Promoting net-zero-energy housing

Contribute to creating more healthy life years for customers and to the environment by realizing high-quality living not constrained by energy problems

Backdrop

Japanese Government Targeting Implementation of ZEH as the Standard for Newly Built Housing by 2020

CO₂ emissions must be reduced to control global warming. At COP21 (the Framework Convention on Climate Change, 21st Session of the Conference of the Parties to the United Nations) held in Paris in 2015, Japan made a public commitment to reducing greenhouse gas emissions 26% by 2030 compared to 2013 levels. To achieve this, we must achieve a substantial 39.3% reduction in the residential sector.

To reduce CO₂ emissions resulting from home use of electricity and gas, the Japanese government is promoting the spread of net-zero-energy housing (ZEH) enabling zero net energy consumption through the utilization of high heat-insulating capabilities and energy-saving devices, as well as photovoltaic systems and fuel cells. The government is targeting having the majority of new housing produced by housing manufacturers built as ZEH by 2020.

Sekisui House’s responsibility as a housing manufacturer is to contribute to the resolution of important social issues including energy and environmental problems while promoting sustainable business.

In 2008, we announced our 2050 Vision, which targets zero CO₂ emissions over the entire housing product lifecycle. At the COP21 conference in 2015, we announced our commitment to the Paris Agreement.

We aim to increase comfort and affordability of our housing while significantly reducing energy consumption and contributing to the achievement of national objectives for the reduction of greenhouse gas emissions. We aim to achieve the COP21 residential sector commitments in both the construction of new homes and the renovation of existing homes.

Sekisui House has also acknowledged SDGs numbers seven (affordable and clean energy), 11 (sustainable cities and communities) and 13 (climate action) as issues for the Company and will proceed with proper initiatives.

Approach

Our Goal

Promoting the Green First Strategy Focused on Environmental Friendliness, Comfort and Economy
Aim for Zero CO₂ Emissions throughout the Entire Housing Product Lifecycle

Since 2009, we have been focusing on promoting the spread of eco-friendly Green First homes, which significantly reduce impacts on the environment. In 2013, in anticipation of government plans to standardize ZEH by 2020, we launched sales of an upgraded version, Green First ZERO housing. Green First ZERO housing offers a high level of comfort, affordability, and eco-friendliness, by substantially limiting the amount of energy consumption with high insulation and highly efficient energy-saving equipment, while also creating more energy than is consumed with high-capacity photovoltaic systems and Ene-Farm fuel cells.

We are continuing to push forward with initiatives to reach our goal of zero CO₂ emissions throughout the housing product lifecycle by 2050.

Action Policies

1. Expanding Net-Zero-Energy Housing

We will develop aggressive proposal activities aimed at increasing the ratio of Green First ZERO sales to 80% by 2020. We will also promote ZEH in rental housing Sha Maison and condominiums. Furthermore, we will aim to meet the COP21 residential sector commitment including for our existing housing.

| Increase ratio of Green First ZERO newly built detached housing to 80% by 2020 |
| Reduce CO₂ emissions from newly built homes and existing low-rise rental apartments by 39.3% by 2030 (compared to 2013) |

Impact of These Activities on the Company

ZEH housing significantly reduces CO₂ emissions and utility expenses, while supporting more comfortable living and increasing healthy life years of homeowners. We emphasize these merits to customers in an attempt to expand sales of homes with high added value.

In addition, actively promoting the remodeling and renovation of existing homes to be energy saving and energy creating is expected to expand business by stimulating potential demand as well as contribute to our inventory of quality housing.

Risk Management

1. Increased costs in line with making homes compliant with national ZEH standards

Our detached homes meet high standard specifications, so upgrading them to ZEH can be achieved at comparatively little extra cost. Furthermore, as a major housing manufacturer, we control costs though central purchasing, which reduces the cost burden for the buyer. Additionally, with ZEH specifications, utility expenses are significantly lower, thus the increase in costs can be recovered after a certain amount of time.

2. Declining demand due to decreases in subsidies or power purchase prices

We will explain the economic merits of Green First ZERO homes by presenting simulations that, after considering lifestyles, reflect the effects of installing photovoltaic systems and high-efficiency water heaters. Additionally, we will convey how well-insulated and highly energy efficient homes lead to healthy and comfortable living and extended healthy life expectancy. By understanding the value of these residences, we will continue to offer homes that merit high customer satisfaction.
State of Progress

Expanding Net-Zero-Energy Housing

Activities Report

Promoting the Spread of Green First ZERO

Sekisui House is working to stimulate the spread of Green First ZERO homes, which are net-zero energy housing (ZEH). We are conveying the merits of these homes by guiding customers planning to build new residences to our model homes or to our Sumai no yume kojo learning center through which they can learn how largely reducing utility expenses can help them achieve levels of comfort they have not yet experienced. We also hold regular seminars aimed at general customers.

After we actively made proposals to customers regarding the use of subsidies for our net-zero energy house support project in 2017, the ZEH ratio for our detached homes grew to 76% (up two points year on year).

ZEH Report at the COP23 Conference

Sekisui House participated in sessions on SDG11 Day and on the following day at the Japan pavilion at the COP23 (23rd Conference of the Parties to the United Nations Framework Convention on Climate Change) held in Bonn, Germany in November 2017. We reported that we were the first company in Japan to make a decarbonation proclamation aimed at eliminating CO2 emissions in home lifecycles. The Company also announced that we are putting initiatives toward achieving that goal in practice and that the ratio of our newly built homes that qualify as ZEH Green First ZERO homes has exceeded 70%.

Our Green First ZERO homes were praised in the Grand Prize category at the 2017 Green Solutions Awards* and were ranked second place worldwide. These awards were held in concert with the COP23 and Sekisui House was the first Japanese company to receive this award.

Establishment of Rental Housing with all Dwelling Units Meeting ZEH Standards in Kanazawa

Since roof space is small relative to the number of dwelling units inside, the number of solar panels that can be installed in collective housing is not sufficient to power each dwelling unit, making compliance with government ZEH standards difficult. Sekisui House installed energy saving equipment such as insulated glazing, high-efficiency air conditioning, water heaters with high-efficiency heat pumps, hot water saving faucets and LED lights into all 13 dwelling units in its Kanazawa rental housing facility built in 2017. The necessary solar panel energy output for each unit is, on average, 2.4 kW. We are making full compliance with net zero energy policies* possible, even in Kanazawa, where solar radiation quantities are low.

* We satisfy all conditions for ZEH stipulated in the ZEH Roadmap Investigative Commission Report (Agency for Natural Resources and Energy, December 2015)

* The 2017 Green Solutions Awards are operated by Construction 21 (executive office in France), who receives support from the Global Alliance for Building and Construction. The awards are a system for globally honoring and recognizing climate control initiatives.
Aim for an 80% Ratio of Green First ZERO Homes

Ever since sales commenced, Green First ZERO Homes have been receiving customer support and praise while delivering positive results. When sales commenced in 2013, Green First ZERO Homes composed 49% of our detached homes. That number has been increasing yearly and as of 2017, has reached 76%. We have established a ratio of 80% as a target to achieve by 2020 and are proceeding with relevant initiatives.

