MITSUI FUDOSAN GROUP

For immediate release

人を、想う力。街を、想う力。 **三菱地所グループ**

Mitsui Fudosan Residential Co., Ltd. Mitsubishi Estate Residence Co., Ltd.

Phase 2 advance information sessions scheduled to start September 15, 2023 (Friday) Mita Garden Hills

WEST HILL building to go on sale

- Introduces Carbon Neutral Design Plan for Improving Wellbeing, and Biophilic Design Plan -

Tokyo, Japan, September 12, 2023 - Mitsui Fudosan Residential Co., Ltd. and Mitsubishi Estate Residence Co., Ltd. announced today that Phase 2 advance information sessions (by reservation only) for the Mita Garden Hills project ("Project") built-for-sale condominium under construction in Mita 1-chome, Minato-ku are scheduled to start on September 15, 2023.

With the aim of realizing a sustainable society, the Project offers a landscape design of approximately 82,900ft² (approx. 7,700m²) to preserve and restore the existing building and trees and maintain the valuable green environment, as well as including various environmentally-friendly features such as the use of solar power generation equipment and fuel cells, and all units being ZEH-Orientated. For the Phase 2 WEST HILL building (8 stories) planned for sale, two natural harmony-type plans that further consider the environment are on offer. These plans aim to improve wellbeing^{*1}, with the "Carbon Neutral Design Plan" avoiding relying exclusively on advanced equipment for energy generation, instead using an architectural planning design guided by traditional Japanese wisdom for lifestyles and homes, as well as a "passive design" for comfortable living harnessing the force of nature to reduce energy consumption and CO₂, and the "Biophilic Design Plan" aiming to release human energy by utilizing various natural elements in the residence.

Mitsui Fudosan Residential and Mitsubishi Estate Residence will continue to provide products and services for diverse lifestyles, as well as promote safe, secure and comfortable neighborhood creation, and contribute to a sustainable society and SDGs.

Features of WEST HILL

- **1.** The only 8-story building in the Project, that offers a more intimate enjoyment of greenery Plentiful variations offering various outdoor areas such as large roof balcony and terrace
- 2. Two "natural harmony plans" that aim to improve wellbeing
- (1) Carbon Neutral Design Plan
 - -Achieved primary energy consumption volume rate reduction of approx. 53%*2-
 - (i) Energy saving through architectural planning design
 - (ii) Other initiatives to realize a sustainable society
 - (2) Biophilic Design Plan -Incorporate greenery within units to create a space at one with nature-(i) Planning that embodies biophilia
 - (ii) Various innovations to sense nature through the five senses
- **3.** "Lifestyle support plan" that provides a more comfortable lifestyle
 - (1) Housework support plan -Housekeeper plan to reduce burden of housework-
 - (2) Care home attendant
- -Living close support service-



[Image of the completed WEST HILL building]

1. The only 8-story building in the Project, that offers a more intimate enjoyment of greenery

The WEST HILL building provides a more intimate enjoyment of greenery, one of the symbolic elements in the Project. As well as the central garden, there is a lush vegetation zone on the west-side of the building, offering a lifestyle enveloped by greenery. Various plan variations offer units ranging from approximately 600ft² (approx. 56m²) to 1,960ft² (approx. 182m²), including some units boasting a large terrace (average area of approximately 527ft² (approx. 49m²)) and large roof balcony (average area of approximately 474ft² (approx. 44m²)), creating a rich outdoor space unusual in an urban residence.



[Image of the completed project seen from Tsunamachi Mitsui Club (Main building: left center)]



[Image of the overall building placement]



[Image of the completed Carbon Neutral Design Plan]

2. Two natural harmony plans aimed at improving wellbeing

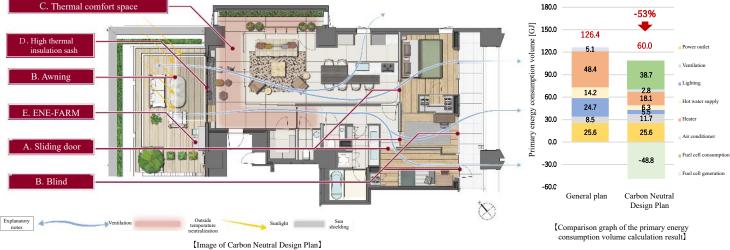
The Project contributes to carbon neutrality through various initiatives such as the installation of solar power generation equipment, and all units being ZEH-Orientated, but also offers further initiatives for a proposed "new lifestyle and homes" that can also improve wellbeing. Two new "natural harmony plans" are offered at the WEST HILL building with its closer connection to nature.

