

Our responsibility to contribute to creating a sustainable society and actions we have taken to meet the responsibility

## Under our corporate vision, we have been pursuing the value we share with our customers to find solutions to social challenges.

We have continued to make concerted efforts to bring greater happiness to residents and help to find solutions to social problems under our corporate philosophy and Sustainable Vision.

With the globalization of the economy, corporate activities have come to exert greater influence over society and the global environment. This means companies now take on even more important responsibility to society than ever before. We have met our responsibility to society by offering quality housing products, thus helping to create safe, secure and comfortable living environments. As a leader of the housing industry, we are fully aware of the sheer size of the impact this industry can have on society, and thus we place a special focus on sustainability in our management policy.

We think that the key to creating a sustainable society is keeping global ecosystems in good health—a basic condition for ensuring lifelong, comfortable lives for all. We are now facing various issues that require the action of our entire society, such as global warming and the consequent occurrence of extreme weather events, a decline in natural resources, impacts on ecosystem networks, energy shortages, threats to healthy life, and the consequences of an aging society. Believing that housing can be part of the solution to these issues, we focus our efforts on putting our corporate philosophy into practice and offering housing products that ensure "comfortable living—now and always." To make public our unchanging determination to contribute to the happiness of residents and sustainability, we announced our Sustainable Vision in 2005 and have since been striving to share values with our customers and all of our employees. In doing so, we are constantly offering new values to contribute to finding solutions to social problems.

#### 1989: Corporate philosophy established

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



Verifying the seismic performance of our earthquake-resistant homes by simulating the motions of the Miyagi earthquake that Exhibiting a real-size home to allow prospective occurred in 1978

Conducting the industry's first earthquake-resistance testing using an actual



1979

Leading the industry in meeting the emerging needs of society Building Japan's first model house for people with disabilities

Addressing the energy problem by promoting the use of natural

Launching a passive solar house, PSH 21

1980

## sized home

Sekisui House founded

Introducing prefabricated housing products with enhanced design flexibility—the first in the industry to use a meter module Launching the "Type B" home onto the market



customers to see what their home would look like and be able to check the interior in advance

#### Opening our model home in Japan's first permanent housing exhibition site

Strengthening our accountability system to ensure higher internal construction qualit

#### Establishing Sekiwa Koji Group companies

Our Shiga and Kanto factories became the first in the industry to be certified as excellent plants for quality control of production components by the Ministry of International Trade and Industry under the new governmental program.

#### Winning certification as excellent plants

Developing a residential area focusing on the concept of "common" and offering it as a solution to the social problem of loss of neighborhood bonds

Beginning the sale of subdivision lots in the "Common Life Osayuki" town

#### **Emergence of built-to-order housing business**

Emphasis on "design," "performance offer" and "nature friendliness'

Actions taken by Sekisui House

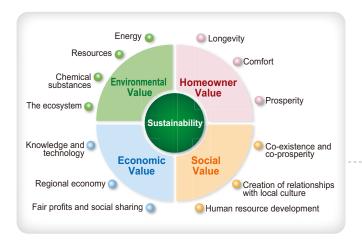
1960

1960

- 1962 The permanent population of Tokyo exceeds ten million.
- 1963 Japan Prefabricated Construction Suppliers & Manufacturers Association is established.
- 1964 Housing Loan Corporation's prefabricated house certification program begins.
- 1973 Performance certification program for industrialized houses established.
- 1973 The first oil crisis occurs
- 1979 The second oil crisis occurs 1979 Act on the Rational Use of Energy (Energy Saving Act) comes into force.
- 1981 New seismic design standards introduced
- 1985 Vienna Convention for the Protection of the Ozone Layer adopted.

#### 2005: Announcing the Declaration of Sustainability 2006: Introducing 13 guidelines

We defined our vision for a "sustainable society." To move closer to this vision and ensure our progress, we declared our determination to carry out corporate management in a manner that balances four key values: economy, the environment, society and homeowner needs. In 2006, we introduced 13 guidelines by further exploring each of these values to determine the direction of our corporate activities and decision making.



2009: Launching the "Green First" model of eco-friendly homes

#### 2011: Launching the "Green First HYBRID" model

To accelerate the process toward a sustainable society, we launched the Green First eco-friendly model that brings greater comfort, while contributing to environmental protection. In 2011, we also introduced the Green First HYBRID model, which is furnished with the world's first power supply system utilizing three different kinds of cells





2010

The 2-million-home milestone is achieved.

2010

1993

The 1-million-home milestone is achieved.

2000



1990

#### 1990

Encouraging cooperation between researchers and residents with the establishment of a new research institute open to the public

**Establishing the Comprehensive Housing R&D Institute** 

#### 1996

Bringing a high-level of comfort and energy-saving efficiency by providing a high-performance heat insulation system and multi-layered insulating glass as standard

Launching the Centrage  $\boldsymbol{\Sigma}$  model onto the market

#### 1997

Providing a photovoltaic power generation system as standard

Launching the Solar Σ.A model onto the market



#### 1999

Introducing a horizontally based organization to integrate the environmental measures that had been taken separately and positioning environmental actions as one of our management priorities

Announcing the Environmental Future Plan

#### 2001

Preserving biodiversity by creating home

gardens with native and indigenous tree species

Embarking on new environmental initiatives under the "Gohon no ki" landscaping concept

Promoting resource recycling leveraging the Sekisui House Group's ability to exercise control over the entire lifecycle of housing

Achieving zero emissions at all our factories

#### 2003

Improving the insulation efficiency of detached

Beginning to ship all newly built detached houses with

a next-generation energy-saving system

Declaring our determination to make sincere efforts to perform our responsibilities to all stakeholders

#### Announcing the medium-term management vision

Ensuring self-sustained lives at home even in times of emergency by securing living space food, drinking water and energy

Launching energy-saving and disaster-proof housing products

Declaring our commitment to creating communities that grow increasingly attractive over time and that are valued as assets of society