As the graph on the right shows, we are receiving highly positive customer feedback, receiving both living comfort satisfaction rates and overall satisfaction rates of over 90%*.

With the support of our customers’ firm trust, we aim to further expand our Green First ZERO home numbers and continue to contribute to global warming prevention.

*Satisfaction Rate of Green First ZERO Residents

<table>
<thead>
<tr>
<th>Satisfaction with housing comfort (comfort evaluation)</th>
<th>Overall satisfaction (evaluation includes utilities expenses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not satisfied: 0.8%</td>
<td>Not satisfied: 1.4%</td>
</tr>
<tr>
<td>Highly satisfied: 49.2%</td>
<td>Highly satisfied: 48.2%</td>
</tr>
<tr>
<td>Neither: 2.0%</td>
<td>Neither: 2.7%</td>
</tr>
<tr>
<td>Highly satisfied + satisfied: 97.2%</td>
<td>Highly satisfied + satisfied: 95.9%</td>
</tr>
</tbody>
</table>

Note: Survey questionnaire taken one year after move-in (March 2015; N = 516)

Key Performance Indicators (KPIs)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>FY2013</th>
<th>FY2014</th>
<th>FY2015</th>
<th>FY2016</th>
<th>FY2017</th>
<th>Definition and remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green First ZERO</td>
<td>%</td>
<td>49</td>
<td>62</td>
<td>71</td>
<td>74</td>
<td>76</td>
<td>Ratio within Sekisui House detached housing (excluding Hokkaido)</td>
</tr>
<tr>
<td>Amount of CO2 reduction compared to 1990</td>
<td>Tons of CO2/year</td>
<td>50,256</td>
<td>43,015</td>
<td>41,599</td>
<td>41,877</td>
<td>41,681</td>
<td>Reduction of residential CO2 emissions from new detached homes compared to 1990 levels (amount and %)</td>
</tr>
<tr>
<td>Rate of CO2 reduction compared to 1990</td>
<td>%</td>
<td>61.5</td>
<td>73.4</td>
<td>75.5</td>
<td>80.1</td>
<td>83.6</td>
<td><strong>Reduction rate (result)</strong></td>
</tr>
</tbody>
</table>

The initiative was praised as a new business model that provides electricity from Japan’s first microgrid and utilizes both structural and non-structural measures to give balanced consideration to environmental, economic and disaster prevention issues.
Promoting Long and Healthy Living Initiatives via Green First Renovation of Existing Homes

Three Sekisui House Remodeling companies are focusing on various initiatives such as our Green First Renovation initiative for customers of our detached housing. We are promoting Green First Renovation, which involves proposing ZEH features and living spaces, as well as remodeling to save and create energy. The Company is also working to reduce CO2 emissions while offering a comfortable lifestyle and an increase in healthy life years. Additionally, the Company is proceeding with floor, wall, ceiling and window innovations that improve insulation through measures such as internal wall heat covers and the RePlus SH sash cover construction method.

Activities Report

Promoting Long and Healthy Living Initiatives via Green First Renovation of Existing Homes

In 2017, our ratio of Green First ZERO homes reached 76%, exceeding our target value of 73%, and that number is steadily proceeding toward our goal of 80% by 2020. The yearly CO2 emission reduction rate per building in 2017 reached 83.6% (up 3.5 points year on year) indicating further progress on home CO2 emission reduction during occupancy stages.

In 2017, our ratio of Green First ZERO homes reached 76%, exceeding our target value of 73%, and that number is steadily proceeding toward our goal of 80% by 2020. The yearly CO2 emission reduction rate per building in 2017 reached 83.6% (up 3.5 points year on year) indicating further progress on home CO2 emission reduction during occupancy stages.

Evaluation

In 2017, our ratio of Green First ZERO homes reached 76%, exceeding our target value of 73%, and that number is steadily proceeding toward our goal of 80% by 2020. The yearly CO2 emission reduction rate per building in 2017 reached 83.6% (up 3.5 points year on year) indicating further progress on home CO2 emission reduction during occupancy stages.

Future Initiatives

Sekisui House will strive to expand the sales ratio of Green First ZERO, detached homes offering comfort, economy, and eco-friendliness, to 80% by FY2020. Furthermore, while aiming to implement ZEH in Sha Maison low-rise rental housing and Grande Maison condominiums, we will proceed with energy-saving and energy-creating renovation initiatives for our existing homes.

2 Strengthen Energy-Saving and Energy-Creating Proposals for Remodeling and Renovation

Energy-Saving and Energy-Creating Remodeling Overview

Renovating Door and Window Insulation

We remodel leaving the existing aluminum sash frame when replacing doors and windows with high-performance thermal barrier and insulation products.

RePlus SH:
High-performance window sashes and windows installed using a construction method of covering the existing window frame from above offer improved insulation.

Ceiling Heat Cover

We improve insulation capabilities by adding suitable insulation materials to the ceiling. It helps keep the house warmer in the winter and cooler in the summer, improving comfort.

Internal Wall Heat Cover: New Proposal

Leaving the existing wall intact, we cover it with a high-performance internal wall insulation panel. As the panel is thin, it does not make the room feel smaller.

Underfloor Heat Cover

Renovation without removing the floor reduces the impact on daily life and the cost burden. The insulation makes the floor warmer, increases comfort.

Evaluation

We have prepared a remodeling menu of high-performance CO2 reduction and insulation for floors, walls, ceilings and doors and windows. We have added higher-performance window insulation products to our lineup, and customers are praising our initiatives as helping them save energy while living comfortably and healthily. Installations of our photovoltaic power system declined in part due to the fall in power purchase prices, but installations increased for Ene-Farm fuel cells, part of energy-creation remodeling that includes hybrid power generation.

Future Initiatives

We will continue to strive to promote Green First Renovation to contribute to the reduction of CO2 emissions from our existing housing. Energy-saving and -generating remodeling, including improved insulation and installation of high-efficiency equipment, is linked to an increase in residents’ healthy life years. We will strengthen proposal activities based on the concept of “sukoyaka remodeling” through hands-on centers such as Sumai no yume kojo nationwide.
Announced Commitment to 100% Renewable Use and Became First in Japanese Construction Industry to Join the RE100

In October 2017, Sekisui House became the first company in the Japanese construction industry to join the RE100 initiative, which aims to supply electricity used for business activities with 100% renewable energy. As an interim goal, we aim to cover 50% of our electricity with renewable energy by 2030 and 100% by 2040.

Until now, the Company had been supplying and marketing 650 MW photovoltaic systems. On the one hand, we consumed 120 GWh of electricity through our business activities in 2016. On the other hand, the FIT system, in which electric power providers purchase surplus electricity produced by photovoltaic systems, will begin to end starting in 2019, so Sekisui House will create additional benefits for customers by purchasing their surplus electricity for use in our business activities.

