEMS, household fuel cells, storage batteries and the like, and for disaster response in general.

* A system introduced in November 2009 where surplus electricity generated by solar power is purchased by electric power companies at a set price for a decade.

Equipment to realize smart energy homes



A solar cell module



A HEMS monitor



A lithium-ion storage battery unit



Ene-Farm home fuel cell

Sumitomo Mitsui Trust Panasonic Finance solar loans by quarter

(Billions of yen)



Promoting Energy Saving and CO₂ Reduction in Cities and Buildings



Initiatives Linked to “Leading Projects for Promoting CO₂ Reduction” Program for Housing and Buildings

The Group promotes CO₂ reduction from the perspective of building evaluation

The pursuit of energy efficiency in constructions is one of the most important factors in corporate real estate (CRE) strategy from the perspective of addressing climate change and economic efficiency. The “leading projects for promoting CO₂ reduction” program for housing and buildings is a system where the national government grants subsidies for pioneering construction projects whose climate change countermeasures will serve as a model for other businesses. Sumitomo Mitsui Trust Bank engages in consulting* to support such projects.

In addition, Sumitomo Mitsui Trust Bank played a leading role in developing the CASBEE Market Promotion Package version of the CASBEE environmental performance evaluation system for property, to allow investors and others to easily use the results of environmental performance evaluation that includes data on energy and greenhouse gases. Sumitomo Mitsui Trust Bank carries out consulting and other services utilizing this system.

*Our consulting service does not guarantee a project will be awarded a grant under the “leading project for promoting CO₂ reduction” program for housing and buildings.



The central branch of Yachiyo Bank



Osaki Forest Building of Toyo Seikan Group Holdings

CASBEE Market Promotion Package Evaluation Items on climate change

Evaluation items on energy and greenhouse gases	Evaluation points
Conformity with energy saving standards, target setting and monitoring, operation and management system	(1) Meeting energy saving standards, (2) setting targets for energy consumption volume, (3) monitoring implementation status, (4) formulating status of operation and management system
Usage and emissions intensity (calculated values)	Volume of primary energy consumption per year under normal operating conditions
Usage and emissions intensity (actual values)	Statistical positioning of volume of primary energy consumption converted from actual values for electricity, gas, etc.
Natural energy (solar power generation etc.)	Ratio against maximum volume of electrical power usage or annual energy consumption

Loans for Environmentally Friendly Housing

The Group provides housing loans to support the spread and promotion of environmentally friendly housing with features relating to energy saving, energy generation, and the like.

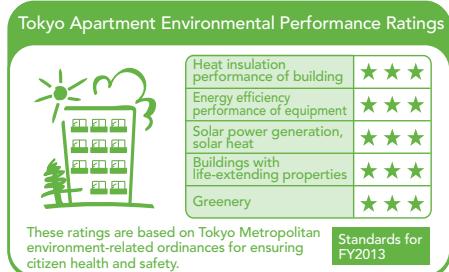
When purchasing a home or condominium, a growing number of people prefer housing with features like high energy-saving performance and abundant greenery that takes the environment into account.

In light of such needs, Sumitomo Mitsui Trust Bank has introduced CSR standards into the housing loan interest structure to provide environmentally friendly housing loans at preferential interest rates for houses like condominiums that employ local government environmental performance rating systems.

Specifically, we provide environmentally friendly housing loans in collaboration with five municipalities: Tokyo, Kawasaki City, Osaka Prefecture, Kobe City, and Hiroshima City. The housing evaluation systems of these governments reflect diverse environment considerations such as improving insulation performance, introducing solar panels, gas heat pumps, and other gear, and greening the site.

In addition, Sumitomo Mitsui Trust Bank provides loan products to support the spread and growth of renewable energy use, amid growing public awareness of the need for saving energy and conserving electricity in daily life.

In December 2012, we began offering collaborative loans for new detached houses sold by PanaHome Corporation that come with solar power generation systems.