(1) Carbon Neutral Design Plan^{*3}

-Achieved primary energy consumption volume rate reduction of approximately 53% -

The Carbon Neutral Design Plan reduces primary energy consumption volume by approximately 53% through "avoiding relying exclusively on advanced equipment for energy generation, but also using architectural planning design guided by traditional Japanese wisdom for lifestyles and homes" as announced by the Mitsui Fudosan Group at CES2022.

The characteristic of this plan is a space design inspired by the concept of passive design seen in Japanese homes that is "in harmony with nature, living comfortably by utilizing this power," rather than being about using equipment or devices to artificially control the environment. The flow of air around the entire residence is ensured by the use of sliding doors to create air flow using the design concept of *fusuma* (traditional sliding door made from solid frame) and *shoji* (traditional sliding door made from paper on wooden latticework frame), with the aim of reducing the temperature through natural ventilation. Additionally, a new central area thermal comfort space like a porch connecting the exterior and interior that incorporates the concept of using the space itself as a heat insulating layer is expected to suppress the impact of outside temperature changes on the living room and dining room. Additionally, awnings and blinds such as eaves and bamboo screens that can adjust sunlight have been installed.



⁽The equipment shown can be selected as an option in some residences)



[Image of the same type general plan]

Energy saving through architectural planning design <u>A. Improved ventilation (sliding door)</u>

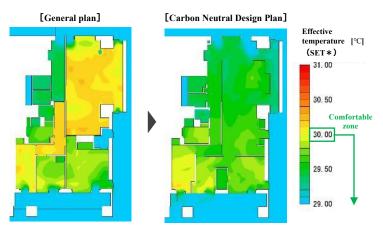
- Design making efficient use of natural ventilation without using energy through the installation of sliding doors in locations with effective ventilation, and planning based on the wind environment of the area periphery and air circulation within the residence to allow air flow throughout the residence.
- Quantification of energy consumption volume^{*4} by calculating the period for comfortable living without using air conditioners by measuring the change in temperature environment after improving ventilation in the residence using the effective temperature index $(SET^*)^{*5}$.

B. Sun shielding (awning, blind)

• Awnings are installed in front of the large sashes facing roof balconies where sunlight causes significant temperature changes, and blinds are installed in front of each sash within the residence. The aim is to shield the residence interior from sunlight to suppress rises in internal temperature, reducing the use of air conditioners.



[Image of completed Carbon Neutral Design Plan]



[Image of changes in effective temperature through natural ventilation] (Calculation based on late June, daytime, outside temperature of 28°C, humidity of 67%)



[Image of the completed awning]

[Image of the completed blind]

C. Outside temperature neutralization (thermal comfort space)

- •A central area thermal comfort space that reduces temperature changes from outside temperature is located between the balcony and the living and dining space. During the summer and winter when temperatures change significantly, partitioning the space using sliding doors reduces the area subject to air conditioning, while simultaneously using the space itself as a heat insulating layer to act as an outside temperature neutralization area, thereby reducing temperature changes in the living and dining space and reducing the use of air conditioning and heating. Even in winter, the trapping of daytime sunlight and the thermal effect creates a comfortable space with the warmth of a veranda for a certain period without using heaters.
- During seasons when the outside temperature is comfortable (spring and fall), a comfortable temperature environment can be maintained without air conditioning and heaters by opening the windows and sliding doors to allow natural air to enter the residence.
- The room can of course be used as a den, or alternatively enjoyed as a hobby display or storage space. As the space between the entrance hall and the living room/dining room/kitchen (LDK) is one single continuous space, it can also be used a large living room/dining room/kitchen measuring over 592ft² (55m²).



D. Enhanced insulation (high thermal insulation sash)

• Aluminum resin composite high thermal insulation sashes are used at large openings that capture and lose heat. Enhancing insulation performance suppresses the impact of outside temperature changes on units, and reduces the use of air conditioners and heaters.

