Management philosophy directed towards implementation of a sustainable society

The value which we have sincerely nurtured as a leading company in the housing industry, and have shared with our customers is sublimated into our “Sustainable Vision.”

Today, we are faced with many problems that require global approaches, such as global warming and the consequent occurrence of extreme weather events, an increase in natural disasters, a decline in natural resources, and the destruction of ecosystems, as well as an increase in energy consumption resulting from today’s lifestyles and economic activities and the vulnerability of the energy supply system.

These problems indicate that we are in an age where we need to be sensitive to the impacts of our lifestyles on the global environment and society, so as to enjoy safe, secure, healthy and comfortable living environments.

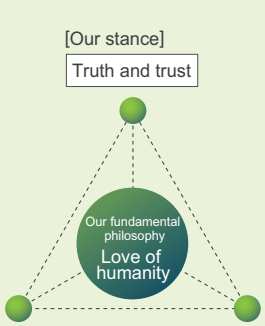
With the belief that “housing can both enable residents to live happily and find solutions to various social problems,” we have continued to explore how we should act as a housing manufacturer based on our management philosophy that focuses on sustainability—“Sustainable Vision.” This section highlights the environmental-impact reducing technologies we have developed as a leading housing manufacturer and our management philosophy and principles with which we bring new values to society to resolve social issues.

1989: Corporate philosophy established

Love of humanity

Our underlying philosophy love of humanity means doing all things in good faith with a spirit of service, desiring happiness for others and treating their joy as our own, with the awareness that each and every human being has irreplaceable value.

It is our belief that a company is a group of individuals, and the mindset of each employee and the relationships between them constitute the very basis of corporate activities and management, and the source of our commitment to contributing to society.



[Background]

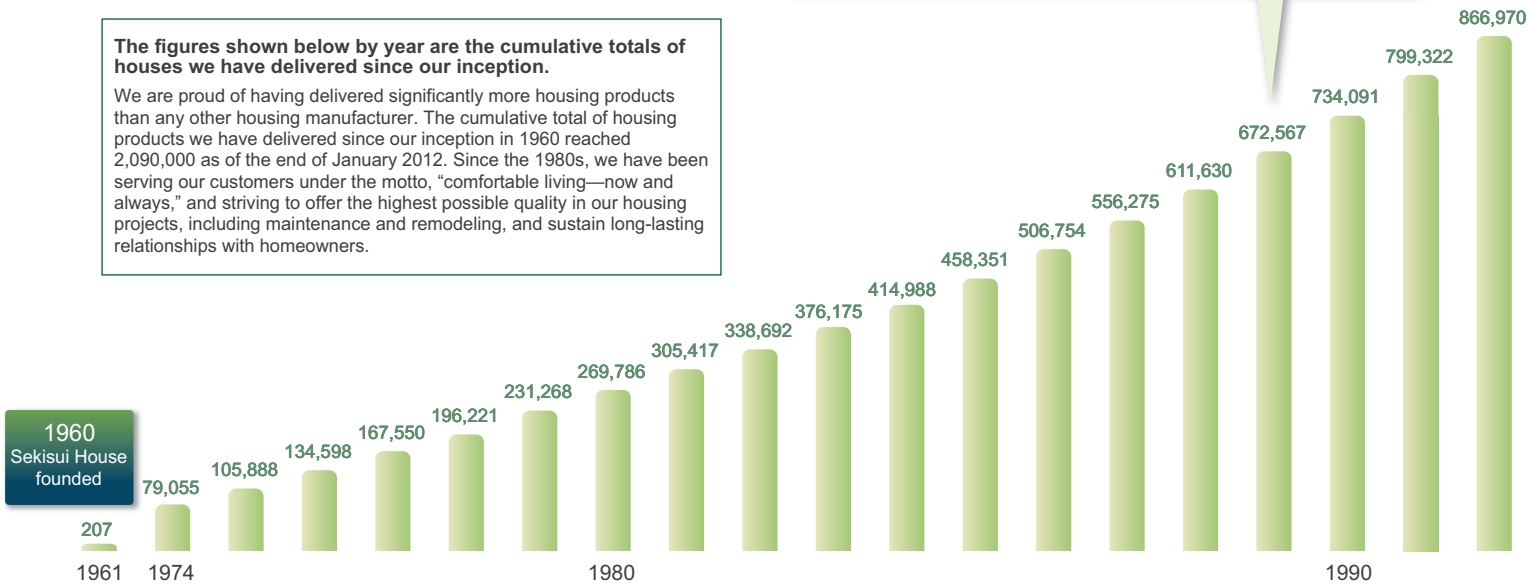
While Sekisui House has continued to steadily grow since its inception, drastic changes in the social environment required us to introduce a “spiritual guidepost” to remind us of our basic principles—a customer-oriented attitude, pride in pursuing the highest quality, and the importance of relationships among employees including partner building contractors. Adopted against this backdrop, our corporate philosophy encourages employees to question whether they remain fully committed to the pursuit of best practice, both mentally and in action, and to exercise self-discipline.

In anticipation of future housing needs, we have always engaged in homebuilding from the viewpoint of residents to offer housing products that ensure “comfortable living—now and always.”

If we are to satisfy varying customer needs for “comfortable living—now and always” by offering attractive forward-looking proposals, all Sekisui personnel need to share the vision of a sustainable society and combine efforts on a group-wide basis in line with the management philosophy.

The figures shown below by year are the cumulative totals of houses we have delivered since our inception.

We are proud of having delivered significantly more housing products than any other housing manufacturer. The cumulative total of housing products we have delivered since our inception in 1960 reached 2,090,000 as of the end of January 2012. Since the 1980s, we have been serving our customers under the motto, “comfortable living—now and always,” and striving to offer the highest possible quality in our housing projects, including maintenance and remodeling, and sustain long-lasting relationships with homeowners.



Addressing the needs of society through our core business

1960- Emergence of built-to-order housing business > 1980- Emphasis on “design,” “performance offer” and “nature friendliness” > 1990-

2004: Medium-term management vision

As a leading company in the housing industry, we declared our commitment to promoting our business activities in a manner that improves customer satisfaction (CS), employee satisfaction (ES), and shareholder satisfaction (SS), and also to fulfilling our obligations to all stakeholders in good faith, with corporate social responsibility (CSR) at the core of our corporate management.

[Background]

Seeing the signs of recovery from the economic recession, we reorganized the Sekisui Group so that we have enough strength to cope with changes in the economic climate and business environment, and adopted a new management strategy to achieve further growth.

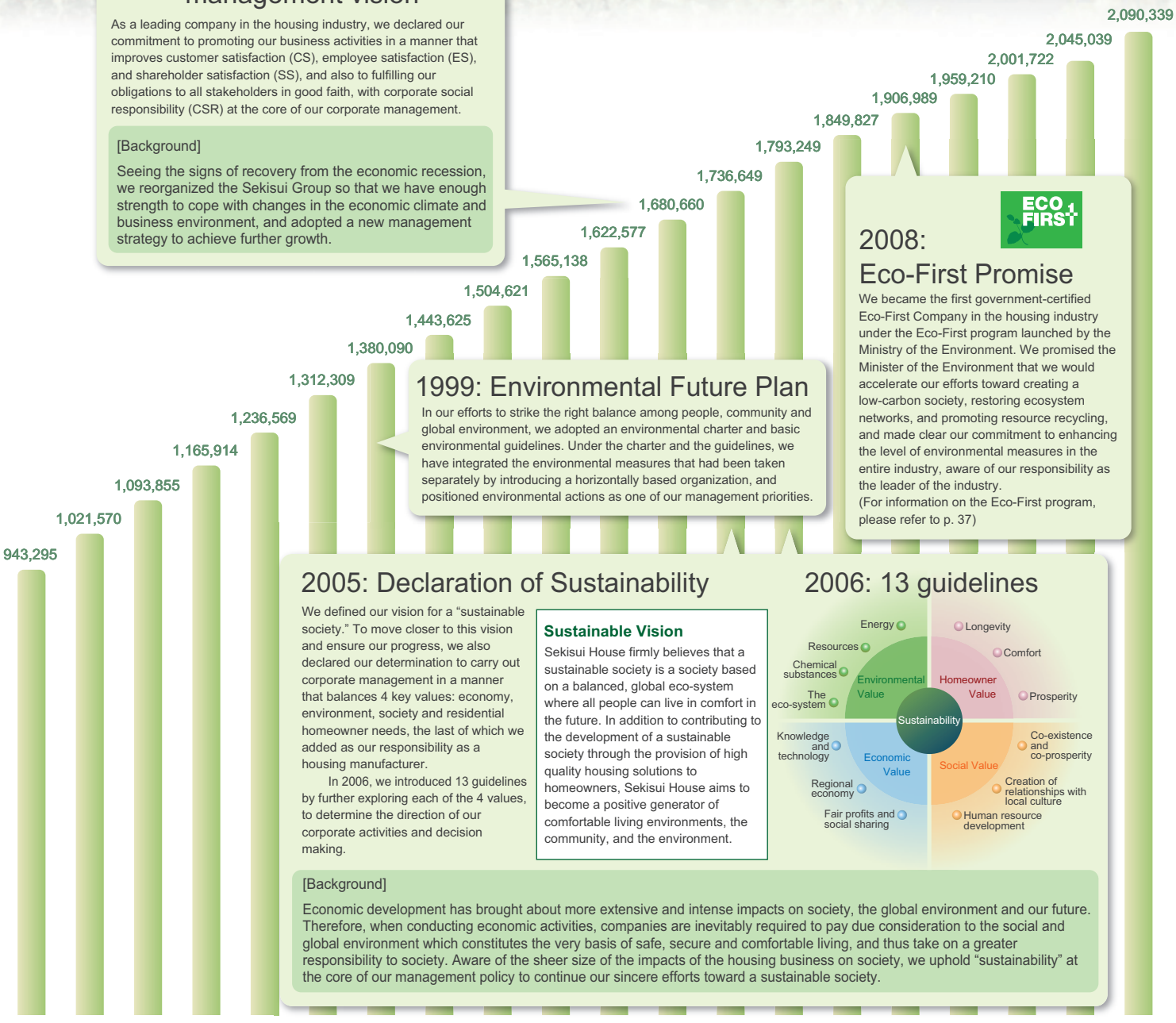
2008: Eco-First Promise

We became the first government-certified Eco-First Company in the housing industry under the Eco-First program launched by the Ministry of the Environment. We promised the Minister of the Environment that we would accelerate our efforts toward creating a low-carbon society, restoring ecosystem networks, and promoting resource recycling, and made clear our commitment to enhancing the level of environmental measures in the entire industry, aware of our responsibility as the leader of the industry.