Photograph courtesy of PanaHome Corporation

Consulting on Smart City Projects

Sumitomo Mitsui Trust Bank Initiatives on Smart Cities

Sumitomo Mitsui Trust Bank provides support for smart city projects by creating frameworks to link various environmental contribution efforts to economic added value, helping with the formulation of project plans, and providing support to move projects towards realization via financial functions such as leasing and financing.

Addressing Climate Change by Creating Smart Cities

A "Smart city" refers to urban development based on concepts linked to raising the overall efficiency of energy usage in a community. For energy suppliers, this involves using renewable energy and unused or under-used heat and introducing high-efficiency power generation and heat-supply equipment. For energy users, this involves adopting demand control systems as well as connecting households, buildings, and transportation systems via IT networks.

The goal of smart cities is to realize a sustainable society by mitigating climate change through measures to increase the efficiency of energy usage across a wide range of human activities such as communications, information technology, transportation, residential environment, and production activities. Furthermore, the process of resolving issues for realizing a sustainable society is expected to open up substantial opportunities in various fields such as disaster preparedness, crime prevention, and other security concerns as well as medical and nursing care and other responses to an aging society. The smart city can also be considered an initiative that integrates these issues.

Menu of climate change countermeasures in smart cities

Measures by energy users		Measures by energy suppliers		Measures in shipping and transportation fields	
BEMS HEMS	Reducing the heat burden	Solar power generation	Biomass power generation Digestion gas power generation	Electrical vehicles Hybrids	Recharging facilities
Community energy management	Use of stored heat	Unused or under-used heat	Small hydropower generation	On-demand transportation systems	Ultra-compact mobility
Demand control	Use of recycled water	Heat pumps	Storage batteries	Car sharing	Light rail transit (LRT)
Introduction of high-efficiency equipment	Interchange of electricity and heat	Wastewater heat City heat	Cogeneration independent power sources	Park-and-ride programs	Hydrogen fuel

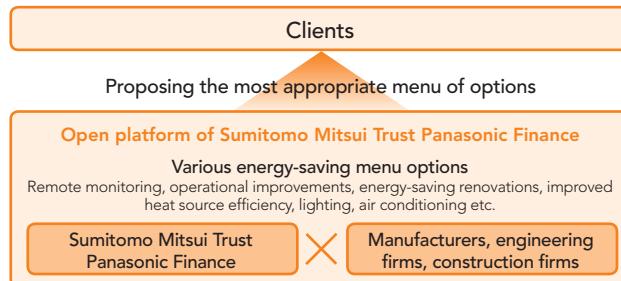
Support for Energy Efficiency



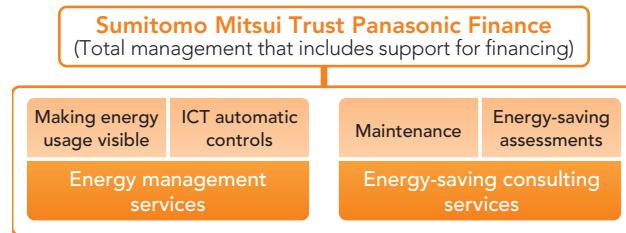
Open Platform Model for Energy-Saving Options

Sumitomo Mitsui Trust Panasonic Finance proposes ways to reform cost structures and respond to environmental considerations through energy conservation at offices, commercial facilities, and factories.

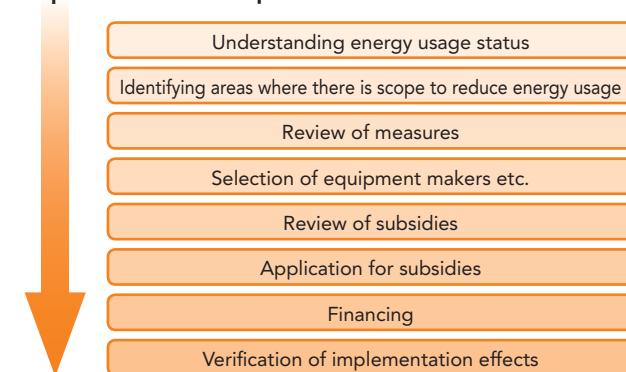
- We have a wide-ranging menu of options including both equipment investment (hardware approach) and operational improvements (tacit business know-how), using an open platform model that proposes the best combination of measures to accommodate diverse requests.
- We provide services that combine energy-saving consulting, energy management, and financing.
- We provide one-stop services covering the entire process from review of energy-saving measures to equipment selection, subsidy applications, financing, and operation. Leases with upkeep agreements are also available as a package that includes equipment maintenance services.