Formulating the Urban Development Charter

Creating a new market of revitalized homes to promote effective use of resources

Embarked on the Everloop home repurchase program

Promoting the FairWood procurement initiative to ensure sustainable wood use

**Establishing internal Wood Procurement** Guidelines

Enhancing housing safety with our governmentaccredited seismic vibration absorption structure that converts seismic energy into heat energy and absorbs building movement



Introducing the

SHEQAS seismic vibration absorption system

#### 2008

Reinforcing environmental efforts upon becoming the first Eco-First Company in the industry under the program launched by the Ministry of the Environment

Making the Eco-First promise

Unveiling our innovation in the Toyako Summit Cooperating in the construction of the Zero Emission House



#### Enhancement of housing "quality" and "performance"

1992 Earth Summit held in Brazil.1993 Environmental Basic Act comes into force.

1995 The Great Hanshin-Awaji Earthquake occurs

1997 The Kyoto Protocol adopted.

#### Pursuit of both "environmental consideration" and "comfort"

2000 Housing Quality Assurance Act comes into force.

2002 Construction Materials Recycling Act comes

into full force. 2005 The Kyoto Protocol takes effect. 2006 Basic Act for Housing comes into force

2009 The national government launches the Long-term Quality

Housing Certification Program.

2010 The tenth meeting of the Conference of the Parties to the

Convention on Biological Diversity (COP10) convened. 2011 The Great East Japan Earthquake occurs.



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# We are continuing our efforts to achieve greater sustainability while addressing demands of society at all times.

## Creating an ideal future based on our "SLOW & SMART" design concept by promoting and refining our "Green First" initiative

Since 2009, we have been promoting our Green First initiative to offer homes that combine a higher level of comfort, cost performance and environmental consideration. The Green First eco-friendly model is now enjoying increasing popularity for its ability to bring to customers safe, secure and comfortable lifestyles coupled with high economic efficiency. This model also boasts a longer life and can play an important role in the process to a low-carbon society.

We are continuing our efforts to further enhance this initiative to address various social needs, such as the prevention of global warming, energy conservation, ecosystem protection, waste reduction, healthier

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living and disaster mitigation, while meeting the emerging demands of an aging society with a falling birthrate, without sacrificing comfortable and convenient living standards. In doing so, we hope to create a better society for all.

Our brand vision, "SLOW & SMART," represents our determination to bring the optimal housing comfort (SLOW) with our latest technology (SMART), which is behind our unwavering commitment to achieve a low-carbon, recycling-oriented society.

To achieve our vision of an ideal future, we will raise this initiative to a higher level and resolutely fulfill our responsibility to society.





#### Leading the industry in promoting the net zero energy house (ZEH) design with our latest "Green First ZERO" model

Falling birth rate



In Japan, the residential sector is responsible for about 30% of total national electricity consumption. To encourage zero energy housing development, the Japanese government is promoting the adoption of the net zero energy house (ZEH) design as standard for newly built homes by 2020, to reduce the primary energy consumption to almost zero on a net basis.

Prior to the introduction of this net zero energy house concept, we launched the Green First ZERO model on April 8, 2013. This new model is an upgraded version of our highly successful Green First model, and employs various innovations including: advanced heat insulation systems such as argon gas-filled multi-layered glass and sash frames with high insulation efficiency; energy-saving equipment such as a high-efficiency air conditioning system and LED lighting equipment; and passive technology such as a design to control solar radiation and ventilation. With high insulation efficiency and the latest energy-saving equipment, the Green First ZERO model is expected to drastically reduce energy consumption at home, while achieving both greater comfort and an energy-neutral living environment with its ability to produce energy utilizing solar and fuel cells.

We will strive to increase the ratio of the Green First ZERO design to all newly built Sekisui House detached homes to 40% in fiscal year 2013 and to 60% in fiscal year 2014, as part of our efforts to facilitate the process to a more eco-friendly society.

#### Increase in the ratio of the Green First and Green First ZERO models to all Sekisui House homes



#### 1. High insulation

Aging society

Providing advanced heat insulation systems including argon gas-filled multi-layered glass as standard

#### 2. Introducing comprehensive energy-saving solutions

Providing high-efficiency air conditioning systems, equipment that uses less hot water, LED lighting equipment and HEMS as standard

#### 3. Using natural energy effectively

Using different kinds of glass depending on the direction the window faces and adopting the design to control solar radiation and optimize

The Green First ZERO model will bring a higher level of comfort, cost performance and environmental consideration to users with the above three advantages, combined with its ability to produce energy by means of solar and storage cells.





To deliver ideal solutions to various social problems with Sekisui House's smart towns

# We are fully dedicated to the implementation of the "Smart Common City" project.

In order to overcome the concern over energy shortages and maintain a pleasant living environment into the future, we are creating smart towns that last for generations in various parts of Japan.

## Expanding the advantages of the "Green First" model to the entire community

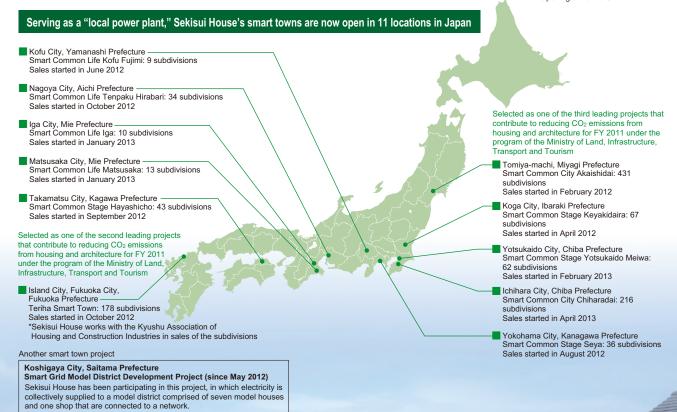
Based on our "Urban Development Charter," we have been promoting the nationwide development of communities named "Common City" where residents enjoy friendly interactions with their neighbors in a pleasant green environment that increases its value as years pass. The significance of our Common City initiative has been highly recognized in society, and awarded a number of prizes in the past. In the wake of the Great East Japan Earthquake, we have also been required to take measures to remove concerns over electricity shortages and enhance the disaster response capacity of our housing.