(For information on the Eco-First program, please refer to p. 37)

1999: Environmental Future Plan

In our efforts to strike the right balance among people, community and global environment, we adopted an environmental charter and basic environmental guidelines. Under the charter and the guidelines, we have integrated the environmental measures that had been taken separately by introducing a horizontally based organization, and positioned environmental actions as one of our management priorities.



2005: Declaration of Sustainability

We defined our vision for a "sustainable society." To move closer to this vision and ensure our progress, we also declared our determination to carry out corporate management in a manner that balances 4 key values: economy, environment, society and residential homeowner needs, the last of which we added as our responsibility as a housing manufacturer.

In 2006, we introduced 13 guidelines by further exploring each of the 4 values, to determine the direction of our corporate activities and decision making.

Sustainable Vision

Sekisui House firmly believes that a sustainable society is a society based on a balanced, global eco-system where all people can live in comfort in the future. In addition to contributing to the development of a sustainable society through the provision of high quality housing solutions to homeowners, Sekisui House aims to become a positive generator of comfortable living environments, the community, and the environment.

2006: 13 guidelines

[Background]

Economic development has brought about more extensive and intense impacts on society, the global environment and our future. Therefore, when conducting economic activities, companies are inevitably required to pay due consideration to the social and global environment which constitutes the very basis of safe, secure and comfortable living, and thus take on a greater responsibility to society. Aware of the sheer size of the impacts of the housing business on society, we uphold "sustainability" at the core of our management policy to continue our sincere efforts toward a sustainable society.

Enhancement of housing "quality" and "performance" **2000- Pursuit of both "environmental consideration" and "comfort"**

Management philosophy directed towards implementation of a sustainable society

“Green First” homes bring “comfortable living—now and always” to homeowners. We are aiming toward a sustainable society by promoting and refining our “Green First” initiative.

If we are to continue our pursuit of safe, secure and comfortable living, we must also have serious environmental consideration. We believe that we can deliver permanently sustainable housing products only through our efforts to bring comfortable living to homeowners in an environmentally friendly manner.

SLOW & SMART

“Slow life” design concept backed by our smart housing technology

We are promoting our homebuilding to bring to our customers a higher level of comfort, economic efficiency and environmental friendliness by refining our “Green First” initiative under the slogan “SLOW life backed by SMART technology.”

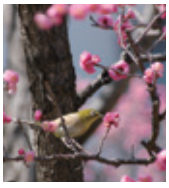
Protecting homeowners with our advanced structural technology that ensures quick recovery from damage caused by an earthquake

“SHEQAS,” Sekisui House’s original seismic vibration absorption system that is accredited by the Minister of Land, Infrastructure, Transport and Tourism

This system converts seismic energy into heat energy and absorbs it. It reduces building deformation by about 50% and demonstrates superior resistance to repeated shakings.

Enjoying everyday life in a green environment

Creating home gardens in a manner best suited to the local climate under the “Gohon no ki” landscaping concept



We create home gardens by planting indigenous tree species best suited to the local climate in various parts of Japan. The environment created in our home gardens attracts various creatures and enables homeowners to enjoy interactions with nature in everyday life.

Design method that gives shape to the concept of “comfortable living—now and always”

Smart Universal Design that ensures greater safety, durability and user friendliness, coupled with enhanced comfort

Our proprietary “Smart Universal Design” method combines the advantages of Universal Design that ensure comfortable living, now and in the future for all the family members by taking into consideration age-associated changes in physical construction, strength and function, with a greater sense of comfort such as pleasant textures and user friendliness.

Our commitment to creating an ideal living environment with our “Green First” initiative

We are offering homes that combine a higher level of comfort, cost performance and environmental consideration in a well-balanced manner from the viewpoint of customers. With this product, we have successfully catered to the demands of the times.

Bringing safety, peace of mind, and healthy and comfortable living to homeowners

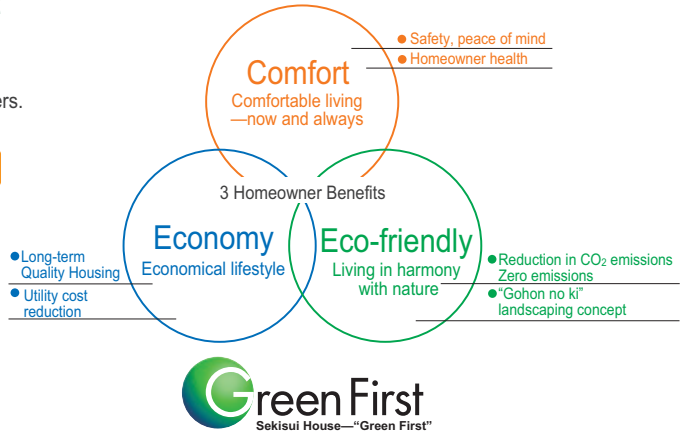
With our outstanding track record in implementation of homebuilding, we bring a pleasant living environment to homeowners in a manner that best suits individual lifestyles and site conditions.

Increasing longevity of homes and enhancing their value as assets

Besides ensuring the best cost performance of our homes in everyday life, we create homes that grow more attractive with the passing of time to enhance their value as assets in the future.

Moving toward a low-carbon, recycle-oriented and environmentally conscious society

Through our homebuilding projects, we are striving to contribute to the creation of a sustainable society by pursuing a more comfortable life while simultaneously preserving the foundation of our lives—the global environment.



An indoor air environment created in consideration of the health of children is also beneficial to all family members.

“Airkis” high-quality indoor air design, customers can now choose indoor air quality.

In July 2011, we introduced “Airkis” as an additional feature of our “Green First” homes. All of our major steel-framed detached homes are shipped with this system. With this system, we can reduce the indoor concentrations of five chemical substances, which are subject to regulation under the housing performance indication system, by more than 50% from the guideline values set by the national government.

空 気 環 境 配 慮 仕 様
Airkis
エアキス

Protecting homeowners’ lifestyles by ensuring safety and security in the event of a disaster and performing environmentally friendly practices on a daily basis

“Green First HYBRID” home, a new self-sustained house furnished with the world’s first power supply system utilizing three different kinds of cells

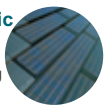
In August 2011, we launched our “Green First HYBRID” home, which incorporates three different cells—solar, fuel, and storage—combined with HEMS (Home Energy Management System). While bringing a high level of comfort, it makes it possible to dramatically save energy and allows people to meet basic living needs if a disaster strikes. The home can also serve as a power generation plant for the local community. Advancement of smart houses will become an important issue for future society.

Green First HYBRID
グリーンファーストハイブリッド

Fuel cells
generate both electricity and hot water at the same time

+

Photovoltaic cells
generate electricity using solar power



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Storage cells
store electricity

Concerted efforts of the Sekisui House Group to facilitate the process of reconstruction and rehabilitation of the areas stricken by the Great East Japan Earthquake

The entire Sekisui House Group is fully committed to continuing concerted efforts to achieve post-earthquake rehabilitation and reconstruction of the stricken areas as quickly as possible.

More than one year has passed since March 11, 2011 when the Great East Japan Earthquake occurred and caused devastation of an unprecedented scale in the Tohoku and Kanto regions.

Immediately after the earthquake, we, at the Sekisui House Group, embarked on customer support activities under our Customer First policy, took prompt initial response actions and provided centralized management of instructions on a group-wide basis.

The number of Sekisui House Group employees who have taken part in the post-earthquake rehabilitation and reconstruction activities from various parts of Japan during the past year amounts to 150,000.

We have been doing our utmost to facilitate restoration and reconstruction work and construction of temporary houses, out of our desire to accelerate the process of recovery from the devastation as much as possible.

Still, much more time and effort is necessary before the stricken areas achieve full recovery from the damage, and many obstacles have yet to be overcome.

We are determined to carry out our responsibility to society as a housing manufacturer, responding to the needs of communities, as well as those of our customers.

Organizational arrangements

Providing centralized management of instructions on a group-wide basis under our Customer First policy

We promptly opened a disaster response headquarters to provide information on a centralized basis and established an internal system to take initial response actions on the day of the earthquake.

On the day of the earthquake, we established the Tohoku/Off-Pacific Coast Earthquake Response Headquarters, for which our president doubled as Disaster Response Director. Based on lessons learned from past disasters, we provided centralized management of disaster-related information and instructions, and opened local disaster response stations in nine locations in the stricken areas. In this way, we promptly took initial action, while maintaining close communication between employees. Despite difficult circumstances, we confirmed the safety of all employees of the Sekisui House Group and their family members by March 15, and immediately made preparations to contact customers to inquire about their safety and any damage their homes had suffered.

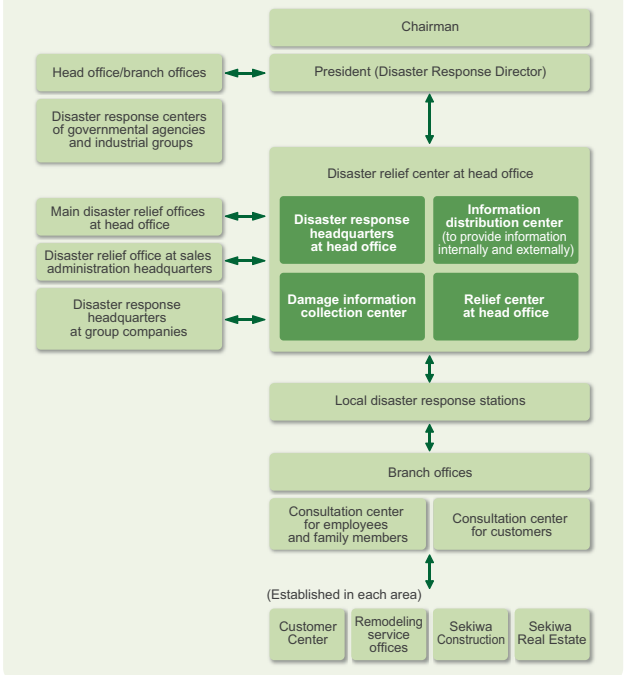
Disaster response headquarters and local disaster response stations were opened in our head office and respective sales administration headquarters respectively to provide centralized management of information.

We implemented an action program that incorporates lessons learned from past disasters.

The Great East Japan Earthquake caused serious damage so extensively that it was very difficult to achieve early recovery. To prepare for such an emergency, we had already developed a Business Continuity Plan (BCP) internally with awareness of the importance of initial action for housing manufacturers. We also implemented the Action Program for Natural Disaster Response to effectively offer needed support to the restoration of stricken areas on a group-wide basis and in cooperation with our business partners, as part of our comprehensive efforts to promote disaster-proof housing design.

Employees of the Sekisui House Group from various parts of Japan joined relief activities immediately after the earthquake.