Consulting-based energy management services to save energy



Sequence of one-stop services

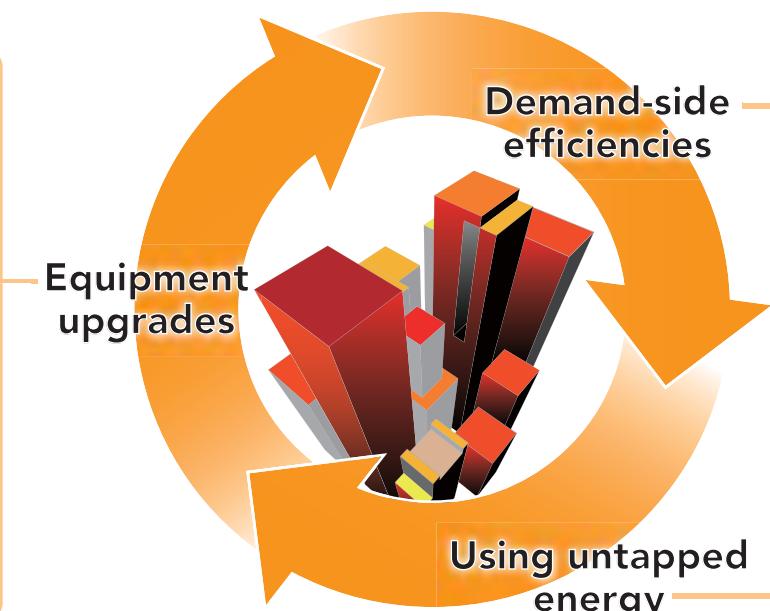


Philosophy Behind Three Energy-Saving Services Provided via an Open Platform Model

Sumitomo Mitsui Trust Panasonic Finance focuses on providing three energy-saving services: (1) upgrading or making equipment more efficient, (2) improving demand-side efficiencies, and (3) using untapped or under-used energy.

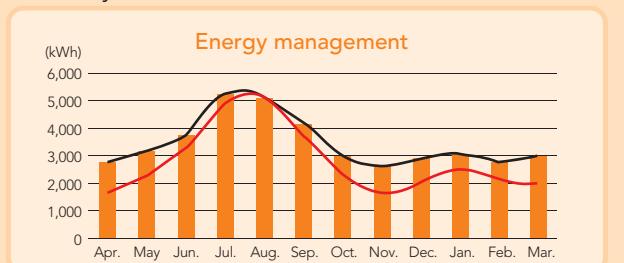
On a global scale, investment in energy-saving initiatives has reached a scale rivaling that of investment in renewable energy and fossil-fuel power generation.* In Japan as well, energy-saving measures centering on these three services have significant potential to reduce energy consumption even more, and ample scope for adoption.

* Source: Energy Efficiency Market Report 2013 published by the International Energy Agency (IEA)



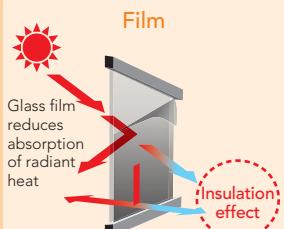
Energy-Saving Service No. 2: Improving Demand-side Efficiencies

Enhancing insulation performance and reducing peak demand improves demand-side energy consumption efficiency.



Heat insulation for roofs, exterior walls, and interior walls

- Insulation coating



Energy-Saving Service No. 3: Using Untapped Energy

Recovering unused energy that has not been captured so far can improve energy efficiency.