E. Waste heat utilization (ENE-FARM)

• ENE-FARM residential fuel cells are used to reduce energy loss by heating water utilizing heat lost during power generation. Power generation through gas is also possible during power outages^{*6}, enhancing the residence's resilience during disasters.



[Image of ENE-FARM]

2 Other initiatives aimed at creating a sustainable society

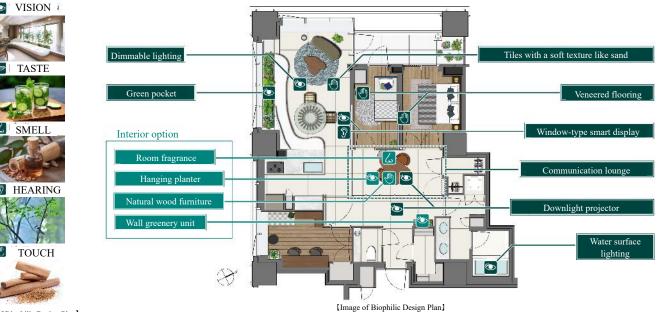
In addition to planning design, the interior design also aims to contribute to carbon neutrality. In collaboration with Mitsui Fudosan Group's MITSUI Designtec Co., Ltd., eco-friendly materials, furniture and accessories from an SDG perspective are offered^{*7}, such as FSC-certified^{*8}, 100% recyclable, and carbon offset, with the aim of creating a sustainable society.

(2) Biophilic Design Plan^{*9} – Incorporate greenery within units to create a space at one with nature –



In modern society, many people face issues such as daily stress, tiredness and mental health problems. It has been demonstrated that plants provide many positive psychological effects such as calming autonomic nerves to help relaxation, and improving concentration, meaning it is important increase to opportunities to connect with nature on a daily basis.

[Completed image of Biophilic Design Plan]



[Image of Biophilic Design Plan]

(Equipment shown for this unit contains some equipment included as standard, and some that can be selected as an option. Some can also be selected as an option in other units. Planting is not included.)

1 Planning that embodies biophilia

The Biophilic Design Plan aims to draw out humans' inherent energy through an intimate connection with various natural elements such as plants in units based on the concept of biophilia^{*10}, thereby improving the happiness and productivity of residents. The proactive use of plants in units that are said to purify air also offers a healthier living environment. Based on the Mitsui Fudosan Residential brand concept "Life-styling x Improving with age," and the Mitsubishi Estate Residence brand concept, "A Home for Life," this offers a biophilic lifestyle with real plants raised by residents that become ever more beautiful over time.

A. Plant cultivation and placement

Mitsui Fudosan Group has collaborated with Daiichi Engei Co., Ltd. to select diverse plants that recreate lush forest-like nature and offer an efficient planting layout. A green pocket immersion-type sensory space provides outdoor-like lush greenery. The green pocket also provides water supply and drainage equipment to lower the hurdles to indoor greenery. A wall greenery unit and hanging plants offer indoor greenery without taking up floor space, creating a three-dimensional space.



[Image of completed green pocket]

[Image of completed green pocket (left) and handing plants (right)] [I



[Image of completed wall greenery unit]

B. Design that increases visibility of indoor greenery in the unit

The communication lounge uses transparent glass doors to enable continuous contact with indoor greenery located in various locations around units. The communication lounge offers views of the green pocket, allowing continuity of greenery throughout the space as well as increasing opportunities to naturally view plants when spending time at home. Multiple movable partitions that permit highly changeable space configurations meet a wide range of needs according to diverse lifestyles and life stage changes.



[Image of completed communication lounge]

(I) Second living room independent but close to LDK



(II) Large LDK integrated with LDK



[Image of communication lounge variations]

[Image of completed LDK to communication lounge]

(III) Private room-type space that supplement both rooms



2 Various innovations to sense nature through the five senses

In addition to greenery from plants, various innovations that appeal to the five senses such as sight, sound, light, smell, texture, touch and taste have been incorporated into the design in order to gain maximum benefit from the biophilic design.