Simplified organizational chart of the Tohoku/Off-Pacific Coast Earthquake Response Headquarters



[Impacts of the earthquake on Sekisui House buildings]

There were 177,458 buildings we had constructed in the areas that registered a seismic intensity of 5 upper or more. Immediately after the earthquake, we launched group-wide efforts to contact our customers in the stricken areas to inquire about damage to their homes, and completed inquiries in less than a month. (For information on our emergency measures and restoration and reconstruction work, please refer to p. 19)

Impact of the earthquake on Sekisui House buildings

No. of Sekisui House buildings in the stricken areas	177,458 buildings in the areas that registered a seismic intensity of 5 upper or more
No. of Sekisui House buildings that required repair	about 2% of the above buildings
No. of Sekisui House buildings partially or entirely destroyed	no buildings destroyed by the shaking. *Some buildings were affected by ground movement and the tsunami.

Initial response action

Promptly taking initial response action through group-wide efforts according to the Action Program for Natural Disaster Response

We completed confirming the safety of our customers and the degree of damage to their homes within approximately three weeks after the earthquake occurred.

On the day of the earthquake, Sekisui House employees took action by collecting information to confirm the safety of our customers and the degree of damage to their homes in their respective territories. On March 15, a disaster response center was opened at our head office to respond to telephone inquiries from customers in the stricken areas. Each of the employees staffed at the center, while collecting information on damage to homes and accepting restoration requests, listened attentively to customers who felt uneasy after the earthquake to reduce their anxiety.

The earthquake and tsunami also caused massive damage to supplies of electricity and gas and other infrastructure. We mobilized group-wide manpower to directly visit customers in the areas that could not be reached by telephone. In this way, we had completed confirming the safety of our customers and damage to their homes within approximately three weeks. There were cases where our visits helped customers confirm the safety of their relatives.


We mobilized group-wide manpower to visit customers in the stricken areas and promptly collected information regarding their safety and damaged homes .

Delivery of aid supplies commenced three hours after the earthquake

Immediately after the earthquake, we began sending aid supplies to our customers and local offices in the stricken areas which were extremely difficult to access due to the damage to major transportation networks. Three hours after the earthquake occurred, the first truck laden with aid supplies left our Shizuoka Factory where food and water had been stockpiled to prepare for a widely expected Tokai earthquake. This was soon followed by other trucks bound for the stricken areas from various parts of Japan. (As of the end of August 2011, aid supplies were carried by a total of eighty-nine 10-ton trucks.)

The aid supplies were delivered not only to our customers, employees and other affiliated parties, but also to local residents and hospitals and shelters where water supplies were likely to remain disrupted for a prolonged period of time. All Sekisui House Group companies and our business partners exerted concerted efforts to support people in the stricken areas, sharing trucks to deliver aid supplies.


We promptly took action to deliver aid supplies to our customers and shelters.

■Main aid supplies sent by Sekisui House (carried by a total of eighty-nine 10-ton trucks)

Drinking water	348,000 liters	Plastic sheets	12,800 sheets	Diapers	45,700
Staple food	292,000 dishes	Portable gas burners for daily use	3,800 units	Sandbags	17,000
Non-staple food	119,000 dishes	Gas cartridges for daily use	14,800 units	Motorbikes	150 vehicles
Clothing and blankets	9,600 items	Disposable warmers	205,000		

(As of the end of August 2011)

Each employee of the Sekisui House Group took individual action as responsible corporate citizens.

Based on our experiences learned from past disasters, we prioritized what we could do as responsible corporate citizens “for the benefit of customers and communities” and took the lead in carrying out various relief activities, such as offering tents for outdoor kitchens to prepare and supply meals to affected people and for reception desks to accept aid supplies; installing temporary lavatories; and offering some of the rental houses managed by the Sekiwa Real Estate Group to those who lost their homes in the disaster.

Sekisui House Group employees who visited shelters to confirm the safety of customers or deliver aid supplies offered assistance to those who took refuge in the shelters, saying, for example, “Let me communicate your wellbeing to your family members/relatives in other locations or shelters.” By making many telephone calls to deliver the messages received, we considered what we could do for the earthquake victims and volunteered to take action and provide aid.


Seeing the disaster from the point of view of the earthquake victims, we decided to install tents and temporary lavatories.

Major actions taken by the Sekisui House Group since the occurrence of the earthquake

Mar. 11, 2011 ►	○Tohoku/Off-Pacific Coast Earthquake Response Headquarters opened at head office. (Renamed the Great East Japan Earthquake Restoration Headquarters on April 1.) ○Local disaster response stations are opened in respective sales administration headquarters in the stricken areas. ○Commenced contacting employees, their family members and customers to confirm their safety and degree of damage to their homes. ○Aid supplies in stock are sent from our Shizuoka Factory three hours after the earthquake.
Mar. 12 ►	○Begin contacting and visiting customers to inquire about their condition,starting from accessible areas. ○Begin inspecting the damage to buildings and launch restoration work.
Mar. 13 ►	○Collection of monetary donations begins.
Mar. 15 ►	○Disaster response center is opened at head office to address inquiries from customers. ○Toll-free telephone service is introduced to all the Customer Centers in the stricken areas. ○Sekisui House finishes confirming the safety of employees and their family members in the stricken areas.
Mar. 18 ►	○Kanto Factory resumes shipping operations.
Mar. 19 ►	○Tohoku Factory resumes shipping operations.
Apr. 1 ►	○Sekisui House begins accepting orders for “Ganbaro Tohoku,” a new housing product specially designed for the stricken areas. ○A special payment program is introduced for employees affected by the earthquake.
Apr. 5 ►	○Construction of temporary houses begins.
Apr. 27 ►	○Construction of temporary houses is completed in Ishinomaki City in Miyagi Prefecture.
May 18 ►	○Submission of “Electricity saving measures and targets during the peak hours in summer” to the Minister of the Environment.
Jul. 1 ►	○Sekisui House starts rotating operation in the Tohoku and Kanto Factories to reduce consumption of electricity during peak hours.
Jul. 27 ►	○Ground breaking ceremony is carried out at the site of Smart Common City Akaishidai (Tomiya-machi, Miyagi Prefecture).
Aug. 8 ►	○“Green First HYBRID” is launched on the market.
Sep. 14 ►	○Construction of temporary houses is completed (2,771 houses in Iwate, Miyagi and Fukushima Prefectures).
Apr. 27, 2012 ►	○Smart Common City Akaishidai opens.

Construction of temporary houses

Meeting a tight schedule and completing the delivery of 2,771 temporary houses with nationwide support

We are the first housing manufacturer to start construction of temporary houses.

In response to a request from the national government, we began construction of temporary houses in Ishinomaki City in Miyagi Prefecture. To help people affected by the disaster resume their normal lives as early as possible, we promptly began to procure construction materials and produce building components at our factories to prepare for construction of temporary houses, and on April 5, we became the first housing manufacturer to embark on construction of temporary houses. While considerable difficulties were experienced in search of construction sites, we immediately began site inspection and drew up plot plans once construction sites were determined. Following approval of the respective prefectures, we proceeded with construction.

Construction personnel worked from early morning until late at night, including weekends.

With the concerted efforts of 60,000 workers, we could complete the construction project on time.

In the temporary housing construction project, we had to meet an unusually tight schedule to complete construction of each house in about two weeks. Working in close cooperation with the Sekiwa Construction Group and the Sekisui House Association which is comprised of our partner building contractors, we mobilized a total of 60,000 construction workers and could manage to complete the construction on time, with no single house requiring repair or improvement. On September 14, we completed the construction of all 2,771 temporary houses as scheduled.

No. of temporary houses built by the Sekisui House Group in each prefecture

Iwate	Miyagi	Fukushima	Total
658 houses	1,879 houses	234 houses	2,771 houses

Restoration and reconstruction work

Mobilizing a total of approximately 150,000 workers across the Sekisui House Group to engage in restoration and reconstruction of the stricken areas

Specialists from each of the Sekisui House Group companies took action promptly and systematically.

We organized a support system combining the strengths of sales and service offices of Sekisui House and group companies around Japan and the Sekisui House Association to promote restoration and reconstruction of the stricken areas. This system has a total of 150,000 workers with professional skills, including more than 800 after-sales support and maintenance service personnel from the Customer Centers, and many expert workers of Sekisui House Remodeling, Sekiwa Real Estate, Sekiwa Construction companies, and the Sekisui House Association. Through this system, the entire Sekisui House Group personnel joined efforts to accelerate the process of restoration and reconstruction. In implementing the construction project, we drew up a detailed plan for rotating the use of construction machines, such as cranes and other heavy machines, trucks and power generators, so that we could procure and transport the machinery needed for particular stages of construction work without fail.

We remain fully committed to advancing the process from restoration to reconstruction.

We assigned a specific task to each team of workers to ensure completion of restoration work at the earliest possible time and to restore buildings to their best possible condition.

In conducting restoration work, we inspected the damage to buildings in each area, and categorized the damage into damage requiring urgent repairs, light damage, damage to foundation, damage to exterior, damage to fixtures, etc. We also organized teams of workers to share the tasks of “repairing the outer sections of buildings” and “modification of houses.” These teams were promptly sent to customers who needed urgent help so that restoration work could be started as early as possible and to restore buildings to their best possible condition. The nationwide network we had built as a leading housing manufacturer enabled us to secure a stable supply of housing materials, building components and construction equipment.

In the coastal areas where the earthquake induced ground liquefaction and caused uneven settlement of buildings, we sent our teams of workers to each of the affected sites to remove sand and take remediation measures using the latest techniques that require professional skills, such as jacking up buildings.

In some areas, we needed considerable time in our work due to damage to infrastructure or building restrictions, but we could almost complete the restoration work by the summer of 2011 through our concerted efforts made under the Customer First policy.

We launched “Ganbaro Tohoku,” a new housing product specially designed for the stricken areas, on Smart Common City project.

In our efforts to provide a safe and comfortable place to live for the people affected by the disaster and help them return to their normal lives as quickly as possible, we launched “Ganbaro Tohoku,” a new housing product specially designed for the stricken areas on April 1, 2011 to promptly meet the urgent housing needs of our customers. This new housing model allows us to start construction earlier than other models and thus requires a much shorter construction time.

In August 2011, we introduced the “Green First HYBRID” model, which incorporates three different cells—solar, fuel and storage—and allows residents to meet basic living needs even when a disaster strikes. Also, we are currently developing Smart Common City Akaishidai (Tomiya-machi in Miyagi Prefecture) and Smart Common Stage Keyakidaira (Koga City in Ibaraki Prefecture), the embodiment of our smart town concept.