Recovering exhaust heat

- Factory exhaust heat
- Heat from hot springs

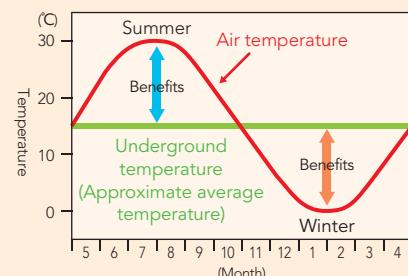


Regenerative burner



Use of geothermal

- Geothermal usage
- Groundwater usage



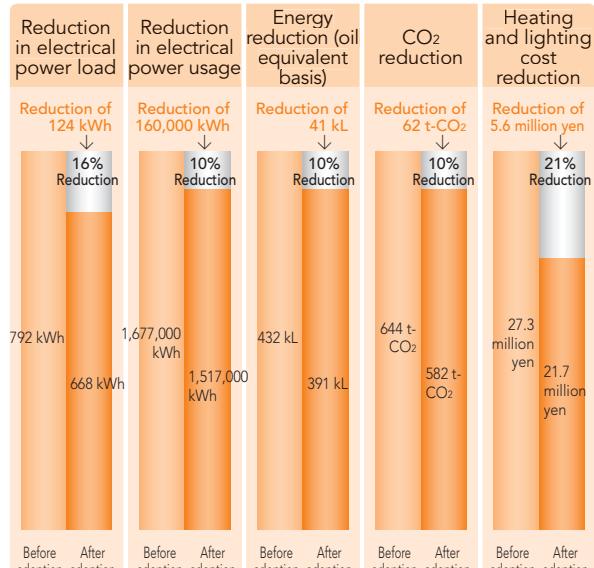
Source: Geo-Heat Promotion Association of Japan website

Energy Cost Reduction at a Factory: a Model Proposal

Adoption Effects

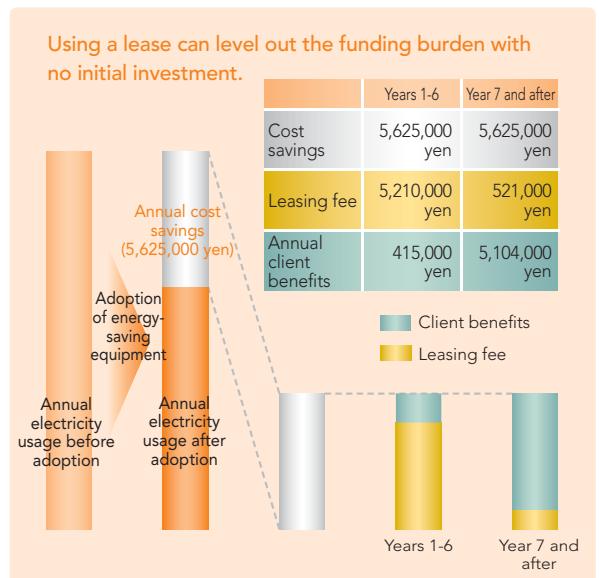
1. Potential reduction of about 16% of the total electrical power load (peak load)
2. Potential reduction of about 10% of the total volume of electrical power use
3. Reduction of about 21% of total heating and lighting costs (running costs)

Reduction effects in heating and lighting costs, volume of energy use, and environmental impact



Benefits of using a lease

Using a lease can level out the funding burden with no initial investment.



Energy Cost Reduction at a Commercial Facility: a Model Proposal

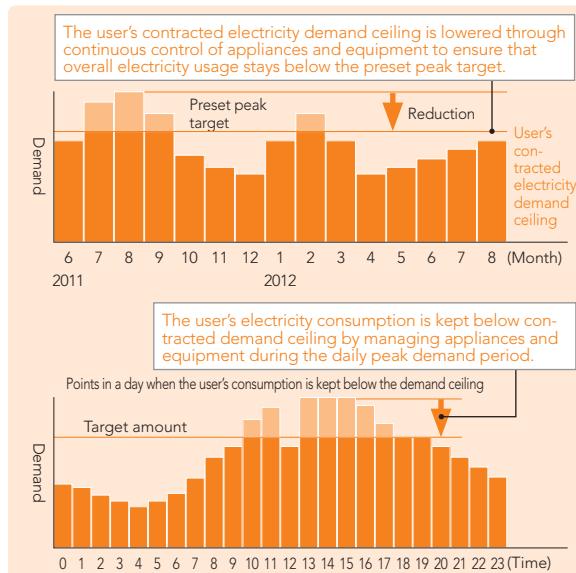
Adoption Effects

- Potential reduction of 70% of electrical power usage via the use of inverters for secondary regulators of hot/cold water pumps
- Potential reduction of 50% of electrical power usage by upgrading lights
- Potential reduction of 13 million yen in annual heating and lighting costs (running costs)