Certified by STB Initiative

In April 2018, the Science Based Targets (SBT) Initiative certified Sekisui House’s greenhouse gas reduction goal levels as scientifically sound in terms of compliance with the Paris Agreement’s two degrees Celsius limit, which made us the first Japanese housing manufacturer to receive this distinction. We have set ambitious goals to reduce the amount of energy consumed through the use of our detached housing and rental housing products and to reduce their CO2 emissions (scope 3, category 11) resulting from electricity both by 45%, compared with 2013 figures, by 2030. Additionally, we aim to reduce our own figures for CO2 emissions produced through energy and electricity consumption (scope 1 and scope 2) by 35%, compared to 2013 figures, by 2030.

Key Performance Indicators (KPIs)

<table>
<thead>
<tr>
<th>Energy-Saving and Energy-Creation Remodeling Achievements*</th>
<th>FY2017 achievements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photovoltaic power system installations</td>
<td>567 units</td>
</tr>
<tr>
<td>Energy-efficient bath fixtures</td>
<td>3,711 units</td>
</tr>
<tr>
<td>Door and window insulation reform</td>
<td>2,814 units</td>
</tr>
<tr>
<td>Ene-Farm (residential fuel cells)</td>
<td>535 units</td>
</tr>
<tr>
<td>Eco-Jozu (latent heat recovery gas water heater system)</td>
<td>3,031 units</td>
</tr>
<tr>
<td>Eco-Cute (heat pump water system)</td>
<td>1,120 units</td>
</tr>
<tr>
<td>Underfloor heat cover</td>
<td>975 units</td>
</tr>
</tbody>
</table>

| CO2 Reductions due to Energy-Saving and Energy-Creation Remodeling* (tons of CO2/year) |
|-----------------------------------------------|-------------------|
| FY2013 | 2014 | 2015 | 2016 | 2017 |
| 7,720  | 6,657 | 5,024 | 5,465 | 4,703 |

Promoting CO2 Reductions throughout the Home Lifecycle

Sekisui House ascertains CO2 emission levels not only when a resident moves in, but throughout the home lifecycle, from the purchase of building materials to factory production, transportation, construction and demolition. We continually engage in activities linked to CO2 reduction proposals and implementation.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>FY2013</th>
<th>FY2014</th>
<th>FY2015</th>
<th>FY2016</th>
<th>FY2017*2</th>
<th>Definition and remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total energy input*1</td>
<td>TJ</td>
<td>3,542</td>
<td>3,039</td>
<td>3,061</td>
<td>2,985</td>
<td>2,903 (2,893)</td>
<td>Amount of energy input at the various stages of development and design, factory production, transportation, construction and demolition</td>
</tr>
<tr>
<td>CO2 emitted during development, design, factory production, construction and demolition*1</td>
<td>t-CO2</td>
<td>148,329</td>
<td>126,209</td>
<td>130,482</td>
<td>126,337</td>
<td>140,425 (122,058)</td>
<td>Amount of CO2 emitted at these stages per fiscal year</td>
</tr>
<tr>
<td>CO2 emitted during transportation*2</td>
<td>t-CO2</td>
<td>45,815</td>
<td>37,749</td>
<td>36,499</td>
<td>35,828</td>
<td>34,399 (35,802)</td>
<td>Amount of CO2 emitted at these stages per fiscal year</td>
</tr>
</tbody>
</table>

*1 Starting in FY2015, energy input from Sekisui House’s main overseas subsidiaries was added to the total energy input.
*2 2017 totals were calculated using unitary heat generation and emissions factors based on the Act on Promotion of Global Warming Countermeasures. Figures in parentheses were calculated using the previous calculation method. (For more details, see page 69)
Preserving biodiversity

Protect ecosystem networks through use of sustainable natural resources that considers impacts of business

Backdrop

Importance of Biodiversity Preservation Activities in Supporting All Lifestyles and Business Activities

Biodiversity, as an ecosystem service, provides us with our daily necessities and has a strong connection with the business activities of companies that are conscious of social issues, such as the procurement of raw materials. The SDGs have reaffirmed this viewpoint. A TEEB* investigation has also pointed out that SDGs 14 (Life Below Water), 15 (Life on Land), six (Clean Water and Sanitation) and 13 (Climate Action) all support Earth’s biosphere, which in turn allows our society to exist, which again in turn supports our daily economic activities. Sekisui House also recognizes the following two points.

1. Deterioration of the Urban Ecosystem

In recent years, as green space shrinks due to urbanization, effective planting will not only lead to ecosystem preservation, it will support our lifestyles in a variety of other ways, such as creating spaces for relaxation, revitalizing regions and reducing water damage by storing rain water. Every year, many trees are planted when new living spaces are created. However, cultivated and non-native trees don’t only include trees that have a high possibility of being utilized by local birds and insects, they also include trees that are not well-suited for Japan’s climate and natural features and have low resistance to pests. It is necessary to carefully consider compatibility when selecting plant species in order to protect regional ecosystems.

2. Importance of Traceability in Procurement

Lumber is an important material that supports our living spaces and Sekisui House uses 300,000 cubic meters of lumber each year. However, functional degradation of environmental preservation due to practices such as illegal logging threatens to disrupt our livelihoods, distort the lumber market and present obstacles to sustainable forest management. Additionally, due to complicated distribution channels, securing lumber traceability has become an extremely important issue. Japan’s Act on Promoting the Distribution and Use of Legally Harvested Wood (Green Wood Law) isn’t the only initiative aimed at securing appropriate lumber procurement; such initiatives have been spreading throughout the world.

Approach

Our Goal

Based on Long-Term Scenarios, Promote the Preservation of Biodiversity by Working with Our Supply Chain

Sekisui House, Japan’s largest manufacturer and supplier of prefabricated housing, is also one of Japan’s largest landscape gardeners, planting nearly one million trees each year. From this standpoint, we have set a 2050 goal of maximizing ecosystem networks through business, which involves focusing efforts on planting that contributes to the preservation of local ecosystems and sustainable lumber procurement linked to the protection of global biodiversity.

It takes time for natural capital and ecosystem to mature or recover. In addition, these initiatives cannot be completed by one company alone. Based on long-term scenarios, we will work with our suppliers to provide customers with rich and comfortable lifestyles while contributing to preserving the environment and creating a sustainable society.

* TEEB is a project conducted with cooperation from the UN Environmental Program and the European Commission that aims to make the economic value of ecosystems and biodiversity more visible.
Since 2001, Sekisui House has promoted gardening and landscaping activities known as the *Gohon no ki* (five trees) planning. Under the slogan “Select five native species... Three for the birds, two for the butterflies,” this project involves the proactive proposal of indigenous species able to provide a high level of support for local creatures in consideration of the ecosystem as opposed to the frequent and exclusive use of garden or non-native species.