To cater to these emerging needs, we are now expanding the advantages offered by the Green First model to the entire community. Specifically, we are promoting the net zero energy house (ZEH) concept that aims to achieve a higher level of energy autonomy. At the same time, we are accelerating our smart town development efforts to optimize energy supplies on a community-wide basis utilizing telecommunications technology, and thus reduce energy loads on society.

\*This project does not involve sales of housing products



Opening of Teriha Smart Town





#### Pursuing our own community development concept focusing on creating living environments that grow more attractive over time and deepening neighborhood bonds

The basic purpose of our Smart Common City initiative is to develop sustainable communities and society by providing solutions to energy shortages and satisfying residents' needs in terms of safety and security; health and comfort; and mutual aid.

In principle, our Smart Common City is comprised of smart houses that are capable of producing energy with a photovoltaic power generation system, which we have been promoting under our Green First initiative, and with fuel cells, thus meeting the electricity needs of each household. Smart houses are also shipped with a high-efficiency heat insulation system, energy-saving equipment and a power outlet to recharge an electric vehicle, which work together to effectively reduce energy consumption at home. With these innovations, Smart Common City as a whole can produce more electricity than is consumed by local residents, and thus can supply surplus electricity to homes, schools, and commercial facilities in neighboring communities. By serving as a "local power plant" in this way, Smart Common City is expected to contribute to dispelling the concerns of society over electricity shortages.

All smart houses are also shipped with the "SHEQAS" seismic vibration absorption system accredited by the Minister of Land, Infrastructure, Transport and Tourism, which makes housing highly resistant to shaking and minimizes damage when an earthquake hits. This system, together with public spaces such as assembly halls and parks equipped with disaster protection functions provided in the Smart Common City, contributes to enhancing the disaster resistance of the community. We can further increase the safety and security levels of the entire community by building 20 to 30% of houses with the Green First HYBRID design that ensures availability of electricity and allows residents to live an almost normal life even in times of blackouts by employing three different types of cells.

Innovations we have introduced to enhance the health and comfort levels include the "Airkis" high-quality indoor air system designed to protect health of children by reducing the concentrations of certain chemical substances to levels less than 50% of the guideline value set by the Ministry of Health, Labour and Welfare; and the "Gohon no ki" landscaping concept that aims to create a pleasant green environment that grows more attractive over time and restore natural ecosystems by planting native tree species. Effective provision of tree shade and the use of evaporation heat also contributes to health and comfort. Furthermore, we promote development of thriving communities by providing common spaces and offering support to community events to encourage mutual aid among residents and help them deepen neighborhood bonds, while maintaining a pleasant townscape and strengthening community-based crime prevention and disaster preparedness efforts.

#### Green First HYBRID, the world's first smart housing model that incorporates three different types of cells

To meet the needs of society emerging after the Great East Japan Earthquake, we launched the Green First HYBRID smart housing model in August 2011 by further improving our energy-saving and disaster-proof housing design which we launched in 2004. This is the world's first mass-produced housing model that employs solar, fuel and storage cells, which work together under automatic control to maintain energy availability and ensure self-sustained lives even during a blackout in an emergency, while optimizing electricity consumption in ordinary times. Having enjoyed great popularity since its introduction, the Green First HYBRID model was recognized as the most outstanding smart housing 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. (We have received about 400 orders for the Green First HYBRID model as of the end of January 2013.)

Main advantages of Green First HYBRID

- Enables residents to produce electricity to cover more than 80% of electricity needs at home, and reduce electricity consumption (during normal household use)
   Drastically reduces utility costs (in some regions, annual utility costs can be reduced to zero.)
   Allows residents to meet the request by the government to save electricity during peak hours (e.g., during the daytime in summer and during evening hours in winter when family members are at home) without sacrificing comfort
- Allows residents to live an almost normal life even in times of blackouts (Residents can even take bath if gas and water is available.)

## Safety and security

- "SHEQAS," Sekisui House's original seismic vibration absorption system (accredited by the Minister of Land, Infrastructure, Transport and Tourism)









#### Mutual aid

Fostering neighborhood bonds to create a thriving community





Enhancing safety by expanding neighborhood relatio

#### **Energy availability**

Health and comfort

■ "Airkis" high-quality indoor air system

Building communities that grow increasingly attractive over "Gohon no ki" landscaping

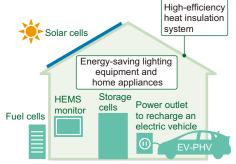
- Promoting the use of natural energy under the "Green First" initiative
- Introducing photovoltaic power generation systems and fuel





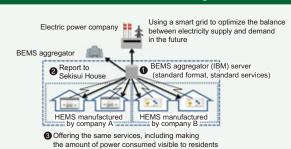
#### Our Smart Common City won a prize at the 9th Eco-Products Awards for FY 2012.

Our Smart Common City was given the Excellence Award for Energy Saving Service at the 9th Eco-Products Awards for its contribution to the needs of a post-earthquake society by promoting energy saving, electricity conservation, disaster preparedness and comfortable standards of living not on an individual household level, but on a community-wide basis.