Electrical power reduction effects

Energy-saving measures	Reduction effects			
	Type of energy etc.	Energy reduction (kWh)	Cost savings (yen)	CO ₂ reduction (t-CO ₂)
1. Switch to system using inverters to regulate pumps	Electrical power	530,000	8,003,000	294
2. Operate air conditioning systems with automatic air volume control	Electrical power	24,000	362,400	13
3. Upgrade lighting to fluorescent bulbs	Electrical power	213,000	3,216,300	118
4. Upgrade lighting to mercury quartz lamps	Electrical power	13,000	196,300	7
5. Switch to motion sensors or manual operation of power facilities	Electrical power	23,400	353,340	13
6. Change temperature settings	Electrical power	82,000	1,238,200	45
7. Introduce electrical power demand controllers	Electrical power	—	—	—
Total		885,400	13,369,540	490

Effects of introducing demand controllers



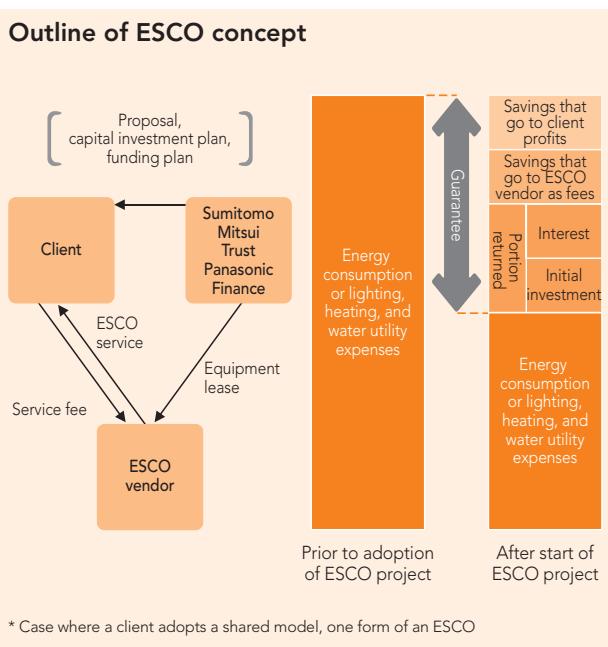
Financing for ESCO* Service Adoption

The Group collaborates with energy service companies (ESCOs) to provide comprehensive energy conservation services from installation of energy-saving equipment to maintenance and management.

* ESCOs provide comprehensive services for energy saving; their compensation comes from a portion of the guaranteed amount of savings on energy costs. In many cases, reductions in water usage are included in the service.

The Group offers comprehensive proposals for the adoption of ESCO services for commercial facilities, factories, and other sites, combined with the use of subsidies.

Outline of ESCO concept



* Case where a client adopts a shared model, one form of an ESCO

Case of ESCO adoption at a metal printing business

The client achieved 15% energy reduction and an annual reduction in lighting, heating, and water utility costs of 25,400,000 yen through an ESCO centered on the introduction of a fannmix burner in the drying process and controlling the number of compressor units.