In terms of project implementation, we collaborate with a network of local tree growers and landscapers to ensure the provision of indigenous species where traditionally there have been few available on the market. We will propose to consumers the richness of life in harmony with living creatures and the significance of environmental conservation.

**Promoting the Planting of Indigenous Species in Consideration of Regional Ecosystems through the *Gohon no ki* planning**

Sekisui House procures FairWood* lumber and wood products that are friendly to local communities and the forest environment in logging areas to enable the use of sustainable lumber. FairWood procurement is legal and based on 10 Wood Procurement Guidelines established with even greater consideration of ecosystems and resident lifestyles in logging areas. Each year, procurement surveys are conducted targeting approximately 50 suppliers of wood materials to ascertain where their timber is felled and milled and to confirm its legality. This information is then converted into numerical data used to manage ongoing progress in this area. These initiatives attempt to expand the use of FairWood by enhancing supplier consciousness of procurement routes while promoting awareness among trading companies further upstream in the supply chain.

**Promoting the Use of Legal and Sustainable FairWood Lumber**

**Impact of These Activities on the Company**

Promotion of the *Gohon no ki* planning enables the realization of housing with high home value through proposals to customers offering comfortable lifestyles surrounded by abundant nature. In addition, it strengthens the recognition that housing appearance that changes over time due to green growth is helpful to enhancing home value—even in the case of green common areas in rental housing—creating rich urban spaces.

In addition, in the area of lumber procurement, by having each supplier follow our guidelines we are raising awareness about the procurement process and increasing the accuracy of traceability data. As a result, the market for high-quality FairWood steadily expands leading to the spread of sustainable lumber.

**Risk Management**

**Risk 1** Proposals similar to *Gohon no ki* planning spread throughout the industry, leading to a relative decrease in the value of our proposals.

*Our Response 1*

We will make use of the many years of collaborations with our landscaper network to aggressively promote tree species proposals in line with market needs, while attempting to differentiate ourselves through total exterior designs delivering higher customer satisfaction by improving our design proposal capabilities and strengthening our construction system. As a result, the continued proposal of new value will further drive the ecosystem-friendly greening market.

**Risk 2** Due to international demand for supply chain management, some are concerned about restrictions on the steady procurement of sustainable, high-quality parts and raw materials.

*Our Response 2*

As logging area trends and other breaking news is monitored by local environmental NGOs, we will obtain information from a network of global environmental NGOs and promptly share it with suppliers of wood materials so that they can make preferential supply arrangements for us.
State of Progress

1 Promoting the Planting of Indigenous Species in Consideration of Regional Ecosystems through the Gohon no ki planning

Activities Report

Ongoing Promotion of the Gohon no ki planning

We continued to promote Gohon no ki planning in FY2017, planting trees out of consideration for regional ecosystems. Throughout the year, we planted 1,030,000 trees in the gardens of our detached homes and collective housing.

Since the plan started in 2001, we have planted a total of 14,090,000 trees. Although greening initiatives tend to be seen as a factor contributing to increased maintenance costs in collective housing, the idea that planting increases the comfort of our living spaces, helps to differentiate them from other companies’ properties and helps them to become more beautiful with age has permeated throughout our Group and we have been striving to increase the quality of planting at our collective housing, such as at our rental house, Sha Maison, and at our condominiums.

Key Performance Indicators (KPIs)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>FY2013</th>
<th>FY2014</th>
<th>FY2015</th>
<th>FY2016</th>
<th>FY2017</th>
<th>Definition and remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of trees planted annually</td>
<td>Tens of thousands</td>
<td>106</td>
<td>99</td>
<td>107</td>
<td>103</td>
<td></td>
<td>Number of trees planted during the year through landscape gardening and greening initiatives</td>
</tr>
</tbody>
</table>

Number of Trees Planted Annually (Tens of thousands)

![Graph showing number of trees planted annually from FY2013 to FY2017]

Total number of trees planted: 14.09 million

Future Initiatives

The permeation of ZEH and the utilization of new construction methods have made the installation of large windows possible and gardens have become added value to the residences themselves, playing a large role in increasing tenant comfort. With this in mind, our designers employ a “whole-area design” process, in which the designer considers the exterior design’s relationship to the overall building from the very beginning.

Additionally, we anticipate the information included in our planting and raising proposal and maintenance sheet will spread and lead to greater awareness regarding the special characteristics of different tree species within the company as well, and to a consideration of ecosystems that begins at an earlier stage.

Topics

Increasing Satisfaction through More Elaborate Information Regarding Planting and Raising

We have begun using a planting and raising proposal and maintenance sheet for individual properties. With this sheet, we have become able to inform our customers more specifically about the enjoyable aspects of our gardens, such as the changing flowers, fruits and leaves and the different varieties of migrating birds and butterflies. Additionally, through our Customer Center, we have become able to share more detailed maintenance information regarding fertilization and pruning periods and about response to pests with our customers when they move in. As of January 31, 2018, this system is in use at about 50% of all of our properties, including custom detached houses and rental housing.

Introducing our Plants via the Planting and Raising Proposal and Maintenance Sheet

We are now able to present customers with a sheet that collects detailed information of about 400 varieties of plants that we use as garden trees at each of our residences.

Evaluation

Shifts in the number of detached housing starts are causing changes in the number of trees planted. However, customers have come to appreciate the benefits that greenery provides—such as comfort, a distinctive appearance, and townscapes that grow more attractive over time—even for rental housing and condominiums, helping to produce sales of ¥67.8 billion in our exterior construction work business, which includes planting and greening initiatives.
Promoting the Use of Legal and Sustainable FairWood Lumber

Activities Report

Proactively Procuring FairWood Lumber with a View to Zero Deforestation

In line with our Wood Procurement Guidelines created in April 2007, we continue with FairWood lumber procurement initiatives, toward the fair procurement of wood sourced with consideration to the environment. These guidelines are divided into 10 wood procurement policies that take into consideration legality, biodiversity, economies of production areas, and lifestyles of residents of logging areas. Each wood product is classified into one of four ranks based on its total score from each policy. We are pushing ahead with FairWood procurement by using fewer low-ranked wood products and more Rank S and Rank A products. In addition, in consideration of cultivating communities’ forestry we do not set procurement targets for the sole adoption of certified wood. Still, certified wood accounts for 64.3% of all of our wood materials, including those used for interior installation, and 99.8% of the wood materials used in construction (including certified processed wood).

Additionally, as part of our efforts to strengthen foundational support for “Zero Deforestation” to clearly express the direction we are aiming for as a Company, in March 2018 we completed registration in the System for Businesses that Deal in Registered Lumber, which was established under the Clean Wood Act in 2016.