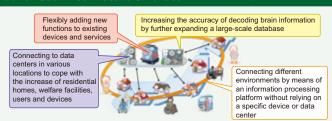
HEMS = Home Energy Management System

#### Embarking on R&D of a more advanced "near-future smart town"



#### Working with IBM Japan, Ltd. to build a next-generation platform

We are striving to build a common platform that supports HEMS devices manufactured by different companies to offer the same services across different systems. For example, the new platform will enable a coordinated control of energy balance, make energy consumption visible to residents, provide easier access to medical and nursing care services that are necessary to improve quality of life, centralize the management of data, and collect data across a smart town so that housing and society is connected. Within the first three years, our target is to introduce HEMS to 30,000 houses in smart towns, both ready-built and custom-built



#### Engaging in research on the BMI network that connects residential homes in partnership with companies in other industries and a university

BMI stands for Brain Machine Interface, which means a system that links the brain to a mechanical device such as a computer. The device is then controlled by signals from the brain. When completed, this system will allow users to control housing equipment, home appliances, or a wheelchair simply by thinking about it, and will be highly serviceable at residential homes and clinics. We conduct R&D of this system as part of our efforts for universal design development, in anticipation that the system will be employed in our smart houses, which will become increasingly "intelligent," to offer HEMS-based advanced mutual aid and interactive management services and bring a higher level of safety and security to the elderly in the future. Commissioned by the Ministry of Internal Affairs and Communications, we have been engaged in joint research on this system since July 2011 with the Advanced Telecommunications Research Institute International (ATR), Nippon Telegraph and Telephone Corporation (NTT), Shimadzu Corporation, and Keio University

Opening Japan's first smart town in Miyagi Prefecture as a symbol of a bright future

More than 100 households have already moved to Smart Common City Akaishidai—an attractive community to which residents become more attached as it evolves with the passing of time.

Upon completion of 431 houses in 2015, the community will become a "local power plant" with the capability of producing 2,500 MWh of electricity a year, 1.7 times as much as the annual electricity consumption of all the households.

Smart Common City Akaishidai is an extensive residential area with 431 houses under development in Tomiya-machi in the suburbs of Sendai City in Miyagi Prefecture. This is the first large-scale post-earthquake community development project in Miyaqi Prefecture and is attracting a lot of attention as the first step in the reconstruction process of the

All the 431 houses to be built in this area will be furnished with a photovoltaic power generation system, out of which 86 houses, or about 20% of all the houses, will be the advanced Green First HYBRID smart houses, each equipped also with fuel cells and storage cells. This community has been developed based on the following five principles: "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." This project was selected as one of the "Third leading projects that contribute to reducing CO2 emissions from housing and architecture for FY 2011," under a program of the Ministry of Land, Infrastructure, Transport and Tourism to support leading projects expected to achieve outstanding results in the reduction of CO2 emissions.

#### Three public facilities are open to serve as shelters in times of emergency.

At the center of the photograph on the right is a street with a circular cul-de-sac that prevents through traffic. In Smart Common City Akaishidai, all the buildings that face a cul-de-sac are built with the Green First HYBRID design which enables self-sustained living at home even during a disaster-induced blackout. Even when electricity supplies stop due to a disaster, the space around cul-de-sacs can be lit up, allowing neighbors to feel safe.

In response to a request from the local government to provide disaster-resistant public facilities in common spaces, we built two assembly halls and a community center adjacent to parks on the premises of Smart Common City Akaishidai. In order to protect lives of residents when affected by a disaster, these facilities are furnished with a storehouse to hold water and food stocks, a well to secure water, a tank to collect rainwater, and a large-capacity photovoltaic power generation system to ensure the availability of electricity even during a blackout

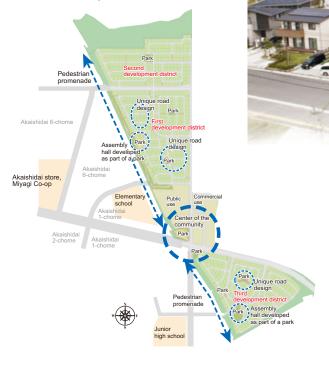


The Green First HYBRID homes that employ three types of cells surround the cul-de-sac. Even during a blackout, this space can be lit up. In times of emergency, the open space serves as an evacuation site for residents.



The community center is equipped with a 16.3 kW photovoltaic power generation system. When a blackout occurs, the center can supply up to 4.5 kW of electricity during the davtime.

Smart Common City Akaishidai is attracting a lot of attention as Japan's first smart town





Smart Common City Akaishidai supplies surplus electricity to homes, shops and schools in neighboring communities during the daytime and serves as a "local power plant."

#### Creating a disaster-resistant and friendly community by building durable housing and promoting neighborhood bonds

To create a disaster-resistant community, we started our work by carefully reinforcing the ground at the land development stage. All the houses we built in the community have obtained a seismic grade 3, which is the highest grade in the seismic performance criteria set under the housing performance indication system We also assisted residents in organizing disaster drills and various community events to facilitate the development of friendly neighborhood relationships. We hope through these activities, residents enjoy safe and secure lives together with their neighbors and grow more attached to their hometown.





Disaster drill

Gardening workshop

#### Creating a pleasant landscape as a valuable part of the community

We develop green townscapes by planting native tree species under our "Gohon no ki" landscaping concept to create a pleasant natural environment that enables residents to enjoy seasonal changes, and restore local ecosystems. The "Gohon no ki" concept naturally leads to the creation of a community where the environment grows more attractive over time. This increases residents' attachment to their hometown, especially as they view it as a common asset.

#### Voice of the G family who moved into a Green First HYBRID home in Smart Common City Akaishidai in June 2012



Since the earthquake, we have renewed our awareness of the importance of neighborhood bonds. In Smart Common City Akaishidai, most of our neighbors join community fairs, which provide valuable opportunities for friendly interactions among residents. We are also impressed with the disaster preparedness of this community, where disaster drills are conducted regularly and foods and emergency supplies are stored in the assembly halls. To be honest, we have yet to understand all the advanced capabilities our home offers to us, but we feel protected knowing

that solar, fuel and storage fuels contribute to energy and electricity conservation, and will meet our electricity needs in times of disaster and blackout. We also love the attractive townscape, and are satisfied with the safety features of the community, which is especially important for households with small children such as ours. We think that not only the sophisticated housing features but also the deep human bonds provide us with a great sense of safety.