A “Ganbaro Tohoku” house under construction in the stricken area

[Further enhancing our Business Continuity Plan]

The disaster helped us identify the areas that require further enhancement. With renewed awareness of the importance of day-to-day risk management, we will reinforce disaster preparedness at each of our sales administration headquarters and sales and service offices by securing transportation routes and ensuring availability of vehicles and fuels in case of emergency, and increasing stocks of water, food and sanitary items. By doing so, we will further enhance our Business Continuity Plan.

Deepening our ties with the government, NPOs, companies and citizens to expand the scope of support

Aid supplies

We jointly implemented the "Ainori (ride-together) Project" to promptly offer support to people in need.

We joined in the efforts of the Osaka municipal government and Osaka Voluntary Action Center to develop the "Ainori (ride-together) Project" from the initial stages of its creation. The system is designed to deliver aid supplies to areas and facilities that are difficult to access.

Immediately after the earthquake, the Sekisui House Group began delivering aid supplies to affected people via our bases in the Tohoku region. This project stemmed from the idea of using our physical distribution system to transport aid supplies that the Osaka municipal government was asking citizens to donate. In our efforts to "listen to the voice of people in the areas where aid supplies are scarce and send needed items to them," we worked with several other companies to develop a framework for transporting aid supplies. In this way, the government, NPOs, several companies and citizens worked together to directly address the needs of elderly people, people with disabilities, infants, and pregnant women in the stricken areas. Starting from March 22, we arranged ten trips to stricken areas in Iwate, Miyagi, and Fukushima Prefectures, transporting a total of approximately 83 tons of aid supplies, including nursing care and childcare products as well as water and food.

■Main destinations of our aid

Local government	Iitate village in Fukushima Prefecture, Minamisoma City in Fukushima Prefecture, Minamisanriku-cho in Miyagi Prefecture, Ishinomaki City in Miyagi Prefecture
Shelters, temporary housing areas, volunteer centers	Shelters in Fukushima University; Kesennuma Municipal Niitsuki Junior High School in Miyagi Prefecture; and Miyagi Prefectural Kesennuma High School, "Heisei no Mori" temporary housing area (Minamisanriku-cho, Miyagi Prefecture), Ishinomaki Disaster Volunteer Center
NPOs, medical and welfare facilities	NPO Community Life Support Center, NPO Miyagi Selp Conference, Takuto Rehabilitation Center for Children (Sendai City, Miyagi Prefecture), NPO Fureai Station Ai (Miyako City, Iwate Prefecture), Iwate Prefectural Council of Social Welfare, "Soleil no Oka" care house (Kesennuma City, Miyagi Prefecture)
Educational facilities	Kodomo Egao Genki Project, Civil Action Network for Supporting Restoration from the Great East Japan Earthquake, Miyagi University of Education (Sendai City, Miyagi Prefecture)

Monetary donations

Offering monetary donations to victims of the Great East Japan Earthquake

Starting March 2011, we began collecting monetary donations from our affiliated parties, including employees and former employees of the Sekisui House Group all over Japan, the Sekisui House Association, and our business partners, and offered the money to the following organizations. Our donations are meant to be either disbursed directly to people affected by the earthquake by the recipient organizations or used to cover expenses for promptly providing support to meet the needs of people in the stricken areas.

Recipient organization	Amount of donation
Japanese Red Cross Society	¥33,000,000
NPO Japan Platform	¥10,000,000
Osaka Voluntary Action Center	¥4,989,208
Miyagi Prefectural Government, Iwate Prefectural Government, Fukushima Municipal Government	¥35,000,000
Total (including the monetary donations from Sekisui House)	**¥82,989,208**

Cooperating with Momo-Kaki Orphans Fund to offer financial aid to children orphaned by the earthquake

Sympathetic to the purpose of the Momo-Kaki Orphans Fund (an organization established to offer financial assistance to children orphaned by the Great East Japan Earthquake), we introduced our own Momo-Kaki Orphans Fund Program, based on the Sekisui House Matching Program*, a joint employee-company donation program. Our Momo-Kaki Orphans Fund Program is joined by about 790 executive officers and employees, and under this program, we will continue our financial assistance for ten years for a total amount of 100 million yen.

*Under this matching program, employees have an amount of their choice withheld from their salaries for donations and Sekisui House matches the donations and contributes the same amount.

Volunteer activities

Sekisui House employees engaging in volunteer activities in the stricken areas

At Sekisui House, sales and service offices and factories offered volunteer opportunities to employees, such as cleaning shelters, collecting items carried by the tsunami, and taking furniture from damaged houses.

Starting April 2012, we implemented a restoration program in the stricken areas which includes cleaning and making storage sheds for temporary houses, as part of training for new employees.

Sekisui House volunteers worked to improve the sanitary conditions of a shelter.

Events and activities to support economic independence of the stricken areas

Producing a "Gift Catalog to Revitalize Tohoku" and promoting sales through the catalog

Our Tohoku Sales Administration Headquarters and TKC Tohoku worked together to produce a "Gift Catalog to Revitalize Tohoku" to support business partners of TKC, and began accepting orders online from August 26, 2011.

Cooperating with the "Minna De Kaouya (Purchase by everyone)" project

We cooperated with the "Minna De Kaouya" project, implemented in major cities in Japan to sell products made by people with disabilities at earthquake-affected welfare facilities in the Tohoku region. For this project, we offered the space in the underground floor of the Umeda Sky Building where our head office is located from May 2011 to the end of March 2012.

Carrying out Tohoku Campaign at canteens of our factories

We carried out Tohoku Campaign in the cafeterias of our factories to offer dishes using specialties of the Tohoku region, such as bean paste from Sendai City in Miyagi Prefecture, wheat gluten fried in vegetable oil (*aburafu*) from Tome City in Miyagi Prefecture, and Pacific saury from Ofunato City in Iwate Prefecture.

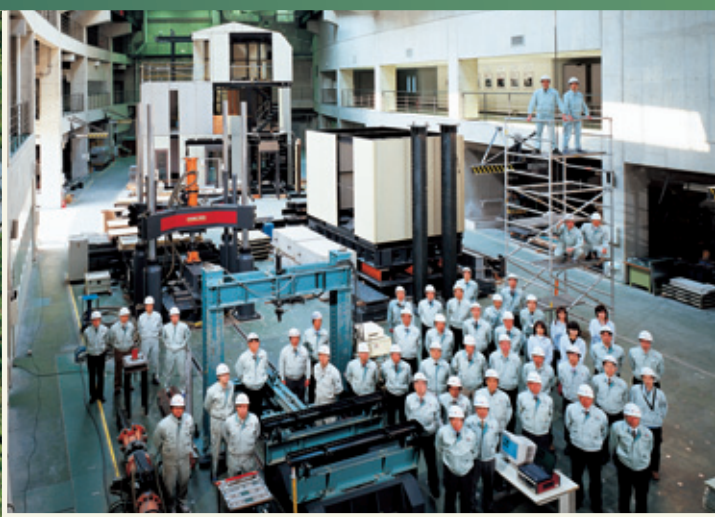
Cooperating in the organization of an event to encourage post-earthquake restoration

We cooperated in organizing an event to encourage post-earthquake restoration titled "3.11 from Kansai—We've Just Begun" which was held at the Umeda Sky Building on March 10 and 11, 2012. Participants in the event enjoyed various stage performances, offered silent prayers, attended workshops, interacted with people who had moved to Kansai from Tohoku for refuge, and joined various other activities. The number of participants in the event totaled 5,500 over two days.

Encouraging employees to organize company trips to three prefectures in the Tohoku region

As part of our efforts to offer economic support to the stricken areas, we encourage employees to choose any of the three prefectures in the Tohoku region (Iwate, Miyagi and Fukushima Prefectures) as the destination of their company trip by partly covering expenses of company trips bound for these destinations.

Commitment to catering to the needs of the
next generation future 1



Promoting our “Green First” initiative to meet the post-earthquake needs of the next generation

Striving to perform our responsibilities in the face of a rapid change in society after the earthquake with renewed awareness of the importance of safe living and disaster-proof housing

Our disaster-proof housing design is backed by our track record of building 2,090,000 houses in cumulative total nationwide and the lessons learned from this experience.

Since its inception in 1960, Sekisui House has delivered more than 2,090,000 houses to customers. During this period, several earthquakes with a seismic intensity of six or more occurred in various parts of Japan. As shown in the following table, we have experienced earthquakes with seismic intensities of six or more every three to five years since 1995 when the South Hyogo Prefecture Earthquake occurred. Lessons learned from this experience reminded us of the importance of the basic principles of homebuilding—safety, durability and comfort—and taught that high seismic performance and earthquake-resistant features are indispensable prerequisites for high-quality housing products as social assets.

January 17, 1995
South Hyogo Prefecture Earthquake (M 7.3/seismic intensity 7)
No. of houses partially or entirely destroyed: 249,180
No. of Sekisui House buildings in the areas that registered a seismic intensity of 5 or more: 29,692

March 24, 2001
Geiyo Earthquake (M 6.7/seismic intensity 6 lower)
No. of houses partially or entirely destroyed: 844
No. of Sekisui House buildings in the areas that registered a seismic intensity of 5 or more: 56,602

March 20, 2005
Fukuoka West Offshore Earthquake (M 7.0/seismic intensity 6 lower)
No. of houses partially or entirely destroyed: 497
No. of Sekisui House buildings in the areas that registered a seismic intensity of 5 or more: 27,007

July 16, 2007
Niigata Chuetsu Offshore Earthquake (M 6.8/seismic intensity 6 upper)
No. of houses partially or entirely destroyed: 6,940
No. of Sekisui House buildings in the areas that registered a seismic intensity of 5 or more: 7,105

*Magnitude (M) and seismic intensity have been recalculated according to the current calculation method.

1995 — 2000 — 2005 — 2010

October 6, 2000
West Tottori Earthquake (M 7.3/seismic intensity 6 upper)
No. of houses partially or entirely destroyed: 3,536
No. of Sekisui House buildings in the areas that registered a seismic intensity of 5 or more: 22,916

October 23, 2004
Niigata Chuetsu Earthquake (M 6.8/seismic intensity 7)
No. of houses partially or entirely destroyed: 16,985
No. of Sekisui House buildings in the areas that registered a seismic intensity of 5 or more: 6,996

March 25, 2007
Noto Peninsula Earthquake (M 6.9/seismic intensity 6 upper)
No. of houses partially or entirely destroyed: 2,416
No. of Sekisui House buildings in the areas that registered a seismic intensity of 5 or more: 2,966

June 14, 2008
Iwate Miyagi Inland Earthquake (M 7.2/seismic intensity 6 upper)
No. of houses partially or entirely destroyed: 176
No. of Sekisui House buildings in the areas that registered a seismic intensity of 5 or more: 16,017

*Seismic intensity and the number of buildings partially or entirely destroyed are taken from the data of the Japan Meteorological Agency and the Chronological Scientific Tables.
*The number of Sekisui House houses in the areas that registered a seismic intensity of 5 or more is as of the day the earthquake occurred.