Industry: Printing **Capital:** 22 million yen

Main equipment: 7 drying ovens, 4 compressor units, 1,500 lights

Energy composition (annual): 3,759 MWh of electricity, about 120 tons of gas (LPG)

Utilities costs: About 110,000,000 yen

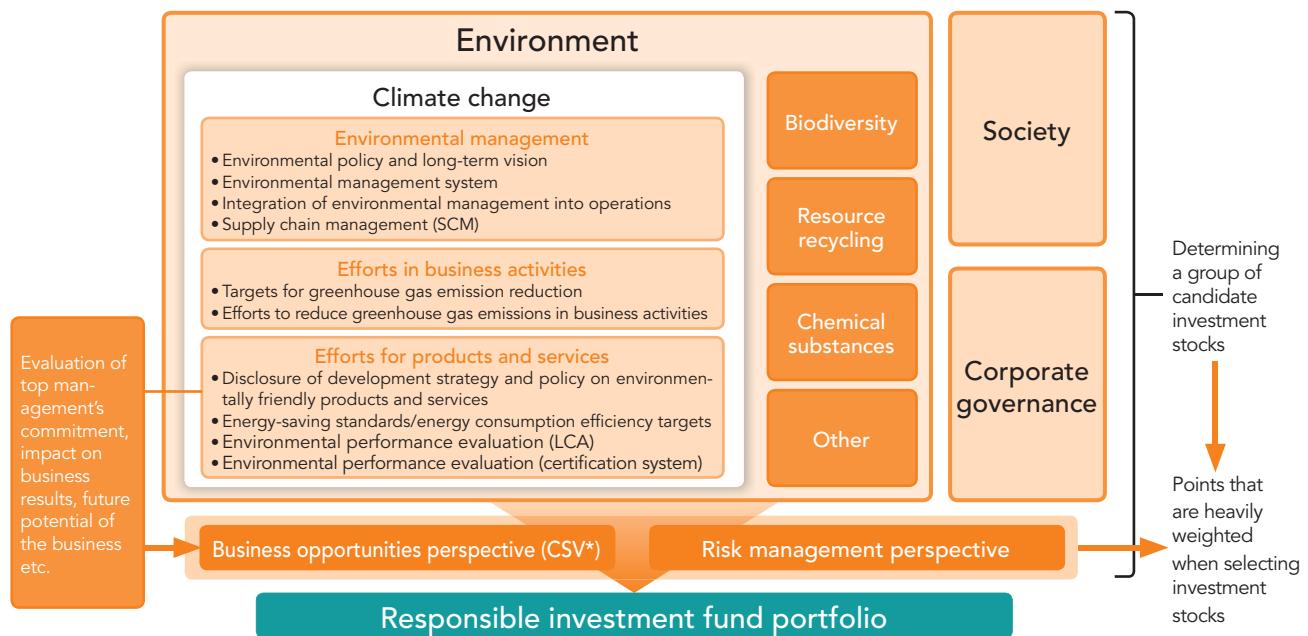
Reduction amount: About 25,400,000 yen

Type	Measures	Energy reduction (GJ)	Energy reduction ratio (%)	Utilities cost reduction (Thousands of yen)	Capital investment (Thousands of yen)	Number of years to recuperate investment
						(Years)
Electrical system	Controlling number of compressor units	2,210	41	3,370	15,172	4.5
	LED introduction	1,070	79	1,640	6,249	3.8
	Introduction of line control system	930	16	1,480	12,976	8.8
Gas system	Introduction of energy-saving burner	7,030	20	11,860	43,507	3.7
	Introduction of control system	3,950	15	7,050	5,780	0.8
	Monitoring devices etc.				1,916	
Total		15,190	15.5	25,400	85,600	3.4

Evaluation of Corporate Climate Change Mitigation Efforts in Responsible Investment (RI)

Climate change mitigation efforts are an important evaluation item for the various responsible investment funds offered by Sumitomo Mitsui Trust Bank. When selecting stocks for investment, we emphasize the dual perspectives of pursuing business opportunities and risk management based on the comprehensiveness of a company's measures.

Our View on Corporate Evaluation in a Responsible Investment Context



*CSV stands for "creating shared value." CSV is the philosophy of pursuing social value and corporate value together.