#### **\$VOICE**

#### Creating clever and attractive homes and communities: Sekisui House at the forefront of an attempt to develop integrated solutions that enable self-sustained living

As our society places greater value on being "smart," we may say that we are posed the question of what it means to be "clever." The influence of information and communications technology extends to mobile phones and home appliances, as well as our homes and communities, which in turn can lead us to innovations in living environments. The energy crisis that arose in the wake of the March 11th disaster, as it turned out, accelerated this process, as the tragedy made us keenly aware of the sheer importance of self-sustained living environments and mutual aid among members of communities, both face-to-face and through SNS. The Smart Common City project that Sekisui House has begun to promote nationwide precisely responds to such trends in society. While "smart" solutions are often developed simply by combining equipment and devices, this is not the case for Sekisui House—it is obvious that they have embarked on a daunting task to develop self-sustained communities with enhanced disaster preparedness and landscapes, thereby offering clever solutions in an integrated manner. I hold in high esteem their cooperative efforts to address the needs of society in this fashion.



Mr. Kazuo Iwamura Professor at Department of Urban Life Studies, Tokyo City University and Graduate School of Tokyo City University Representative Director at IWAMURA Atelier Co., Ltd.



### Pursuing sustainability in global markets

## **Developing overseas business**

Committed to creating homes and communities that harmonize with the local climate and culture, with our state-of-the-art energy producing and saving technologies and resource recycling expertise

#### Launching high-quality housing products and cutting-edge environmental technology onto the world's markets

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 understand and agree with our commitment to creating an ideal living environment. We have already embarked on projects in the U.S., Australia, China, and Singapore and have begun supplying our housing products to these markets.

#### United States of America

#### Creating communities in accord with our basic environmentally conscious principle



With our American subsidiary, North America Sekisui House, LLC (NASH), we are promoting more than 30 community development projects all over the U.S., in cooperation with our partner companies.

In 2010, we embarked on our first real estate development project in the U.S. through NASH in Loudoun County in the suburbs of Washington, D.C. Designed to develop a mixed-use community named One Loudoun, this project is being carried out with Miller and Smith in McLean, Virginia, which is a local developer and also our joint venture partner. In 2010, we also started the Cinco Northwest development project with a developer, Newland Communities in San Diego, California as an extension of the development of Cinco Ranch—a community with a history spanning more than 20 years and known as one of the



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





Cinco Ranch in Texas

Tehaleh in Washington

most successful communities in the Houston area of Texas, which is among the largest markets in the U.S.

In 2011, we started another project with Newland Communities to develop a new community in Tehaleh (formerly called Cascadia) in the suburbs of Seattle-Tacoma, in Washington. Located close to Mt. Rainier, the new community boasts a beautiful surrounding landscape and is one of the largest master-planned communities in the northwestern part of the U.S. In the same year, we, along with Newland Communities, acquired the community development projects in 11 states including Texas, Florida, and North Carolina from the California Public Employees' Retirement System (CalPERS). Accordingly, we took over the development of Telfair, which, along with Cinco Ranch, is known as one of the most successful communities in the Houston area, as well as the development of FishHawk, one of the most successful communities in the Tampa area of Florida.

In 2012, we embarked on the development of another community, Embrey Mill, in Stafford County in the suburbs of Washington, D.C. in partnership with Newland Communities. Two new communities had their grand openings in 2012—the Tehaleh community that is mentioned above and the Waterset community in Tampa, Florida that was developed under the project we took

over from CalPERS. In this way, we are steadily and successfully expanding our business presence in the U.S. market.

In developing master-planned communities in the U.S., it is customary that the developer builds a community center as a venue for facilitating interactions among residents and sharing information with them. This community center is placed under the management of the residents' association. In a project to develop a community that was recently inaugurated, we undertook the design and construction of a community center according to this custom, while ensuring strict compliance with the local environmental building standards and sticking to our environmentally conscious development concept.

NASH worked with Newland Communities, one of our business partners in the U.S., to develop a joint principle, combining the guidelines that Sekisui House has implemented in developing sustainable communities in Japan with existing know-how available in the U.S. By incorporating this joint principle in specific development designs under joint development projects, these two companies unite their efforts to promote the development of sustainable communities by making use of the surrounding natural environment.



Waterset in Florida

#### China

#### Promoting community development projects in a manner that preserves ecosystems, while maintaining local living environments



In China, we are engaged in the development of townhouses, condominiums, and commercial facilities in Shenyang, Suzhou, Taicang, Wuxi and some other locations. In the spring of 2012, our Shenyang factory began operation, and full-scale construction is underway in each project site.

Currently, we are carrying out three projects in Shenyang City, the capital of and gateway to Liaoning Province in the northeastern part of China, and will begin the sale of housing products in 2013.

In the urban area of the city, a mixed-use complex of a hotel and condominiums are being developed under the Yuqin Residence project, and we will begin the sale of condominium residential units in the early summer of 2013, with delivery to customers scheduled for the end of 2014. Our sales center has been completed, and we are now preparing for full-scale sales activities. The hotel under construction is scheduled to be completed in 2015. Two other projects are underway in new urban areas in the southern part of Shenyang City, and the sale of housing products will begin in 2013.

In Shenyang City, we will supply about 2,000 housing products in total, both townhouses and condominiums, through these three projects. Housing products offered under these projects are designed to maximize the advantages of their respective locations and make the most of our proprietary environmental technology and homebuilding expertise. Since advanced notice of sale was given on the Internet and through other media, we have received an increasing number of inquiries from customers. This encourages us to meet the high expectations of end-users and provide housing products that ensure high quality, security, and safety.

In Suzhou, a city renowned for its historical heritage, beautiful water and green environment, we are building condominiums with 3,160 residential units and 74 townhouses in a lot of about 17.7 hectares in Xiangcheng District, which will be developed as a new urban center in the northern part of Suzhou.