10 Wood Procurement Guidelines

1. Source wood products from areas with relatively low risk of illegal logging.
2. Source wood products from areas without sensitive ecosystems.
3. Do not source wood products from areas where local ecosystems are seriously damaged due to large-scale logging of natural forests.
4. Do not use endangered species for wood products.
5. Minimize CO₂ emissions when producing, processing, and transporting wood products.
6. When logging wood products, avoid conflict with local communities and refrain from unfair labor practices.
7. Source wood products from areas of controlled logging, so as not to exceed the rate of forest regeneration.
8. Source wood products from domestic forests where well-planned forest management is in place to conserve ecosystems.
9. Source wood products from plantation forests that are managed so as to promote conservation and ecosystem development.
10. Use recyclable wood building materials.

Key Performance Indicators (KPIs)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>FY2013</th>
<th>FY2014</th>
<th>FY2015</th>
<th>FY2016</th>
<th>FY2017</th>
<th>Target</th>
<th>Definition and remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio of Rank S and Rank A wood products as defined by the Wood Procurement Guidelines</td>
<td>%</td>
<td>88</td>
<td>91</td>
<td>93</td>
<td>93</td>
<td>92</td>
<td>95</td>
<td>Survey results of about 50 of our main wood suppliers</td>
</tr>
</tbody>
</table>

Wood Product Procurement Ranking

Depending on their total score, procured wood products are classified into four ranks, from high to low: S, A, B, and C. Minimally acceptable scores are set for Guidelines 1 and 4, as we place a high priority on these two items.

<table>
<thead>
<tr>
<th>Total score (maximum 43 points)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>34 and above</td>
<td>S</td>
</tr>
<tr>
<td>26 to 33</td>
<td>A</td>
</tr>
<tr>
<td>17 to 25</td>
<td>B</td>
</tr>
<tr>
<td>Below 17</td>
<td>C</td>
</tr>
</tbody>
</table>

Evaluation

In fiscal 2017, the ratio of Rank S and Rank A lumber that we set as a management goal was 92%. In recent years, we have been working on reducing our Rank C lumber and through improvement efforts and collaboration with our suppliers, we lowered our ratio of Rank C lumber by two points.

Future Initiatives

Supplier awareness regarding procurement is growing in line with the enforcement of the Clean Wood Act and broadening concern for SDGs, so we will use this opportunity to strengthen consulting for each of our suppliers while promoting the spread of CSR procurement*.

* For more details, please see page 37.
Maximizing Customer Value through the Value Chain

Achieve Highest Quality and Technology through Big Data and Stakeholder Cooperation

Main stakeholders:
Customers, employees, partner companies (procurement, processing, distribution, and construction), factories, and residents living in neighborhoods surrounding construction sites

Backdrop

Collaboration with Stakeholders is Indispensable in Meeting Demand for Housing Value

Demands for housing value continue to diversify due to considerable progress in technology and rapidly changing demands from society. When considering changes in future business environments, corporate approaches to providing the most appropriate value to customers also continue to change from those used previously.

For example, when analyzing which of the diverse cutting-edge technologies are most suitable for consumers in terms of actual and potential needs, utilization of big data and joint inspections with leading equipment manufacturers are crucial.

Additionally, the Company cannot stably procure materials of superior quality to meet environmental or societal demands, train skilled technicians amid the declining population or achieve decent job goals without important cooperation and up and down the supply chain and strategic approaches.

Finally, we recognize the demand for initiatives that bear in mind SDGs focused on Industry, Innovation and Infrastructure (Goal 9), Responsible Consumption and Production (Goal 12) and Partnerships for the Goals (Goal 17).

Approach

Our Goal

Respond to Accumulated Needs through the Eyes of the Customer and Produce Performance and Quality that Surpasses that of the Competition

It is necessary to create a total business scenario that utilizes the value chain to maximize customer value in order to understand high demands for housing and to offer truly satisfying quality and service. The key to this is our industry-leading big data, which was accumulated through diverse channels and allows us to anticipate customer needs and changes in society. We will use this data through our manufacturing and construction throughout the Group and share it through careful supply chain management to provide performance and quality our competitors cannot match while ensuring traceability.

As we specialize in community-based projects, we make an effort to exchanging information in both directions and understand changes in lifestyle needs to make housing construction more open to society.

We conduct research and development concerning both physical structure and comfortable living environments that reflects valuable customer opinions and new societal needs.

We collect opinions through initiatives such as model homes that take advantage of regional characteristics, construction site tours held in cooperation with owners and hands-on centers.

We create freely designed housing that responds to customer needs by making full use of the advantages of industrialized housing to secure structural safety and by utilizing our highly precise project accountability system.

At our factories, we use high-quality and highly precise original materials to conduct manufacturing tailored to each customer.

We stably secure high construction precision through our construction systems, human resource development and collaboration with one of Sekisui House Group’s strongest assets, the Sekisui House Association.

As we specialize in community-based projects, we make an effort to exchanging information in both directions and understand changes in lifestyle needs to make housing construction more open to society.

1. Before Building Homes

2. Until the Homes are Completed

3. Achieve Lasting Security and Comfort

See pages 41–46
Action Policies

1 Achieve Optimal Safety, Security, Health and Comfort through Big Data

We achieve safety, security, health and comfort through our promotion of research and development regarding both physical structures and comfortable living environments and through top quality and technology. We respond to diverse needs using consumer big data, a valuable intangible asset gathered from encounters with many customers such as those living in our 2,380,000 constructed homes, the 310,000 members of our members-only site, Net Owners Club, the 910,000 visitors to Nattoku kobo and the 630,000 visitors to Sumufumulab.

2 Meticulous Supply Chain Management during Material Procurement

Collaboration with suppliers who understand the value we place on consideration for product development in houses that use tens of thousands of parts is an important factor in meeting diversifying needs. As interest in ESG investment rises, we will work to create long-term benefits for both our Company and its suppliers, including CSR procurement, as well as strengthen our collaborative relationships with suppliers.

Impact of These Activities on the Company

In order to complete our mission of protecting residents’ lives and property, we have led the housing construction industry by proceeding with research and development regarding both physical structures and comfortable living, constructing a total of 2,380,000 homes with top quality and technology accumulated over more than half a century.

We are able to gain customer support due to our housing technologies and because we create high-quality and technologies through top quality and technology. We respond to diverse needs using consumer big data, a valuable intangible asset gathered from encounters with many customers such as those living in our 2,380,000 constructed homes, the 310,000 members of our members-only site, Net Owners Club, the 910,000 visitors to Nattoku kobo and the 630,000 visitors to Sumufumulab.

Risk Management

1 Catch-up and selection difficulty due to technological progress and diversification

As an industry-leading company, we have secured opportunities to participate in the implementation and testing of cutting-edge public and private sector technologies and in joint research with manufacturers upon request. Comparing results produced through these opportunities with big data we have accumulated enables us to respond to actual customer needs and make rapid management decisions.