Launching energy-saving and disaster-proof housing products to ensure self-sustained lives at home even in times of emergency

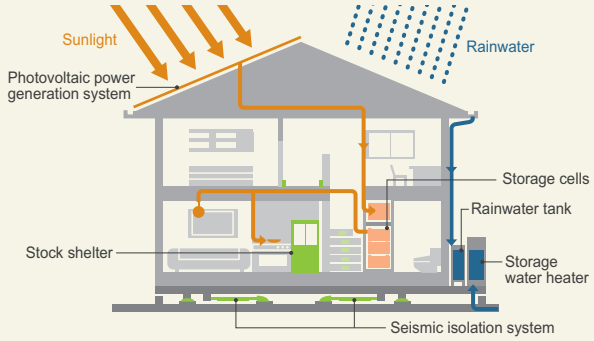
Adding disaster-proof features suited to Japanese houses while prompting residents to increase disaster awareness and preparedness on a daily basis

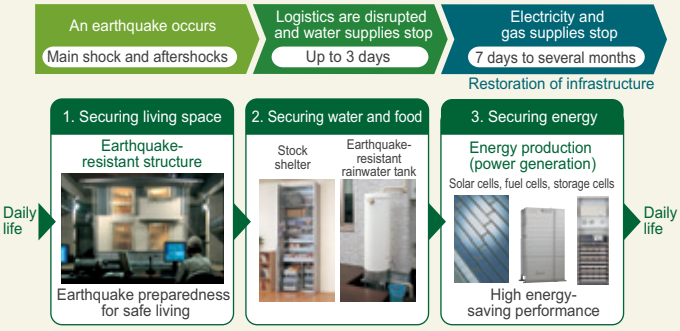
While no Sekisui House buildings were destroyed solely by shakings in the past earthquakes, we have often heard homeowners in the affected areas say that their houses were intact but they could not continue to live in them, due mainly to damage to infrastructure. Out of our desire to ensure self-sustained lives at home even after a disaster, we launched an energy-saving, disaster-proof house on the market in 2004, a first in the Japanese housing industry.

Designing disaster-proof housing features to meet needs during an emergency that change over time and also be of service and deliver comfort on a daily basis

Our energy-saving, disaster-proof house is characterized by its ability to meet needs during an emergency at each stage in the aftermath of a disaster. As a housing manufacturer, we contribute to disaster mitigation by introducing housing features that allow self-sustained lives even after a disaster occurs, in anticipation of constantly changing situations.

Of course, our housing products are designed to withstand the strong shakings of an earthquake and protect the lives of residents. In addition to this, we introduced unique seismic isolation and resistance technologies to our new disaster-proof house to minimize possible damage to the structure so that residents can continue to live in their homes even after an earthquake occurs, while enhancing measures to prevent dishes from being thrown from cupboards and furniture from falling when experiencing strong shakings. Furthermore, the house is equipped with a stock shelter to store food and drinking water and an earthquake-resistant rainwater tank for toilet flush water, which enable residents to stay in their homes even without a supply of daily necessities for approximately three days. In the event of a disaster, electricity, gas and other utilities may be out of service for a prolonged period of time. Our energy-saving and disaster-proof house allows residents to generate and store electricity at home with its photovoltaic power generation system and electric power storage system, which also help residents reduce energy consumption. In designing this product, we also gave importance to introducing these emergency functions in an ordinary housing environment, not in a special setting.





*The energy-saving, disaster-proof house has been equipped with fuel cells since August 2011.

Model energy-saving, disaster-proof house in Akashi City (now removed)

An increasing need to secure energy and reduce electricity consumption at home as electricity shortages became a reality

The first-ever experience of rolling blackouts reminded us of the preciousness of electricity and taught us what is needed for future homebuilding.

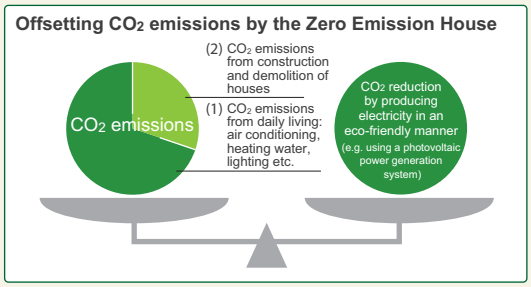
In the G8 Hokkaido Toyako Summit held in 2008, we unveiled our Zero Emission House to the world, and in 2009, we embarked on our “Green First” initiative to bring greater comfort, economic efficiency and eco-friendliness to our customers. Over the years, we have remained committed to developing energy producing and saving technologies to ensure both comfortable living and a reduction of CO_2 emissions to contribute to the prevention of global warming. In 2011, we had the first-ever experience of rolling blackouts and the government’s request for significant reduction of power consumption following the Great East Japan Earthquake. This experience posed us the very difficult question of how we can cope with and overcome electricity shortages.

Confusion caused by the rolling blackouts

(Courtesy of the Mainichi Newspapers)

Dimly lit downtown street due to power saving

Sekisui House cooperated in the construction of the Zero Emission House hosted by the Ministry of Economy, Trade and Industry in the Toyako Summit.



Zero Emission House is designed to reduce to zero CO_2 emissions from (1) daily living and (2) construction and demolition of houses.

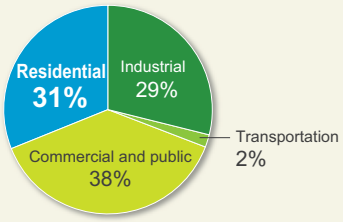
With its ability to bring greater comfort, economic efficency and eco-friendliness in a well-balanced manner, our “Green First” initiative presented a vision of lifestyles in the near future and proved to be a viable solution to the serious energy problems that arose in 2011. By further improving the “Green First” design, we launched the “Green First HYBRID” model, a disaster-resistant smart house capable of producing energy for family consumption.

Japan’s energy policy is now undergoing drastic change, shifting its focus to energy production and conservation. The year 2011 will be remembered as the first year of the smart house era.

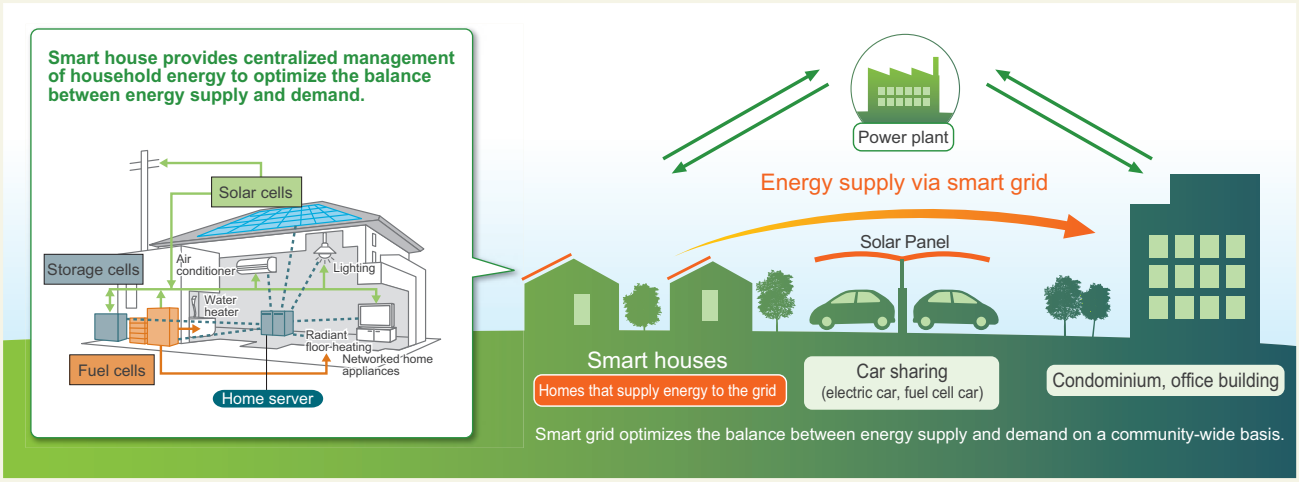
Today, Japan’s energy policy is at a crucial turning point. In the conventional energy policy, importance was placed on reducing CO_2 emissions and creating a sustainable society by switching from fossil fuels to nuclear energy. However, the 2011 earthquake and the nuclear power plant accident that followed have compelled us to reduce our dependence on nuclear energy. Against this backdrop, we are now required to accelerate the development of technologies to produce energy from renewable energy sources and to save energy without sacrificing comfortable and convenient living standards. The Japanese government has embarked on drastic measures to change the direction of its energy policy, including the Renewable Energy Feed-in Tariff System to be introduced on July 1, 2012, in its efforts to achieve a new future vision that is substantially different to the original vision.

Of course, it is also necessary for us to change our lifestyles at home, as residential users are responsible for about one third of the national power consumption. While many obstacles have yet to be overcome, we believe that we can expedite the process for achieving a sustainable society by offering housing products capable of producing electricity at home for family consumption.

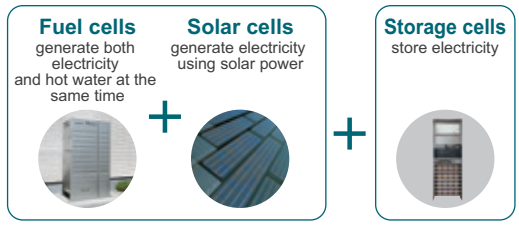
Overall electricity consumption in FY 2009

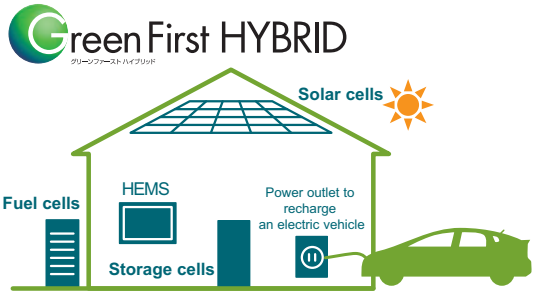


Source: IEA/OECD



“Green First HYBRID,” the world’s first smart house model that incorporates three different types of cells (launched in August 2011)





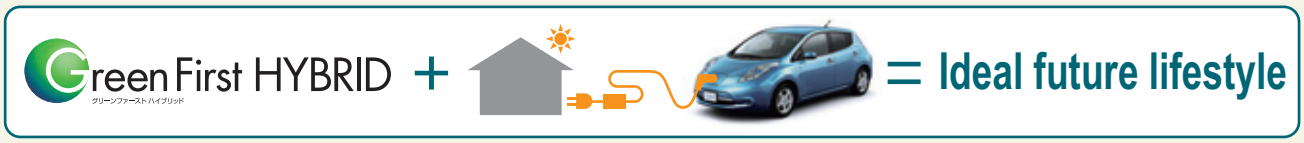
HEMS = Home Energy Management System

In the latter part of 2011, the Japanese housing market saw the hasty introduction of a range of innovations, such as storage cells, HEMS technologies and photovoltaic power generation systems, reflecting the rapidly growing interest in the concept of producing, saving and storing energy at home. In this light, we may call 2011 the first year of the smart house era. Sekisui House launched its “Green First HYBRID,” an advanced smart house equipped with our original HEMS in August 2011. This is the upgraded version of our energy-saving, disaster-proof home we introduced in 2004, and the world’s first mass-produced model that incorporates three different types of cells—solar, fuel, and storage—which work together to ensure self-sustained living at home even during a disaster-induced blackout, while enabling optimal control of electricity consumption by producing electricity for family consumption during ordinary times.