In this historical city, we are creating a new townscape by combining our architectural design with the traditional

architectural style of Suzhou, which is characterized by white walls and black roof tiles. Here, parking lots of the condominiums are created underground to separate walkways and driveways for greater safety, while a satoyama environment is created that resembles a green island under our "Gohon no ki" landscaping concept. By employing building materials that prevent sick building syndrome and high-quality indoor air systems in our housing products, we ensure a secure, safe, healthy and comfortable living environment.

Taicang City is about 50 km northwest of the central part of Shanghai. In Taicang City, we are implementing a project to build condominiums with 511 residential units in a lot of about 78,700 m<sup>2</sup>. Taicang City is the closest city to the central part of Shanghai and our project is conveniently located adjacent to a shopping complex, hospitals, hotels and other urban facilities. Taking advantage of this location, we have embarked on the construction of the largest condominiums in this area with a residential unit measuring about 300 m<sup>2</sup> on average.

Committed to offering secure, safe, healthy and comfortable housing products, we have employed building materials that emit less chemical substances and adopted open floor plans, taking into consideration the amount of sunlight and south-north airflow, to provide functional and comfortable indoor spaces. By providing some of the buildings with rooftop gardens, we will create a



Condominiums and townhouses in Suzhou City (Artist's rendering)



Townhouses in Shenyang City Hunnan New District (Artist's rendering)



Condominiums in Taicang City (Artist's rendering)



Yugin Residence project in Wuxi City (Artist's rendering)

pleasant green landscape that allows people to feel the flow of wind, light and water, thereby offering an eco-friendly living environment. In doing so, we aim to develop a community that will grow more attractive with the passing of time, and that will inspire residents' attachment to the neighborhood accordingly.

Piling work officially started in January 2013, and the sales center and model room had their grand openings in mid-May

Another of our ongoing projects is the Yuqin Residence project in Wuxi City being carried out on Lake Tai-one of the three most famous lakes in China.

The Wuxi New District, where the development site is located, is in the southwestern part of Wuxi City. This is a new urban center with a new municipal government building as well as modern office buildings, hotels and residential housing. It has a beautiful natural environment and is very conveniently located. On the south side of the development site is a park that faces Lake Tai and on the west side, there is a renowned Buddhist temple, Jinghui Temple. On the north side, a new school has just opened, and is said to be one of the best schools in the city.

The project site covers an area of about 12.6 hectares, where townhouses, low-rise apartments, condominiums, and commercial facilities are being constructed. By carrying out this large-scale complex development project, we aim to create a pleasant living environment that constitutes a natural part of the surrounding landscape. Also, we are selecting and planting tree species in consideration of local ecosystems as part of the exterior construction work, and at the same time are enhancing the waterfront area to ensure the long-term protection and preservation of the local natural environment.

We launched the project at the end of 2012 and will begin the sale of subdivisions in the autumn of 2013.

#### Providing training to upgrade the professional skills from a global perspective to contribute to enhancing the technical competences of Chinese construction workers

Continuously providing training for construction workers from a global perspective is critical to our efforts to assure the quality of our housing products. To keep our construction quality at a high level, Chinese construction workers are obligated to undergo training at a training school opened on the premises of the Shenyang factory, where they deepen their understanding of steel-frame structures and exterior wall work and improve their ability to maintain constantly high work performance

In addition to this local training, we implement an on-the-job training program in Japan. In this training, Chinese trainees are invited to Japan to work at construction sites to develop construction skills for a period ranging from one to three years. After the training is over, trainees return to China with the latest knowledge and technical skills, which will help them in their work.

Currently, three Chinese trainees are working at Japanese construction sites to learn our construction methods under this program. We also implement a continuous on-the-job training program for construction supervisors for a period lasting between several weeks to several months.

Through these training programs, we ensure high performance of both construction workers and supervisors at construction sites in China so that high- quality housing products are always supplied to the Chinese market.



A Chinese trainee learns about the construction method of the " $\beta$  system", Sekisui House's original industrialized housing system.

#### Voice from Chinese trainees working with Sekiwa Construction Hanwa Co., Ltd.

#### I will share the knowledge I have learned in Japan with my colleagues in China

I am impressed with the diligence and strong sense of responsibility of my Japanese colleagues. They seldom talk about non-work-related matters while at work, and fully dedicate themselves to the tasks assigned to them. Even when construction work enters a new stage, they act on their own judgment to the fullest possible extent, instead of simply waiting for instructions from their supervisors.

In China, we have a saying which means "see for yourself where there is work to be done." Learning from the positive attitude of Japanese workers, I am determined to study

hard during my year in Japan, never wasting even one minute. After returning to China, I will share with my colleagues my knowledge about construction and the Japanese mindset toward



Mr. Fan Zhiyong

#### Studying the Japanese language to better understand the way construction work is done

All the Japanese workers I have met at construction sites are very industrious and concentrate on their tasks at all times. I want to be more like them and so make an effort every day.

My present goal is to learn everything about construction techniques during my year in Japan, Also, I will use my free time to master Japanese, as I think Japanese proficiency is necessary to accelerate my learning of construction work and enhance my technical competence

While only a few months are left before the

end of the training, I will do my utmost to learn the latest construction techniques, which I will apply to construction work in China and share with my Chinese colleagues. toward work.



Mr. Li Digang

#### I want to become an expert in the $\beta$ system

At the beginning of the training in Japan, I had difficulty communicating and felt physically tired, but these were just minor problems and hardly affected the training itself. I want to learn more about construction techniques and develop expertise in the ß system. which I will put to use in the construction projects I will undertake in China. Also, I will try to find time to increase my Japanese proficiency, which will enable me to have smooth

communications with Japanese coworkers in China after my return.



Mr. Wu Tao

#### Australia —

#### Introducing the "satoyama" design and contributing to thriving communities



In Australia, we have been engaged in the development of condominiums, residential areas, and complex facilities mainly in the Sydney and Melbourne areas.

In Wentworth Point in the suburbs of Sydney, we completed the construction of three condominiums with a total of 678 residential units. All of these units have been sold and many people have already moved in.