2 Concerns regarding ability to maintain high quality despite the decline in number of workers in the construction industry and lack of skilled technicians

We are proceeding with initiatives aimed at conserving manpower and increasing efficiency in our production, distribution and construction processes, mainly through automation. At the same time, we are promoting active implementation of our construction management system, which uses information and communications technologies such as tablets and PCs, to improve operational efficiency and increasing retention rates by enhancing welfare programs and optimizing the training of young employees.

3 The increasing social demand for sustainable material procurement within supply chain management

We promote wide-ranging supply management initiatives that focus on quality as well as respond to environmental issues and social issues including human rights and labor.

At Sekisui House, we promote close collaborations with suppliers based on the sharing of CSR procurement policies at regular policy briefings and CSR assessments conducted through supplier evaluations. This sharing of action policies allows us to avoid risks, understand supplier strengths and weaknesses and create and strengthen relationships of trust.
State of Progress

Achieve Optimal Safety, Security, Health and Comfort through Big Data

Activities Report

Company-Wide Optimization and Operational Reconstruction through Centralization of Residential Information

We constructed a system using big data to adjust and decrease design and technical specifications and centralize material information to efficiently provide a variety of small-lot produced high-quality housing materials.

With this system, we succeeded in centralizing residential information on design, materials, customers and historical data, including information regarding maintenance. The system is increasing productivity in all types of work by making it possible to conduct major operational processes on tablet PCs and smartphones, shortening construction times and reducing operational costs. This enables us to aim for faster customer service and provide highly precise, quality services with detailed data regarding all involved parties.

Examples of residential information use in each process

Construction of a Residential Information System

- Diversifying customer needs and various legal reforms
  Respond by developing new materials and updating specifications
- Independent business systems in each division produce data fragmentation and redundant work
  Operations and Organization become bloated
  (Sales Division) Increasing workloads accompanying more complicated design operations
  (After-Sales Service Division) As number of homes increases, verifying specifications becomes more complicated, lengthening response times.
- (Production Department) Increase in man-hours due to pursuit of high quality and material data management and maintenance

Reconstruct operational flow through centralization of residential information

Develop New Technologies and Products Able to Respond to Customer Needs

In 1997, Sekisui House launched ß System, the first steel rigid-frame construction method for industrial housing. A special characteristic of this method is that pillar positions can be freely positioned allowing for highly flexible floorplans and window positions on every floor. In 2017, we developed a new construction method, called the Flexible ß System and launched new products allowing us to further raise design freedom levels and space proposal capabilities in response to demands for custom detached houses, rental housing, houses used as commercial properties and offices, and homes for the elderly as well as for non-housing such as childcare centers, hospitals, hotels and public facilities.

We also developed and implemented a new and original construction method, the Dynamic Frame System, in our lightweight steel frame housing, creating large openings and vertically and horizontally wide-open spaces that hadn’t existed before. In response to net-zero energy housing (ZEH) initiatives and customer demand for larger windows, we are proposing to make industry-leading high-performance heat insulating aluminum and resin composite sashes a standard component in our windows.
Seeking to improve the safety, comfort and quality of living spaces while responding to customer demand is a housing manufacturer’s mission. Our Company has been conducting research and development concerning physical structures and comfortable living environments since establishing the Comprehensive Housing R&D Institute in 1990. We have conducted investigative research into how lifestyles and housing best interact with one another, including inspection and assessment of basic housing features, all in pursuit of healthy and comfortable living. Through in-house inspection and research, we quickly identify problems and find solutions, creating technologies that are unique strengths for Sekisui House, such as the heavy steel-framed system, the SHEQAS seismic control system and the Airkis high-quality indoor air system.

With regard to the Airkis system, working jointly with National University Corporation Chiba University, we established the Sick House Syndrome Countermeasure Research Wing for the Creation of Healthy Living Environments inside of the university’s Preventive Medicine Center in April 2017. We also constructed two test houses on the university’s Kashiwanoha Campus and held long-term stay and evaluation studies in an attempt to intensify initiatives conducted from a medical point of view. Additionally, we established the Nattoku Kobo inside of our Comprehensive Housing R&D Institute, where about 30,000 visitors per year visit to conduct two-way exchanges of information between consumers and builders about the ideal state of housing.

Furthermore, we established the Sumufumulab, a base for research and development and information exchange regarding living spaces and lifestyles inside of the Grand Front Osaka, in front of Osaka Station. There, we conduct joint research based on open innovation with various stakeholders.

Key Performance Indicators (KPIs)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>FY2012</th>
<th>FY2013</th>
<th>FY2014</th>
<th>FY2015</th>
<th>FY2016</th>
<th>FY2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHEQAS seismic control system installation ratio</td>
<td>%</td>
<td>75</td>
<td>87</td>
<td>89</td>
<td>94</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td>(steel-framed two-story detached housing)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airkis high-quality indoor air system installation ratio</td>
<td>%</td>
<td>76</td>
<td>78</td>
<td>80</td>
<td>85</td>
<td>87</td>
<td>88</td>
</tr>
<tr>
<td>(steel-framed detached housing)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Evaluation

We are maintaining high rates of installation for our SHEQAS and Airkis systems. Through the centralization of residential information using IT, we were able to improve productivity, operational efficiency and customer services. Additionally, thanks to our research and development concerning physical structures and comfortable living environments, we’ve developed new construction methods and launched new products that increase our design freedom and space proposal capability. Our range of response to demands for multipurpose construction has expanded.

Future Initiatives

In the future, we will continue to actively propose SHEQAS and Airkis systems to customers as competitive advantages unique to Sekisui House. While further improving IT utilization methods for each individual process, we will heighten our sensitivity to customer needs and the current of time, while conducting research and development concerning both physical structures and comfortable living environments. Additionally, we will continue to make industry-leading proposals while maintaining dialogue with stakeholders and further raise safety, security, health and comfort for residents.
Meticulous Supply Chain Management during Material Procurement

Activities Report

The extensive housing industry, which uses a large amount and wide variety of materials, has a significant impact on the supply chain. In particular, as seen in the UN Sustainable Development Goals (SDGs), the extent to which companies are able to maximize the impact of environmental and social issue resolutions, including the supply chain, ranks as a more positive strategy for the long-term enhancement of corporate value going beyond “responsibility.” At the same time, it is an important pillar in terms of efforts to coexist with and nurture the supply chain and we are proceeding with related initiatives.

Procurement Policies

To pursue procurement activities based on the Sekisui House corporate philosophy and corporate behavioral guidelines, since 2007 we have observed and promoted eight procurement policies focused on the highest quality, optimal pricing and supply optimization.

In addition to conducting detailed sustainability appraisals of our lumber procurement and chemical substance management, we have established independent guidelines manage the progress of targeted suppliers.

Eight procurement policies

- Subcontracting Law and Commercial Code
- Lumber procurement guidelines
- Chemical substance guidelines
- Zero emissions
- Eco-friendly products
- Development purchases
- Cutting-edge technologies and production methods
- Alternative material and industry-related information

Supplier Evaluation Implementation and Improvement

To maintain fair and impartial business practices, we conduct supplier evaluations based on our procurement policies and inform each company of their results so that they will contribute to future improvements.