[Image of completed downlight projector]

[Image of completed window smart display]

[Image of completed dimmable lighting]

- ✓ Sight and sound A downlight projector that can project natural images such as the shade of trees swaying in the breeze and water surfaces provide a relaxing effect derived from fluctuation. The window-like high-definition window smart display shows realistic natural scenery images, with the display itself also a speaker, allowing replays of powerful natural sounds that create an immersive natural sensory space.
- ✓ Lighting Dimmable color lighting that reproduces the wavelength of solar light suitable for plant cultivation supports the maintenance and cultivation of plants within the unit. Reproducing the transition of natural light through light scene settings and automatic switching supports the maintenance and correction of the circadian rhythm^{*11}, and color temperature and color adjustments aid improved concentration and appetite, to create a healthier living environment.

✓ Smell, texture, touch and taste

Units incorporate innovations to more intimately feel nature using the five senses, such as furniture made from natural wood, room fragrance extracted from natural ingredients, tiles with a soft texture like sand, and green pockets with indoor flowerbeds to enjoy homegrown herbs or other plants.

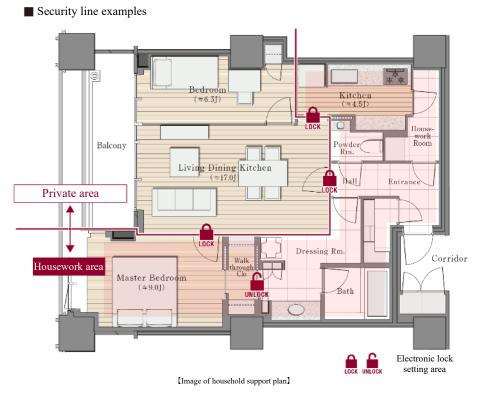
3. Lifestyle support plan for a more comfortable lifestyle

The Project offers lifestyle plans and soft services aimed at busy dual-income families and senior citizens that reduce the housework burden to achieve a freer and more comfortable lifestyle. These were planned with input from partners of the Mitsui-No-Sumai Loop resident service operated by the Mitsui Fudosan Group.

(1) Housework support plan^{*12} – Housekeeper plan to reduce burden of housework –

A housework support plan option is offered that reduces the housework burden and considers the convenience of the housekeeper as well as the user.

- Linking the entrance door electronic key to an app allows a resident to grant timelimited unlocking authority to a third party such as a housekeeper. An outside visitor can enter units using a smartphone only during designated times even if a resident is away...
- ② This allows the setting of a security line within a unit using electronic locks to restrict third-party access to certain rooms such as the LDK or master bedroom. A smartphone can be used to change the restricted area.
- ③ The housework space layout and facilities were also examined, and the high-use door between the living room/dining room and kitchen was made electronic to make it user-friendly for the housekeeper as well as for the convenience of the resident.



(2) Care home attendant^{*13} – Living close support service –

The living close support service care home attendant is offered. This provides convenient services to support daily life aimed mainly at busy dual-income families and senior citizens. Offered services include basic cleaning within units, as well as meal preparation that can include grocery shopping, and an Internet auction listing service. Other services aimed at senior citizens include communication care support that offers consultation and help for daily matters with an emphasis on conversation with the user, offering services for every lifestyle.

- (Examples of service menu)
- •Basic cleaning of unit
- ·Laundry and garment organization
- Meal preparation^{*14}
- •Internet auction listing service^{*16}
- •Grocery shopping service*15
 - ·Communication care support



[Image of service menu]

Outline of CES2022 Carbon Neutral Design

•For the realization of a carbon neutral society, Mitsui Fudosan Residential reaffirms the concept of the Japanese home that is environmentally friendly and has existed with nature, and integrated this with technology to further advance the comfort of Japanese homes to create the new housing concept of Carbon Neutral Design, and displayed this concept plan at the CES2022, the world's largest electronic exposition.

- Japanese homes contain many features to aid comfortable living by harnessing the force of nature, using middle areas such as large eaves and verandas to adjust sunlight, and opening *shoji* and *fusuma* to create air circulation, as well as for sensing coolness and changing seasons using the five senses. They are also called long-life houses that adapt to life stages by changing layouts through the closing and opening of partitions.
- •As well as a space for experiencing the "passive design" unique to Japan, a new lifestyle format for now into the future that combines Japanese wisdom with cutting-edge technology was presented using a model of a condominium private floor unit and images.