Since the beginning of the project in 2009, we have been promoting the development of condominiums in Wentworth Point in line with our Urban Development Charter to contribute to creating sustainable communities as we have done in Japan. For example, we employed the "satoyama" design in landscaping the condominiums' inner gardens, under which underground parking lots were built. Satoyama refers to a natural environment that has been moderately modified by humans. We created an Australian version of satoyama by planting native plant species to provide a sense of continuity with the green environment of the national natural park in the vicinity so that the communities will be visited by more wild birds. Here, various community activities are conducted and joined by many residents. Our local subsidiary contributes to the prosperity of the communities by cooperating with residents in organizing community events held twice a year, while offering opportunities for friendly interactions among residents and between residents and Sekisui House employees.

In Camden Hills, a newly developed residential area in the suburbs of Sydney, we began selling subdivisions in March 2012 and have sold all the 79 subdivisions in the first-phase development district. Subdivisions in the second- to fourth-phase development districts are also selling well, and many houses are currently under construction in the first-phase development district. In March 2013, we held the first community event in Camden Hills in commemoration of the first anniversary of its opening, inviting residents from Camden Hills and neighboring communities. While the market for new residential areas is highly competitive, visitors to Camden Hills are deeply impressed and highly compliment our sustainable community development initiative, as well as our landscaping policy to preserve existing trees and make the most of local historical and geographical features.



In Central Park at the center of Sydney, we are undertaking the development of a mixed-use community with Frasers Centrepoint, our joint venture partner with whom we collaborate also in Singapore. The community under development spans five hectares in area, and includes condominiums with about 2,000 residential units, office buildings, the equivalent to five floors of commercial facilities, and housing for students. In June 2013, we began delivering the condominium residential units completed in the first phase of the project to customers, who highly recognize the value of our environmentally conscious housing concept.

This project is characterized by the adoption of an eco-friendly tri-generation system, which uses gas to produce electricity, hot water and chilled water; the reuse of rainwater and wastewater after filtration to sprinkle over plants in the project area; the restoration of an old beer brewery as a historical monument that symbolizes the community; and, most notably, the introduction of wall greening that is proven effective in reducing CO<sub>2</sub> emissions and light penetration into buildings. Upon completion of the project, green walls will be extensively created in the community with the number of plants on the walls amounting to 80,000.



Camden Hills (Artist's rendering)



Central Park

#### Singapore

#### Creating a sustainable living environment by pursuing our homebuilding philosophy as a new standard of value



In Singapore, we have been carrying out the "Boathouse Residences," "Punggol Watertown" and "Hillsta" development projects. In addition to these three projects, we embarked on two more projects; namely, the "Bedok eCO" and "Tampines QBay" projects, with our joint venture partners in 2012. With favorable sales of the housing products developed under these projects, the unique additional value we have created from a resident's viewpoint has been penetrating the Singapore market.

The Boathouse Residences project is implemented in an established residential area, where we are undertaking the construction of condominiums beside a river, alongside which there is a pleasant jogging trail. By employing a simple design concept, we are creating a calm, comfortable living environment.

The Punggol Watertown project is designed to create a mixed-use community that is comprised of commercial facilities and condominiums with 992 residential units to add to the attractiveness and popularity of the Punggol Waterway, on which the government places special importance as a waterfront space of the 21st century. Boasting great convenience with direct accessibility from an MRT Station, the commercial facilities are expected to bring a new lifestyle concept to the neighborhood, while the residential space that overlooks the waterway ensures pleasant living environment.

The Hillsta project involves the construction of condominiums with the "satoyama" landscaping concept that is at the core of our community development philosophy. To make optimal use of the hilly terrain, we are creating a green network by connecting green

spaces, thus developing a high-quality residential environment where residents can interact daily with nature. The community consists of high-rise condominiums as well as low-rise townhouses, which together constitute a tranquil and sophisticated environment.

In the Bedok eCO project, we employ a sustainable, nature-friendly community design. We also built model rooms leveraging our superior design capability to allow visitors to learn, first-hand, about the usability of our housing and the highly functional and efficient floor plans. Our efficiently designed compact residential units, created in a manner that suits local needs and individual lifestyles, have been favorably received as a new housing concept, and reported in the media.

The housing units built under the Tampines QBay project incorporate various unique innovations. For example, we make the space around kitchen counters usable for various purposes as we do when building Japanese detached houses, and incorporate the guest house design that we employed in our condominium development projects. Such unique features have increased in popularity and contributed to successful sales results.

Two years have passed since we launched the first project in Singapore in 2010. During this time, we have deepened our amicable relationships with our joint venture partners, while introducing to the Singaporean market the pool of know-how we have built in Japan. We will continue our efforts to offer more comfortable and attractive living environments so that the new value we have created from a resident's viewpoint will be a part of the housing culture of this country.



ouse Residences (Artist's rendering)



Punggol Watertown (Artist's rendering)



Hillsta (Artist's rendering)



Tampines QBay (Artist's rendering)



## As a venue to co-create new housing culture with our stakeholders

## **Opening SUMUFUMULAB**

On April 26, 2013, we opened the industry's first open innovation base in Knowledge Capital, in Grand Front Osaka, a modern shopping and business complex recently completed in Osaka's Umekita area.

生きるコトを、住むコトに。

## SUMUFUMULAB

## Opening the industry's first information and R&D base designed to create new values by combining sensibility with technology

Grand Front Osaka is Osaka's new landmark facility that houses modern business offices and shops. As a core part of this shopping and business complex, Knowledge Capital is designed to create new values by combining human sensibility with technology and develop innovative products and services.

Sekisui House opened the industry's first open innovation base, SUMUFUMULAB, in the Future Life Showroom in Knowledge Capital. From here, we will create new housing culture through collaboration with stakeholders in various sectors.