The “Green First HYBRID” model, developed from the viewpoint of residents, brings a largely stress-free environment to homeowners.

“Green First HYBRID” creates a largely stress-free housing environment by

1. Freeing residents from the stress of saving energy
2. Freeing residents from concerns over blackouts
3. Freeing residents from the financial stress of utility costs (reducing utility costs to zero)
4. Freeing residents from the influence of local electricity shortages
5. Enabling residents to join in the efforts to stop global warming



We participated in the Tokyo Motor Show as an exhibitor for the first time as a housing manufacturer, where we presented our “Green First HYBRID” smart house concept and our vision of an ideal lifestyle in the near-future smart mobility city.

At the Tokyo Motor Show held in December 2011, we set up an exhibition booth for the first time as a housing manufacturer to showcase our “Green First HYBRID + EV” concept, a new vision of living in a smart house environment with an electric vehicle. Since 2010, we have participated in the Smart Network Project, an initiative commissioned by the Ministry of Internal Affairs and Communications to accelerate the process toward the creation of a smart house environment. Under this project, we built the “Kankan kyo” prototype house in the Yokohama Minato Mirai 21 district to explore how we could contribute to an ideal future lifestyle with our smart house design combined with an electric vehicle. At the Tokyo Motor Show, some exhibitors proposed the idea of supplying electricity for residential use from an electric vehicle during a blackout. In contrast to this, the Sekisui House model exhibited in the show is capable of recharging an electric vehicle even during a blackout, as we are convinced of the vital necessity of a vehicle during an emergency. This motor show, where ideal lifestyle and urban design models were exhibited focusing on the EV and other latest automobile technologies, ended in a great success, reflecting the increasing public awareness of the energy problems resulting from the earthquake, and our booth alone was visited by as many as 36,000 people, despite the fact that the show was originally intended for the automobile industry. Our exhibition was widely covered by the mass media and garnered a very good reputation.


Demonstrative experiments were conducted in the Kankan kyo prototype smart house (in Yokohama City) to develop an ideal future housing environment combined with an electric vehicle. (2010)


An electric vehicle and the Kankan kyo prototype house


Sekisui House booth at the Tokyo Motor Show


Exhibition of Sekisui House’s original HEMS at the Tokyo Motor Show

Our “Green First HYBRID” was recognized as the most outstanding smart house product available on the Japanese market, and won the Minister of Economy, Trade and Industry Prize, the grand prize of the 2011 New Energy Award Program implemented by the New Energy Foundation.

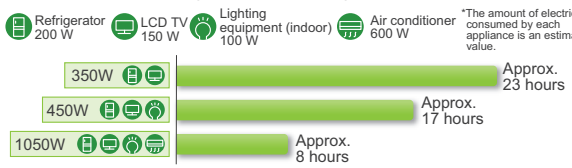
グリーンファースト ハイブリッド
新エネ大賞
経済産業大臣賞

(We received 150 orders for the “Green First HYBRID” model from various parts of Japan during a six-month period up to the end of December 2011.)

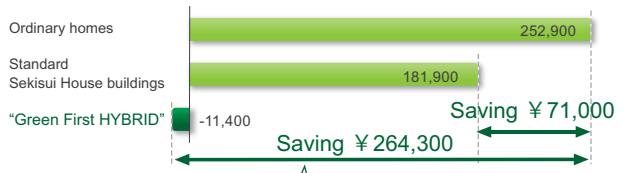
Large-capacity storage cell system (8.96 kWh)
Living without concerns with a constant supply of electricity available

The large-capacity storage cell system ensures undisrupted supply of electricity and thus allows residents to live without concerns at all times. Capable of storing 8.96 kWh of electricity, this system enables continuous use of a refrigerator for one full day even if a blackout occurs, while allowing relatively unrestricted use of TV and lighting equipment. To be specific, the system is capable of supplying electricity to a refrigerator, an LCD TV, and lighting equipment for about 17 consecutive hours.

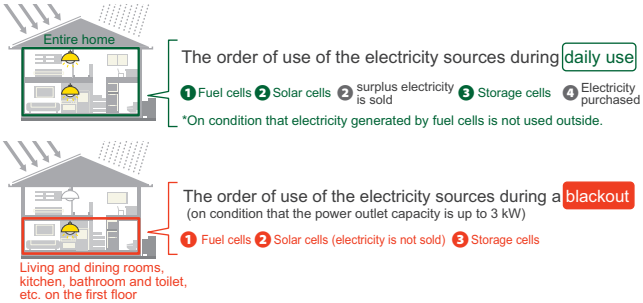
Example of electricity consumption by home electrical appliances



Utility cost savings (yen/household/year)
For a four-person household living in a house of 135 m² in an area of Tokyo



“Green First HYBRID” allows residents to sell surplus electricity so utility costs are reduced to almost zero.



From construction of smart houses to development of smart towns under the “Green First” initiative
Sekisui House has embarked on a smart town project with the development of “Smart Common City Akaishidai,” an extensive residential area designed as part of the post-earthquake reconstruction process in the suburbs of Sendai, and also in various other parts of eastern Japan and Kyushu.

The smart town concept of Sekisui House is to deliver solutions to energy problems and facilitate the process toward achieving a sustainable and thriving society.

Today, Japanese housing manufacturers are required to carefully use finite energy resources, not only in individual homebuilding but also in the development of residential communities. In doing so, we must strive to create a sustainable society with a disaster-resistant, eco-friendly and comfortable living environment.

At Sekisui House, we embarked on the Smart Common City community development project in 2011 to further promote our smart town concept. Characteristically, this project places special emphasis on the viewpoints of residents to bring them maximum benefits. In carrying out the project, we are striving to create disaster-resistant, thriving communities where all the residents are satisfied with the living environment in terms of “safety and security,” “energy availability,” “mutual aid,” and “health and comfort.” To be specific, the Smart Common City developed by Sekisui House is basically comprised of our “Green First HYBRID” smart houses, each furnished with the “SHEQAS” seismic vibration absorption system that is accredited by the Minister of Land, Infrastructure, Transport and Tourism and the “Airkis” high-quality indoor air system. In creating the Smart Common City, we also take advantage of our extensive experience in homebuilding and community development, in which we introduce various attractive programs to strengthen neighborhood bonds, facilitate interactions among residents, and encourage community-wide disaster-prepared efforts. Needless to say, we will strive to achieve higher environmental performance, by enhancing the ability of the Smart Common City communities to generate electricity for local consumption and supply surplus electricity to neighboring communities, thereby contributing to a reduction in electricity consumption during peak hours, and reducing CO_2 emissions largely to lessen environmental impacts. We are committed to creating communities in which residents will feel increasingly attached to over generations, and that function as social capital and bring the joy of “SLOW & SMART” living to residents.

①Smart Common City Akaishidai with 431 houses—the first step in the post-earthquake reconstruction process in the Tohoku region

Smart Common City Akaishidai is an extensive residential area with 431 houses, which is under development in Tomiya-machi in the suburbs of Sendai City in Miyagi Prefecture. This is the first large-scale post-earthquake reconstruction project for Miyagi Prefecture, and draws much attention as the first step in the reconstruction process of the Tohoku region. In this area, a total of 431 houses will be built, all of which are furnished with a photovoltaic power generation system. Around 20% of them will be the advanced “Green First HYBRID” smart houses, each equipped with fuel cells and storage cells in addition to a photovoltaic power generation system. We are developing this community based on five principles; namely, “a disaster-resistant and crime-free community,” “environmental friendliness and the use of natural energy,” “attractive landscape that constitutes a valuable part of the community,” “positive neighborhood relationships,” and “health, welfare, and safety.” Our Smart Common City Akaishidai development project was selected as one of the “3rd leading projects that contribute to reducing CO_2 emissions from housing and architecture” for FY 2011, under the program of the Ministry of Land, Infrastructure, Transport and Tourism to support leading projects expected to achieve outstanding results in reduction of CO_2 emissions.

*Development area: 399,000 m²
Total no. of subdivisions: 764
(of which Sekisui House owns 431)
Sales of subdivisions began in December 2011

Mr. Yoshihiro Murai, Governor of Miyagi Prefecture (center) was present at the groundbreaking ceremony of the Akaishidai East District Development Project.
(President Toshinori Abe on the left)

Master plan of Akaishidai Community development

The “Green First HYBRID” district is uniquely provided with cul-de-sacs to prevent through traffic.

③ "CO_2 Zero District," a smart city developed under an industry-government-university joint project in Fukuoka Island City

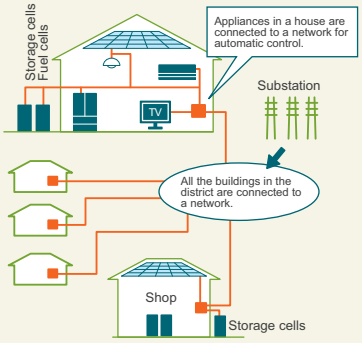
Currently, private-public efforts are underway to develop Fukuoka Island City, a model city of the 21st century, where Sekisui House is engaged in a project to create "CO_2 Zero District" with 178 smart houses jointly with the Kyushu Association of Housing and Construction Industries. This is an industry-government-university project, conducted with the support of Fukuoka Municipal Government, Kyushu University and Saibugas Co., Ltd., and selected as one of the leading projects that contribute to reducing CO_2 emissions by the Ministry of Land, Infrastructure, Transport and Tourism. All the houses in this district will be furnished with a large-capacity photovoltaic power generation system and more than 70% of them will be equipped with both solar cells and fuel cells for power generation. Some of these houses are also built with "Green First HYBRID" features, including storage cells.

*Scheduled development area: 59,300 m²
Total no. of houses: 178
This district will be opened in autumn 2012.

④ Smart district (provided with a next-generation power distribution grid) in Saitama Prefecture. Sekisui House, through private-public partnership, participates in the smart district promotion project.