Evaluation of Corporate Climate Change Mitigation Efforts in Financing

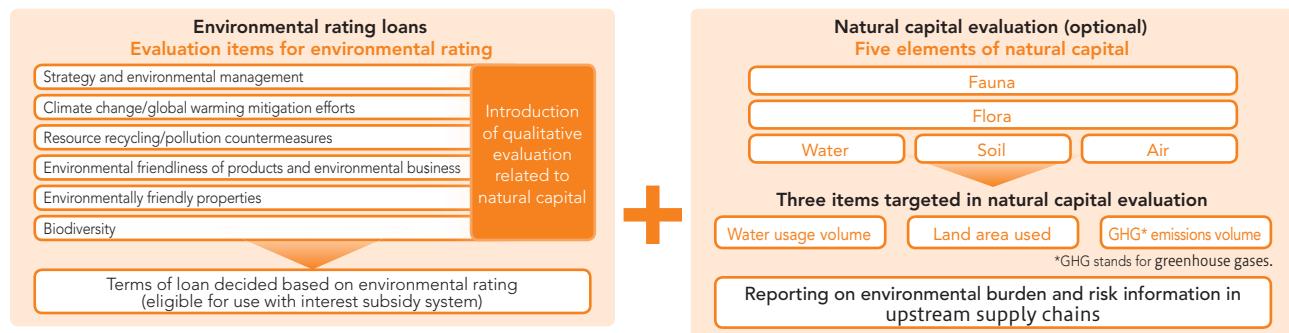
The Group evaluates climate change mitigation efforts through an environmental rating system and measurement of CO₂ emissions volume in a potential borrower's supply chain.

Environmental Rating Loans

Sumitomo Mitsui Trust Bank incorporates items on climate change and global warming mitigation efforts into the rating criteria for environmental rating loans. These loans incorporate an evaluation system not only of emission volume and measures to reduce greenhouse gases produced by business activities at the client company, but also of the climate impacts of their supply chain management. The evaluation includes whether the company has a grasp of the volume of emissions in its supply chain, and whether it promotes initiatives through the supply chain.

Clients of Sumitomo Mitsui Trust Bank's environmental rating loans can use an optional paid service for calculating the scope 3 greenhouse gas emissions upstream in their supply chain. They can use the results of this calculation for information disclosure in a carbon disclosure project (CDP) and in CSR reports. In addition, the optional service provides calculations of water usage volume and land area used in the upstream supply chain.

Concept of environmental rating loans



Note: When companies with certain conditions use these loans to make equipment investments that help counter global warming problems, they can receive interest subsidies under the Japan Environment Association's interest subsidy program.

Note: These options are provided by PricewaterhouseCoopers Sustainability Co., Ltd. and are not available without loan products.

Sumitomo Mitsui Trust Bank Shin-Yurigaoka Branch—Our first environmentally friendly branch



Recharging for
electric cars



Building exterior



Solar panels on the roof



Enabling people
to see generated
electricity levels

As the first environmentally friendly branch, we are aiming for zero CO₂ emissions.

The Shin-Yurigaoka Branch opened on November 1, 2013. As Sumitomo Mitsui Trust Bank's first environmentally friendly Eco-branch, the new location seeks to achieve zero CO₂ emissions through a range of measures including the installation of solar panels on the roof, the use of electric cars, and the adoption of a building energy management system (BEMS) that visually displays the amount of electricity used by the building.



General Manager,
Shin-Yurigaoka Branch
Yuko Konishi

Sumitomo Mitsui Trust Bank, Limited Corporate Planning Department, CSR Promotion Office

1-4-1, Marunouchi, Chiyoda-ku, Tokyo 100-8233, Japan

Telephone: +81 (3) 6256-6251 Facsimile: +81 (3) 3286-8741 URL (only Japanese is available): <http://smtb.jp/csr/index.html>

- Companies are requested to use their own judgment whether or not to adopt proposals made by Sumitomo Mitsui Trust Bank based on this document.
- Companies that do not adopt the proposals made by Sumitomo Mitsui Trust Bank in this document will not be subject to disadvantageous treatment with regard to other transactions with Sumitomo Mitsui Trust Bank, nor is adoption of the proposals made by Sumitomo Mitsui Trust Bank in this document a condition for other transactions with a company.

SuMi TRUST
SUMITOMO MITSUI TRUST HOLDINGS