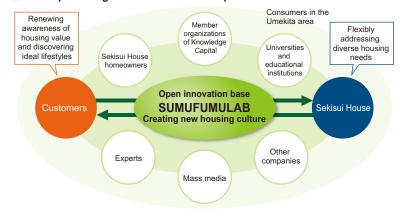
## Co-creating new lifestyles together with stakeholders under the motto, "quality housing is the key to a happy life"

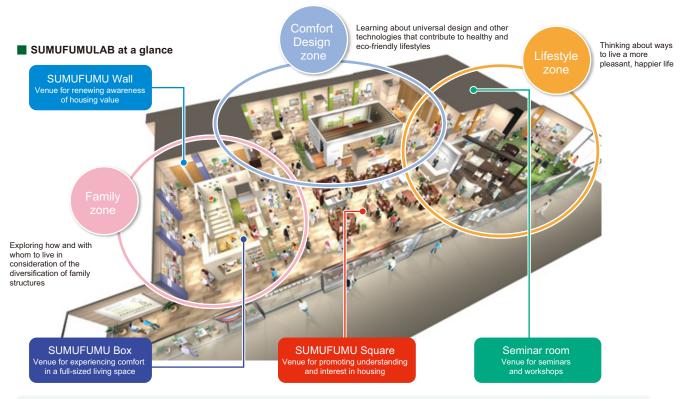
Today, our lifestyles are affected by various changes, such as changes in family structure and work styles, diversification of communities, and a growing awareness of environment- and health-related issues. Against this backdrop, attempts to explore ideal ways of living, not bound by conventional ideas of housing, are becoming more critical to leading a happy and comfortable life.

To address such societal needs, SUMUFUMULAB provides a venue to co-create new lifestyles to better enjoy life, focusing on making the time we spend at home more pleasant, under the motto, "Quality housing is the key to a happy life." Located in the Umekita urban center that attracts people of all ages and with different values, our SUMUFUMULAB invites visitors to think about the significance of living with people dear to us in a healthy, comfortable and pleasant environment, in light of the diversification of lifestyles. In doing so, we hope to promote innovations in housing culture and communicate our message widely to the public. SUMUFUMULAB is expected to play an important role as a platform for developing new projects and creating new values by encouraging interactions among professionals and specialists in various sectors, including our customers who are professional consumers and Sekisui House, a professional homebuilder; as well as experts, universities, educational institutions, member organizations of Knowledge Capital, the mass media and various other companies.

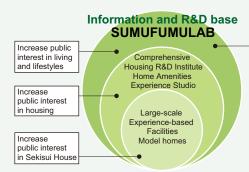
SUMUFUMULAB will embark on new initiatives for the future in succession as an information base that enables all stakeholders to refine their sensibilities and discover their ideal lifestyles, and also as an R&D base that encourages innovation through co-creation.

#### Conceptual diagram of the co-creation process at SUMUFUMULAB





■ The position of SUMUFUMULAB in public facilities of Sekisui House



Collaborating with consumers, experts, universities, educational institutions. mass media, member organizations of Knowledge Capital, and companies

#### Meaning of SUMUFUMULAB

"SUMU" means "to live" in Japanese and "FUMU (FUMU)" is a sound uttered when one is convinced of something. As this name indicates SUMUFUMULAB is a facility designed to stimulate the sensibilities of visitors by providing information, staging events and exhibitions, and offering opportunities for visitors to deepen their understanding of housing, think about "living" through hands-on experience, and discover how to better enjoy life, thereby convincing them of a new "value" of housing.



#### Basic data of SUMUFUMULAB

Name · SUMUFUMUI AB

Venue: Future Life Showroom on the 4th floor of Knowledge Capital in Grand Front Osaka in the Umekita area, Osaka City

: About 660 m<sup>2</sup>

#### **Providing visitors with opportunities** for hands-on experience of living comfort in a full-sized living space in three zones, while implementing a "co-creation" collaborative program

SUMUFUMULAB consists of three zones; namely, "Family," "Comfort Design" and "Lifestyle," each of which is furnished with attractive facilities such as the "SUMUFUMU Box" where a full-sized living space is open for visitors, the "SUMUFUMU Wall" which prompts visitors to renew their awareness of housing value, and the "SUMUFUMU Square," which is a venue to promote visitors' understanding and interest in housing in a relaxed setting like that of a cafe. From these facilities, visitors can learn many things about housing and living, ranging from the social background of homes and lifestyles to the latest technologies. Such knowledge, in turn, helps them discover their ideal lifestyles. Visitors can also participate in R&D programs by attending workshops and various other events.

In addition, we started "House of Dialogue," a long-running program, in SUMUFUMULAB as part of our "co-creation" efforts with "Dialogue in the Dark" (DID)—a much talked-about international project that gives visitors a unique experience of discovering how sharp their five senses are in complete darkness. By collaborating in this revolutionary project—which has been already attended by 100,000 people in Japan alone—we offer opportunities for visitors to learn and think about what it means to enhance their living comfort and to restore relationships.

At SUMUFUMULAB, we implement the PDCA cycle that consists of the abovementioned activities and continue efforts to create new values by leveraging the latest technologies, in partnership with visitors and our partners in "co-creation" programs. In so doing, we aim to make our "SLOW & SMART" housing culture widely known to the public.

#### "Co-creation" activities at SUMUFUMULAB

#### Visitors and partners in 'co-creation'' programs

Refine sensibilities in a relaxed setting like that of a library or a cafe

Discover new ideas for living and ideal lifestyles

Contribute to creating future lifestyles by joining "co-creation" efforts

#### Sekisui House

Collect responses from visitors and use the data for R&D purposes

Promote "co-creation" efforts in partnership with consumers, member organizations of Knowledge Capital and researchers

Enhance the social value of the company (to garner greater support in society)

- Send messages from SUMUFUMULAB and its website and offer information to consumers
- Organize workshops jointly with consumers and various other stakeholders and promote planning of new product development
- Communicate information widely to the public through the mass media

In addition, we are going to implement events in cooperation with all Knowledge Capital members.



#### Dialogue in the Dark

Groups of visitors are guided around a space of complete darkness where they explore and experience various settings led by experts in the world of darkness (visually impaired