We are engaged in the "Koshigaya Lake Town Smart House Model District" development project jointly with Koshigaya Municipal Government of Saitama Prefecture, and built a "Green First HYBRID" model house furnished with a photovoltaic power generation system, fuel cells and storage cells as well as a HEMS. From this model house, and together with other model houses and commercial facilities, we will promote the use of microgrids and other advanced smart house technologies.

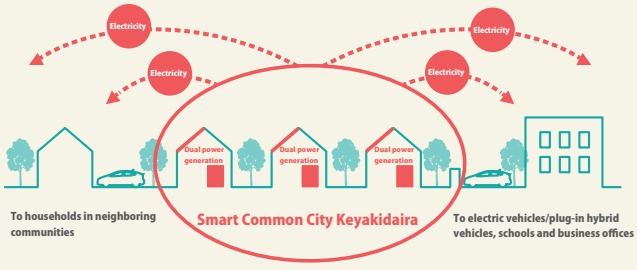
■Conceptual diagram of a smart house model district



② "Smart Common Stage Keyakidaira" where all of the 67 Sekisui House homes are capable of generating electricity for 85 households with dual power generation system

Koga New Town Keyakidaira is a large residential area with 549 subdivisions, located in Koga City in Ibaraki Prefecture. In part of this area, Sekisui House is developing its Smart Common Stage project which consists of 67 smart houses, each equipped with a power generation system using both solar and fuel cells, and a power outlet to recharge an electric vehicle. Ten of them will be "Green First HYBRID" homes with more advanced smart house features including storage cells. The Smart Common Stage project is designed to serve as a "power plant" to generate electricity, not only for local consumption, but also for supply to neighboring communities, and all the 67 Sekisui House homes will be capable of generating electricity to meet the needs of 85 households per year. The Smart Common Stage will contribute to reducing the amount of power purchased from the utility provider during peak hours by supplying surplus electricity generated with solar cells to neighboring communities during the daytime in summer. In winter, it will generate electricity with fuel cells and supply surplus electricity to households during evening hours when family members are at home. At the same time, the Smart Common Stage project is capable of reducing CO_2 emissions by 218 tons annually (equivalent to the amount of CO_2 absorbed by 15,600 50-year-old cedar trees), thus contributing to global warming prevention.

*Development area: 24,400 m² / Total no. of subdivisions: 67 / Sales of subdivisions began in March 2012.



Serving as a "local power plant" to supply electricity to neighboring communities during the daytime

VOICE

I expect Sekisui House to develop housing products capable of overcoming various problems that may arise during their long life.

During the long life of a house, a range of problems that are unforeseeable at the time of construction may arise, including huge disasters such as the Great East Japan Earthquake. Even global environmental problems were unknown to the public a few decades ago. To develop housing products that can overcome these potential problems, manufacturers should have, of course, technical excellence to cope with immediate circumstances, but, equally importantly, they should stick to their principles which have been enhanced by their many years of experience in homebuilding. In this light, I encourage Sekisui House to further promote the "Green First" initiative. While the smart house is attracting increasing attention nowadays, the most important thing about this concept is that the building itself is designed to consume less energy, rather than the house being equipped with solar cells and other advanced features. I believe Sekisui House can outperform their competitors in this regard.

Dr. Yoshiyuki Shimoda
Professor, Division of Sustainable Energy and Environmental Engineering
Graduate School of Engineering
Osaka University

Consideration of the health of residents

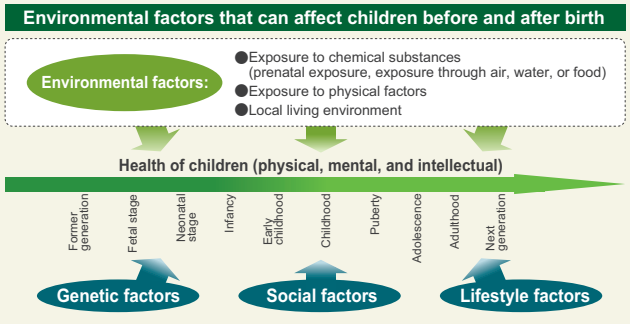
Committed to delivering “comfortable living—now and always” with our state-of-the art homebuilding technologies backed by the “lifelong housing” concept

Creating an ideal living environment that promises healthy lives for all

While the possible impacts of chemical substances on human health have long been widely recognized, the threat to the health of children, who are smaller and thus more vulnerable than adults, is attracting a higher level of interest recently. We, at Sekisui House, have continued concerted efforts to deliver “comfortable living—now and always” and create a healthy living environment free from any harmful chemical substances. Aware of the special importance of indoor air quality which can affect the health of residents, we are striving to create a healthy indoor air environment through measures to prevent sick building syndrome which is caused mainly by volatile organic compounds (VOCs).

The national government has embarked on a project to protect the health of children.

Children are smaller and thus more vulnerable to environmental impacts than adults. Sick building syndrome and sick school syndrome still remain a primary concern of society. Against this backdrop, the Japanese government has embarked on an “Eco & Child Study” project to investigate how various environmental factors can affect the health of children.



Master plan of the “National survey on health of children and environment” (Eco & Child Study) (Drawn up by the Ministry of the Environment on March 30, 2010)

Main steps taken by Sekisui House to bring a healthy living environment to customers

1994: Measures are taken to reduce formaldehyde emissions.

2003: Strict F☆☆☆☆standards (certified by JAS) are applied to all interior finishing materials.

2007: Healthy indoor air environment design is introduced as an option. Sekisui House participates in the Chemi-less Town project.

2008: Chemicare design for healthy indoor air environment wins the 2nd Kids Design Award.

2009: Sekisui House’s Chemi-less House test home becomes the first residential building that is awarded Chemi-less Certification.

2011: “Airkis” high-quality indoor air system is launched on the market.

Chemi-less House test home built for demonstrative experiment purposes

“Airkis” high-quality indoor air system developed to protect the health of children

Though not visible to the naked eye, we take in more air than any other substance, including food and water in our everyday lives. We began R&D on indoor air quality about 20 years ago when the threat of sick building syndrome became apparent, and we have since taken various measures to ensure healthier air quality. Since 2007, we have been promoting a housing design which can reduce indoor concentrations of five chemical substances that cause sick building syndrome to less than 50% of the guideline value set by the national government in order to protect children who are at a greater risk if exposed to these substances than adults.

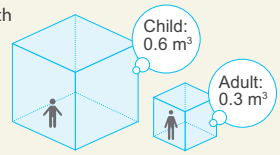
Our efforts to expand the range and reduce the cost of healthier building materials led us to the introduction of the “Airkis” high-quality indoor air system in 2011. We have since been committed to promoting the use of this new system.

Ensuring a clearer air environment for children by introducing strict guidelines that set allowable concentrations of five chemical substances at levels less than 50% of the national guidelines

Developed to protect the health of children, the “Airkis” system is designed to reduce the concentrations of five chemical substances; namely, formaldehyde, toluene, xylene, ethylbenzene and styrene, to levels less than 50% of the guideline value set by the Ministry of Health, Labour and Welfare.

A child needs about twice as much air as an adult per 1 kg of body weight.

Source: “Guidelines for Chemical Substances to Protect Health of Children,” Bureau of Social Welfare and Public Health of Tokyo Metropolitan Government



Measuring indoor chemical substance concentrations upon completion of every “Airkis” home by having the air analyzed by a third-party laboratory to assure air quality

Upon completion of an “Airkis” home, we measure concentrations of the chemical substances using a method specified by the Ministry of Health, Labour and Welfare and have the data analyzed by a public third-party laboratory. We then draw up an “Air Quality Certificate” based on the results of the analysis, and deliver the certificate to the customer along with the home.


Air being taken upon completion of a Chemicare home


Air being analyzed by a third-party laboratory


An “Air Quality Certificate” is issued.

Developing building components that meet the strict “Airkis” standards

Currently, we are in the process of developing building components that meet the strict internal standards of chemical substance concentrations, which are set at levels more than 50% lower than the guideline value of the national government, by combining “building materials that emit less chemical substances into the air,” “building materials that absorb more chemical substances” and a “ventilation system that promptly eliminates chemical substances from the indoor air.” Also, we are expanding the range of building materials we offer to customers to ensure that the “Airkis” system will be adopted in more Sekisui House homes. During 2011, we worked with our business partners to measure the concentration-reducing effects of about 300 sample components, and added 200 kinds of new building components to our lineup.

VOICE — Achievements of the Chemi-less Town Project over the past five years

The Chemi-less Town Project is an industry-academia research project conducted jointly by several companies and Chiba University to create homes and a community free from sick building syndrome. As a member of this project, Sekisui House built a test home by using the advanced homebuilding technologies they had developed internally, where we conducted sensory evaluations using the traditional five senses, and also residential experiments. The results of these experiences led to the introduction of the “Airkis” high-quality indoor air system on the market in 2011. By launching this project, we aimed to develop and promote healthier homebuilding components through close cooperation with companies, thereby preventing sick building syndrome. As a leader of this project, I am very glad that this project has brought about such a significant outcome. We will remain committed to our efforts to prevent possible diseases by means of environmental improvement.

Dr. Chisato Mori, M.D.
Director, Center for Preventive Medical Science Chiba University

Communicating the latest information on safe living to society, as well as measures to prevent sick building syndrome at home

Today, concerns are growing over the possible impacts of various chemical substances present in our living environment on the health of children. Besides exploring effective measures to prevent sick building syndrome, we are striving to bring healthier air quality to residential spaces to ensure a bright future for children.

Organizing a seminar on the prevention of sick building syndrome

In November 2011, we organized a seminar titled “What we can do for the future of children: The latest progress in sick building syndrome prevention” in Iino Hall in Chiyoda-ku, Tokyo, with the participation of about 150 people. In the seminar, Dr. Claudia S. Miller, an American researcher and authority on public health and environmental medicine, delivered a lecture. In the panel discussion that followed, a heated debate took place over the possibility of industry-government-academia partnership in reducing the impacts of chemical substances on our living environment among panelists, including a representative of the R&D department of Sekisui House.

Cooperating with the Eco & Child Study to protect the health of future generations

In 2011, the Japanese Ministry of the Environment embarked on a “National survey on the health of children and the environment” (Eco & Child Study). As a housing manufacturer that has long been addressing the issue of sick building syndrome, we agreed with the purpose of this project, and have undertaken the PR activities for the project as its corporate supporter. To be specific, we engage in publicity activities in our offices and model homes throughout Japan to increase public recognition and deepen understanding of this project, while posting our messages to encourage the project and show its logo on our website and in-house magazine. Through these activities, we are striving to create an ideal living environment for the healthy growth of children.