At the same time, we believe the proper implementation of high-level procurement policy is impossible without a stable corporate structure and quality management, thus we conduct ongoing factory visits and quality control diagnostics with our primary suppliers.

Additionally, in order to deepen mutual understanding and ensure compliance with our procurement policies, 150 of our major suppliers participate in our annual policy briefings. We offer opportunities for mutual motivation at these briefings by explaining our newest management plans, procurement policies and product strategies, sharing information intended to act as guiding principles for our suppliers, honoring outstanding companies and viewing presentations regarding successful initiatives.

Promoting CSR Procurement

Since 2015, our Company has established and implemented CSR Procurement Standards in accordance with our eight procurement policies. Since 2017, we have included a CSR evaluation metric in our supplier evaluations and are raising awareness regarding social responsibility while encouraging sustainable development. Furthermore, the total value of transactions we conducted with the 123 suppliers targeted by our evaluations in 2017 amounted to 74% of our total procurement cost.

In the course of CSR evaluation, we also have all suppliers assess their initiatives in response to ISO26000’s* seven main themes and 28 goals in advance from the perspectives of (1) compliance with regulations, (2) responsible divisions and systems, (3) prevention rule procedures, (4) in-house awareness training and (5) awareness of present conditions. These results are then quantified and evaluated.

Additionally, we visit and monitor suppliers deemed to be in need of attention according to these results to verify conditions. We conducted visits and monitoring at four companies in 2017.

Moving forward, we plan to sponsor a supplier subcommittee underneath the CSR Committee and promote CSR procurement initiatives.

CSR Procurement Standards

<table>
<thead>
<tr>
<th>Human rights and labor</th>
<th>Respect for human rights, abolition of discrimination, prohibition of child labor, prohibition of forced labor, wages or working hours, dialogue and consultation with employees, safe and healthy work environments, human resource development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance</td>
<td>Compliance with laws and regulations, compliance with the Competition Law, prevention of corruption, management and protection of confidential information, import and export transaction management, protection of intellectual property</td>
</tr>
<tr>
<td>Social contribution</td>
<td>Regional and community contributions</td>
</tr>
<tr>
<td>Risk management</td>
<td>Risk management mechanisms, formulation of business continuity planning</td>
</tr>
</tbody>
</table>
Enhancing Production and Distribution Quality, Improving Operational Efficiency

Activities Report

Sekisui House's built-to-order production, which uses materials custom-made for each residence, is the foundation for our principle of making homes tailor-made for each customer. While rationally producing various product types in small lots, we are automating our production lines and installing robotic technologies so that we can consistently provide high-precision materials with stable performance and quality.

Additionally, we are prioritizing health and safety management to prevent work-related employee accidents and other damage to employee health. At the same time, we endeavor to create comfortable work environments, facilitate operations and improve production.

Promoting Automated Production of Main Structural Components

At our five factories across Japan, we produce original materials including our main structural components, such as pillars and beams, as well as exterior wall components. We aim to improve production efficiency and quality at every one of our factories through ongoing improvement activities and effective capital investment.

At the Yamaguchi factory in 2017, we worked towards further automation and augmentation of the B system heavy steel-framed three- and four-story housing construction method. To implement our new flexible B system construction method, we also installed a manufacturing line at our Shizuoka factory for WH Columns, which are 2.5 times stronger than our previous columns.

Quality Management System Development

We thoroughly manage quality in all manufacturing processes, placing full-time supervisors on each production line, inspecting raw materials upon delivery, conducting random checks and quality inspections on components and requiring factory technicians to take regular proficiency tests.

While our highly-skilled employees conduct quality management, we also conduct high-precision investigations using cutting-edge technologies, such as robotics, increasing production efficiency and quality and preventing the release of defective products.

In-House Production of Original Exterior-Wall Components

Dyne Concrete, a component of our highest quality lightweight steel-frame two-story housing product “Is Series” and the Bellburn earthenware exterior walls on our Shawood wooden-frame detached homes are original exterior-wall components produced by Sekisui House. These components are unique in that they are beautifully designed as well as water resistant, weather resistant and durable.

In line with intensive quality management at our factories, we engage in built-to-order manufacturing on each housing order and promote the automation and augmentation of our production lines.

Conducting Work Environment Maintenance

At every factory, we conduct necessary health and safety management to prevent the occurrence of disasters or health problems while conducting operations, securing safety and health for our employees. At the same time, we endeavor to form comfortable work environments, facilitate work performance and raise productivity. In order to develop our health and safety management, we hold a Health and Safety Committee meeting once per month and a Production Department Health and Safety Promotion Council meeting at all factories once per quarter to share information regarding each factory’s present condition, items for improvement and future outlook.

Key Performance Indicators (KPIs)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>FY2012</th>
<th>FY2013</th>
<th>FY2014</th>
<th>FY2015</th>
<th>FY2016</th>
<th>FY2017</th>
<th>Definition and remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakeven point shipment area</td>
<td>%</td>
<td>100.0</td>
<td>100.9</td>
<td>102.4</td>
<td>98.5</td>
<td>93.1</td>
<td>96.3</td>
<td>Index utilizes FY2012 as 100</td>
</tr>
<tr>
<td>Trends in grievances and abnormalities at construction sites</td>
<td>%</td>
<td>100.0</td>
<td>98.0</td>
<td>75.6</td>
<td>56.7</td>
<td>60.7</td>
<td>47.5</td>
<td>Index utilizes FY2012 as 100</td>
</tr>
</tbody>
</table>

Evaluation

Through maintenance and enhancement of our production lines, several of factories have become able to produce components, completing a system that will enable us to continue production in the case that one or more of our factories is damaged during a natural disaster. We were also able to move forward with work environment development, advancing process automation through the introduction of robotics, which clarified the differentiation of processes performed by employees, improving quality and operational efficiency.

Future Initiatives

To contribute to increased work efficiency and labor conservation at construction sites, we will continue to pre-process and assemble components inside our factories and endeavor to deliver them to sites in the most usable condition possible.

Additionally, we will prioritize workstyle innovations in production departments, including subcontractors, in recognition that this will result in more comfortable work environments that will raise productivity and activity levels.
4 Initiatives Aimed at Strengthening Construction Capabilities and Maximizing Construction Competence

Activities Report

Amid the ongoing aging of the construction industry workforce, one in three construction workers in Japan is now 55 years or older. A decrease in the number of construction workers is now an inevitability and the recruitment, training and increased retention of new employees have become industry-wide issues.

The Sekisui House Group is working to strengthen construction technologies in order to maintain ongoing and stable construction capabilities and improve quality and customer satisfaction. We are also conducting initiatives aimed at maximum utilization of existing construction competence, such as reinforcing organizational strength with partner building contractors while utilizing all systems already available.