[Expo images of the CES2022 Mitsui Fudosan residential booth]

- *1 Wellbeing means the state of being physically, mentally and socially fulfilled (1948 Constitution of the World Health Organization (WHO)).
- *2 For the Project, energy consumption volume reductions were quantified through the use of BEST-H (housing environment design tool) to take into account elements that can contribute to energy consumption volume reductions (such as indoor temperature reduction effect through air circulation improvement, and sun shielding effect of opening and closing awning) (cooperation for environmental analysis consulting from Nikken Sekkei Ltd and Nikken Housing System Ltd). More specifically, BEST-H simulated the primary energy consumption reduction effect that includes energy-saving initiatives through elements not set out in categories in the ZEH-certified system Web Program (program conforming to energy saving standards for housing) for housing, and this figure calculated by comparing it to a "general plan" for a residence with an ordinary specification and certain set conditions. Calculations were made setting an assumed lifestyle schedule of a family living in a Carbon Neutral Design Plan unit and an operation schedule of each facility based on this, and as the unit layout and assumed family composition used as the basis for calculations using BEST-H and the Web Program differ in some aspects, the calculated primary energy reduction volume figures differ. The details are simulated verification result, so do not guarantee the CO₂ emissions volume reduction, utilities fee reduction or improved comfort for each unit plan.
- *3 Applies to some units in the WEST HILL building, or is a menu plan for a fee.
- *4 The assumed air conditioner usage period was 117 days a year for the general plan, and 81 days a year for the Carbon Neutral Design Plan, and the primary energy consumption reduction amount was calculated using these usage periods.
- *5 SET* (Standard Effective Temperature) is an effective temperature index that is widely used by researchers and air conditioning engineers. This index is calculated using the four heat elements of air temperature [°C], relative humidity [%], air velocity [m/s], mean radiant temperature [°C], as well as metabolic rate due to activity (met) and resistance of clothing (clo). For the Project, certain conditions were set and the effective temperature calculated including ventilation (comfortability).
- *6 Requires gas supply, and ENE-FARM to be generating power at time of power outage.
- *7 MITSUI Designtec Co., Ltd. offers sales and consultations for applicable products
- *8 FSC-certified: structure provided by the Forest Stewardship Council®, with the mark granted to products manufactured from raw materials products under appropriate forestry management from the perspective of environmental conservation.
- *9 Applies to some units in the WEST HILL building.
- *10 Biophilia is the concept that "people instinctively seek life", and "people gain health and happiness by interacting with nature" as advocated by Edward O Wilson, an American biology researcher, in 1984. The effect of biophilic design incorporating biophilic concepts has been demonstrated in countries around the world.
- *11 Circadian rhythm means the roughly 24-hour cycle biological rhythm inherent in humans, and breaking this is said to potentially cause sleep disorders and other issues.
- *12 Applies to some units in the WEST HILL building, or is a menu plan for a fee.
- *13 Is a charged service expected to be offered for the entire Project. The details of the service menu may change.
- *14 Meal recipes are limited to general recipes
- *15 Stores and products that can be used with this service are limited.
- *16 Auction sites for listing are limited.

■ Overview of Mita Garden Hills

Location	102-1 Mita 1-chome, Minato-ku, Tokyo
Access	A five- to seven-minute walk from Azabujuban Station on the Tokyo Metro Namboku
	Line and the Toei Oedo Line
	A 10- to 12-minute walk from Shibakoen on the Toei Subway Mita Line
Zoning	Type two residential area and type one educational district
Structure/scale	Ferroconcrete construction, 2 floors below grounds, 14 floors above ground, and other
	structures
Site area	271,752ft ² (25,246.57m ²)
Private floor areas	315.81ft ² - 4,052.6ft ² (29.34-376.50m ²)
Floor plans	1R - 4LDK
Total number of units	1,002 (with two additional areas for stores)
Opening date of residential sales	October 14, 2022
salon	
Start of Phase 2 sales	November 2023 (planned)
Completion date	March 2025 (planned)
Architect/Builder	TAISEI CORPORATION
Official website	https://www.31sumai.com/mfr/X1712/