Eco & Child Study

This is Japan’s first large-scale survey to explore how exposure to chemical substances and other environmental factors from fetal stage to childhood can affect the growth and development of children. This project aims to identify environmental factors that can impact the health and growth of children through periodical monitoring of the health conditions of children from fetal stage until the age of thirteen.

Japan Eco&Child Study
こども・健康・環境

Our “Airkis” system is an improved version of the Chemicare design for a healthy indoor air environment. By developing new building materials with less emissions of chemical substances that can cause sick building syndrome and introducing uniform specifications to reduce costs, the “Airkis” system is offered as a highly attractive option for customers. The name “Airkis” is a combination of “air” and “kiss,” which represents our conviction that choosing the air for residential settings should become as common a practice as choosing food and water. Today, the “Airkis” system is employed in a growing number of Sekisui House homes, and its use is steadily expanding. Currently, the “Airkis” system is mostly applied to steel-frame detached houses, but we will introduce this system in other types of houses, and continue our R&D efforts to bring healthier air quality to our customers, building on the insights gained through the Chemi-less Town Project.

*Chemi-less, Chemi-less House, and Chemi-less Town are registered trademarks of an NPO, the Center of Environmental Health Science for Future Generations.

Central Park Project (Artist's rendering)

Developing overseas business

Committed to creating sustainable homes and communities in a manner that harmonizes with the local climate and culture, using our state-of-the-art resource recycling, and energy producing and saving technologies

We are promoting homebuilding and community development projects globally, taking advantage of our high-quality industrialized housing and advanced environmental technologies. We work in close cooperation with our partners in respective countries, including governmental agencies, developers and builders who agree with and think highly of our commitment to creating an ideal living environment with our advanced resource recycling and energy producing and saving technologies. We have already embarked on projects in Australia, Singapore, the U.S. and China, and begun supplying our housing products to these markets.

Australia

Participating in a new initiative, the "Central Park Project" designed to develop an eco-friendly community capable of producing energy for local consumption

In Australia, we have been engaged in community development projects underway in Wentworth Point, Camden Hills, Ripley Valley, Coolum, and Serrata. In parallel with these projects, we took part in another project in 2011, which is carried out in Central Park in the center of Sydney. Launched in 2007, the Central Park Project aims to develop a community with an area of 58,000 m^2 over a period of seven years, for which Jean Nouvel and Norman Foster, two world-famous architects from France and the U.K. respectively, undertake the design work. Upon completion, this community will accommodate residential, office and commercial complex facilities with a total floor area of 213,500 m^2.

This project is not about simply constructing new buildings: we place equal emphasis on conserving the local environment and historical heritage by preserving some of the existing buildings to make this community more attractive and valuable. For example, the old beer factory in the development site, which constitutes a traditional streetscape of this area, will be reused in part as commercial facilities.

In Australia, an environmental rating system for buildings called the Green Star Program is implemented by the Green Building Council. We are going to take drastic measures to reduce greenhouse gas emissions in the development site and introduce photovoltaic power generation systems in public areas so that our Central Park Project will be awarded the top six-star rating under this system. In addition, this community will be furnished with green walls, wastewater recycling facilities and a trigeneration system (an energy supply system that puts CO_2 as well as heat and electricity to effective use), to minimize local consumption of water and share surplus water and electricity with neighboring facilities. In this way, this development project aims to create a community capable of producing energy for local consumption with the latest innovations.

Punggol Watertown (Artist's rendering)

Singapore

Creating a more attractive and comfortable living environment through our dedication to bringing additional value focusing on the benefits for residents

In Singapore, we are working jointly with local developers in the Boathouse Residences project to develop a suburban residential area, the Punggol Watertown project to build residential facilities directly accessible from a subway station, and the Hillsta project to create a waterfront community in a green environment.

In carrying out these projects, we introduce the concepts of "Japanese-style" and "Sekisui House-style" community development to bring additional value to the conventional living environment, while respecting Singapore's own residential culture and community design. With our community development philosophy and proven homebuilding know-how, we hope to contribute to the creation of extremely pleasant communities where residents can have more satisfying lives.

We work in close cooperation with local joint venture business partners to bring new living environments to our customers in Singapore, leveraging our experience in the "Gohon no ki" and other landscaping and environmental projects and our environmental policy. Throughout our history, we have developed and upgraded various innovations to meet customers' needs for living space in a manner most satisfactory to them. Our mission is to introduce these innovations in the markets we serve, and we are doing our utmost to fulfill this mission in the ongoing projects. In doing so, we will continue to promote our style of homebuilding and community development in Singapore, placing the highest priority on the benefits of residents.

Hillsta (Artist's rendering)

Cinco Ranch in Texas (Artist's rendering)

One Loudoun near Washington, D.C. (Artist's rendering)

United States of America

Implementing projects to induce a shift in ideas about the living environment by placing greater emphasis on natural elements

As a community developer, we participated in several development projects in Texas, Florida and North Carolina in December 2011, in addition to earlier projects conducted in Virginia, Texas, and Washington. Before our participation, our business partners were involved in many of these community development projects, under which parks and trails are created in a manner that harmonizes with the surrounding natural environment to provide ideal venues for local residents to enjoy interactions with nature in their everyday lives (e.g. by going trekking, organizing road races and other outdoor events.)

While engaging in these ongoing community develop projects, we will work with our business partners to further enhance the environmental measures and know-how we have developed so far, and combine them with existing know-how available in the U.S. In doing so, we hope to strongly and clearly communicate our view of our commitment to the environment to our customers in the U.S.

Sekisui House is the first to start production using a Japanese industrialized housing system in China.

China

Participating as a core member in China's national project that aims at achieving "lower carbon emissions" and "sustainable development"

Shenyang City is currently carrying out a national project to develop a "Modern Construction Industrial Park" as a national center for production of prefabricated houses, building materials, and housing equipment, with focus placed on "low carbon emissions," "sustainable development," "environmental preservation," and "greening." We agreed with the purpose of this project and participated in the project in April 2011 as a core member. To cater to the growing demand of Chinese customers for next-generation energy-saving and high-quality housing products, we constructed a factory to produce steel-framed houses within the park, leveraging our experience of having supplied high-performance eco-friendly prefabricated houses designed to ensure healthy lives in the Japanese market. We are the first Japanese housing manufacturer to open a full-fledged prefabricated housing system factory in China.

The main part of the factory is roughly divided into three sections—one is allocated to factory workers, another is for companies that opened business bases in Shenyang with us, and the other is for welcoming guests, as this factory is visited by many people.

While each section is independent from the other, the factory as a whole is designed to offer an ideal work environment, and also furnished with facilities that can be shared by all.

For example, the welfare building and garden are open to all, allowing people to spend time together and enjoy friendly interactions. In this way, we ensure sustainable operation of the factory. The welfare building is equipped with our original exterior walls, which can withstand the extremely harsh weather of Shenyang during the winter season when temperature falls below -20° C and which are hardly affected by degradation through aging.

As part of our energy-saving efforts, we adopted downlights and fluorescent lights for indoor lighting as well as LED light in spaces where long-time lighting is required, while installing motion sensor-activated lighting and faucet systems. In the entire factory site, we planted local tree species under our "Gohon no ki" landscaping concept to preserve the local ecosystem and create a pleasant green environment that will grow more attractive over time.

Building an exhibition house and a resource recycling center to strengthen environmental measures

In the steel factory on the premises, the assembly of structural frames is carried out automatically. Here, advanced robots handle the processes following the input of raw materials, from drilling, cutting, and welding, to completion of finished products. Through this system, we can constantly deliver the highest quality products to Chinese customers, unaffected by differences in abilities and skills among individual workers.

On April 15, 2012, the completion ceremony of the Shenyang factory was conducted, and the factory has since been in full-fledged operation to produce and supply steel-frame components for prefabricated houses, which we will promote in the Chinese market, as well as our original exterior walls, interior finishing materials and housing equipment for condominiums and townhouses.

In the garden of the factory, we are currently building an exhibition house, which is designed after the Large-scale Experience-based Facilities we have in several locations in Japan. This will serve as a flagship model for the Chinese market. Equipped with state-of-the-art housing technologies from Japan, such as our roof tile photovoltaic power generation system, LED lighting, and HEMS, this model offers visitors hands-on opportunities to learn about the environmentally friendly housing features we will bring to Chinese customers.

A resource recycling center is also under construction on the premises of the factory. Both the "Modern Construction Industrial Park" concept and China's national policy place special importance on creating a national economic system that contributes to resource recycling in three sectors – production, consumption and urbanization. The resource recycling center will expand the scope of operation in step with an increase in shipments from the factory, starting from resource conservation in the production and logistics processes and back-office operation and eventually embarking on recovery and sorting of byproducts from construction sites and production of recycled products.

We are convinced that the quality of a prefabricated house is largely determined by the ability of workers to achieve accuracy in construction. With this conviction, and adhering to our long-held philosophy that human resource development is at the core of manufacturing, we opened a school on the premises of the factory to train Chinese construction technicians.

Production is undertaken by high-performance robots.

Mr. Wang Min, Party Secretary of Liaoning Province (second person from left), Mr. Zeng Wei, Party Secretary of Shenyang (far right), Mr. Chen Haibo, Mayor of Shenyang (far left) and Mr. Isami Wada, Chairman of Sekisui House, press the buttons to start the operation of the factory.

Offering a living space with reduced exposure to chemical substances, providing buildings with rooftop greening, and creating a landscape that harmonizes with the surrounding environment

We are carrying out several housing development projects in China, and one of these projects is the condominium development in Taicang City. Taicang City is located about 50 km northwest of the center of Shanghai, and about 50 km from the center of Suzhou City. This is one of the nearest cities to downtown Shanghai. In the eastern part of Taicang City, we will start the construction of condominiums with 511 residential units in a 78,746 m^2 lot in July 2012. In this city, urbanization has been spreading eastwards, and our development site is right at the center of the urbanized area.

This project is meant to develop an attractive residential area from the perspective of residents based on our homebuilding principles of "safety, security, health and comfort," while taking into consideration the traditional culture and lifestyles of Chinese people. We will create functional and pleasant residential units by employing building materials that emit less chemical substances, providing ample storage space, and developing floor plans that are functional and efficient and that facilitate housework.

In our efforts to develop an eco-friendly future-oriented community, we will provide rooftop gardens to some public facilities and condominiums to create an attractive green landscape. In doing so, we aim not only to deliver a pleasant living environment to residents, but also to promote green landscaping in the neighboring area as well. The residential buildings, each designed to have good south-north ventilation, are arranged in gentle curves to symbolize flows of wind and water, which gives a dynamic impression to the landscape. Upon completion, these buildings will serve as a landmark of this area, with their environmental friendliness and excellent visibility even from a distance.

Condominium complex in Taicang City (Artist's rendering)