Collaboration with the Sekisui House Association, a Voluntary Organization Comprising Members of the Sekiwa Construction Group and Partner Building Contractors

The Sekisui House Group's biggest strength is the Sekisui House Association. Since its founding as a community with a common destiny bound together with strong relationships, the aim has been to ensure co-existence and mutual prosperity for the Group and its members.

The Sekisui House Association is a voluntary organization comprising Group companies and partner building contractors.

Sekisui House Group's Project Accountability System

Customer Satisfaction-Boosting Initiatives Conducted as a Community with a Common Destiny

- Various training programs
- Construction quality meetings
- Sekisui House Training Schools

Increase construction quality

- Sekisui House Senior Technician Exam
- Construction Meister certification
- “My Idea” construction improvement proposal system

Zero-emission initiatives

Safety measures

Construction site beautification

Quality improvement

Business co-existence and mutual prosperity

Conduct thorough health and safety management

- Foreman training
- Health and safety training

Enhance welfare programs

- Compensation system
- Subsidy system

Technologies that Extend Housing Life

One technology that Sekisui House possesses that can extend the life of concrete used in housing foundations and can be utilized in all of our detached housing, is our highly durable foundation sheet construction method. This method involves affixing an adhesive sheet to the surface of foundational concrete beneath a building using special construction jigs, providing the foundation with a coating for a long period of time.

Covering the foundation’s surface with a sheet helps to prevent exposure to carbon dioxide, which causes deterioration in concrete. Additionally, by trapping water inside of the concrete, the sheets also reduce cracks that result from drying contraction and enable long-lasting strength and durability. We developed this technology in 2015 and it received the Meritorious Technology Award, First Prize in the Presidential Commendations (based on the 27th commendation guidelines*). By making foundations, a building’s bedrock, more durable, we are providing homes in which customers can live safely and securely for a long time.

* This is a Company system that commends technological developments that contribute to operational improvements or are beneficial in the execution of operations as well as creative or original research and development relating to operations having a large impact within or outside the Company.
Prioritizing Human Resource Training that Passes Skills to the Next Generation of Young Technicians

Operation of Sekisui House Training Schools

Sekisui House directly operates vocational ability development schools accredited by the Ministry of Health, Labor and Welfare with the goal of cultivating human resources that can be active at the forefront of the industry. We established three schools in East Japan (Koga City, Ibaraki Prefecture), Central Japan (Ritto City, Shiga Prefecture) and West Japan (Yamaguchi City, Yamaguchi Prefecture). At these schools, we conduct training that allows technicians from each company in the Sekiwa Construction Group, as well as technicians hired by partner building contractors, to learn about technology and acquire skills. These schools also aim to teach and refine manners necessary for members of society.

These schools are unique from other schools in that they do not merely provide the opportunity to acquire technical skills and knowledge necessary for construction with Sekisui House, but also the opportunity to study our corporate philosophy, which is indispensable for achieving customer satisfaction. Those who have completed the course work actively in regions throughout the country as construction technicians or construction managers. Their young energy injects vitality into construction sites, strengthening construction capabilities. Even after completing the course, technicians are able to participate in a variety of ongoing training aimed at improving technological knowledge and skills.

Construction Meister and Sekisui House Remodeling Meister Systems

We established the Construction Meister System to honor superior technicians on Sekisui House construction sites and certified 312 technicians in 2017. Since beginning to implement the system in 2010, we have certified a total of 1,933 technicians. Construction Meisters are awarded a certificate, a sticker and incentive pay. We eagerly expect them to contribute to strengthening the “community with a common destiny” mindset that we share with our partner building contractors and to boosting the motivation of other construction technicians by actively setting good examples, handing down sophisticated, high-level skills and by contributing to improving construction quality.

Additionally, we have established the Sekisui House Remodeling Meister System at the three Sekisui House Remodeling companies in charge of remodeling operations for Sekisui House owners. This system, which we established in 2008, aims to improve remodeling construction sites and construction quality while deepening owner trust and raising owner satisfaction by certifying and registering superior technicians working for partner building contractors who participate in remodeling work for Sekisui House. We certified 29 technicians under this system in 2017 and 368 technicians certified under this system are actively contributing nationwide. Moving forward, we will enhance initiatives enabling meaningful exchanges of information between Remodeling Meisters.

“My Idea” Construction Improvement Proposal System

The “My Idea” Construction Improvement Proposal System encourages and supports creative originality aimed at enhancing quality and increasing customer satisfaction. Once per year, we collect ideas concerning improvements to actual construction methods from technicians throughout the country who are involved with our construction projects. Then, after reviews in each region, a nationwide examination committee conducts a final review, ranking the ideas and awarding certificates of commendation and cash bonuses to technicians who presented selected ideas.

2017 was the 30th year of these activities where the 30th Anniversary Grand Prize was presented for the highest achievement from among 1,268 proposals received from across Japan.

We have received at cumulative total of 51,212 proposals through this system, which have led to many new tools, equipment and construction methods, including some that were commercialized or patented.

We introduce proposals selected for award through our construction newsletter, Tsuchioto, which we regularly send to employees working at our construction sites. We also upload videos demonstrating the proposal content to our Company website to inform worksites of superior ideas and to help them spread nationwide.

Key Performance Indicators (KPIs)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit</th>
<th>FY2013</th>
<th>FY2014</th>
<th>FY2015</th>
<th>FY2016</th>
<th>FY2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction workers (foundations, construction, carpentering)</td>
<td>people</td>
<td>–</td>
<td>10,518</td>
<td>10,393</td>
<td>9,843</td>
<td>9,351</td>
</tr>
<tr>
<td>Sekisui House Training Schools participants (total)</td>
<td>people</td>
<td>2,294</td>
<td>2,385</td>
<td>2,480</td>
<td>2,568</td>
<td>2,638</td>
</tr>
<tr>
<td>Employees who passed the Sekisui House Senior Technician exam (total)</td>
<td>people</td>
<td>14,458</td>
<td>14,607</td>
<td>14,808</td>
<td>15,012</td>
<td>15,214</td>
</tr>
<tr>
<td>Certified Construction Meister</td>
<td>people</td>
<td>312</td>
<td>318</td>
<td>305</td>
<td>325</td>
<td>312</td>
</tr>
</tbody>
</table>

Evaluation

The 18 companies comprising wholly-owned subsidiary Sekiwa Construction and partner building contractors ensure reliable construction quality through participation in our project accountability system. The Sekisui House Association, which we constructed over a long period of time and with which we share a mutually prosperous co-existence, is one of our Company’s strong points and supports our business activities with stable construction capabilities despite current challenges facing the industry.

Future Initiatives

Moving forward, we will further strengthen our collaboration with the Sekisui House Association. Additionally, we will cooperate with each worksite and department to maximize construction capabilities by leveling construction work, increasing construction productivity and introducing cutting-edge technologies. Finally, we will proceed with initiatives aimed at securing and retaining new technicians by enhancing training and conducting workstyle innovations.