■ Project site map



■ [Reference] Press releases for Mita Garden Hills

https://www.mitsuifudosan.co.jp/english/corporate/news/2022/0425/download/20220425.pdf https://www.mitsuifudosan.co.jp/english/corporate/news/2022/1013/download/20221013.pdf

[Mitsui Fudosan Group's Contribution to SDGs]

https://www.mitsuifudosan.co.jp/english/esg_csr/

The Mitsui Fudosan Group aims for a society that enriches both people and the planet under the principles of coexist in harmony with society, link diverse values and achieve a sustainable society, and advances business with an awareness of the environment (E), society (S) and governance (G), thus promoting ESG management. By further accelerating its ESG management, the Group will realize Society 5.0, which the Japanese government has been advocating, and contribute significantly to achieving the SDGs. Additionally, the Group formulated the following Group guidelines related to "Realize a Decarbonized Society" and "Diversity & Inclusion Promotion" in November 2021, and "Biodiversity" in March 2023. The Mitsui Fudosan Group will continue to work toward solving social issues through neighborhood creation.

[References]

Group Action Plan to Realize a Decarbonized Society <u>https://www.mitsuifudosan.co.jp/english/corporate/news/2021/1124</u>
Formulated Diversity and Inclusion Promotion Declaration and Initiatives Policy <u>https://www.mitsuifudosan.co.jp/english/corporate/news/2021/1129_02/</u>
Mitsui Fudosan Group Biodiversity Policy <u>https://www.mitsuifudosan.co.jp/english/corporate/news/2023/0413/</u>

About Mitsui Fudosan Residential's Carbon Neutral Design Promotion Plan (only in Japanese)

https://www.mfr.co.jp/content/dam/mfrcojp/company/news/2022/0315_01.pdf

Initiatives include saving energy by improving the performance and durability of homes and promoting the introduction of renewable energy as well as provision of services that enable residents to enjoy contributing to the environment through energy conservation and other activities after moving into this condominium. In this way, the Company aims to realize carbon neutrality in both homes and living.

Mitsui Fudosan Residential's First Exhibit at CES 2022 for Carbon Neutral Design

https://www.mfr.co.jp/content/dam/mfrcojp/company/news/2022/0105_01.pdf (Only in Japanese)

For the realization of a carbon neutral society, Mitsui Fudosan Residential reaffirms the concept of the Japanese home that is environmentally friendly and has existed with nature, and integrated this with technology to further advance the comfort of Japanese homes to create the new housing concept it has position as Carbon Neutral Design, and displayed this concept plan at the CES2022, the world's largest electronic exposition, held in Las Vegas, Nevada, U.S. from January 5 to 7, 2022 (local times).

[Mitsubishi Estate Group's Initiatives]

The Mitsubishi Estate Group has established the Mitsubishi Estate Group Sustainability Vision 2050, articulating the vision it aims to achieve by 2050. In order to realize this vision, the Group has established Mitsubishi Estate Group 2030 Goals for SDGs in its 2030 Long-Term Management Plan. They are positioned as milestones that define various themes and actions in working to achieve the 2050 vision. Mitsubishi Estate Group is committed to providing even greater value to a wider range of stakeholders in the four key themes of Environment, Diversity & Inclusion, Innovation, and Resilience.

[Reference]

Mitsubishi Estate Group's sustainability website https://mec.disclosure.site/e/sustainability/

In March 2022, Mitsubishi Estate Group took steps towards realizing a decarbonized society by formulating new reduction targets for emissions of greenhouse gases such as CO_2 and making a 2050 net zero declaration aligned with the standards announced by the SBTi. The Mitsubishi Estate Group continues in its aim to realize a sustainable society through business activities as an advanced ESG company.

■ About Mitsubishi Estate Residence's "CO₂ Emission Reduction Strategy"

https://www.mec-r.com/news/2022/2022 0112 02.pdf (only in Japanese)

Mitsubishi Estate Residence aims to reduce CO_2 emissions by 50% from 2019 levels by 2030 to accelerate initiatives to realize a decarbonized society.

* The initiatives covered in this press release are contributing to five of the UN's SDGs.

