



July 23, 2019

To whom it may concern

TOKAI Holdings Corporation  
Katsuhiko Tokita, President & CEO  
(Code No. 3167 Tokyo Stock Exchange First Section)

## **Commencement of Sales of “OTS House” Realizing Complete Self-sufficiency in Water/Electricity**

TOKAI Holdings Corporation is pleased to announce that TOKAI CORPORATION (hereinafter “TOKAI”), our wholly owned subsidiary, will launch “OTS\* House” in July 23 which ensures a normal life as usual even in the face of power and water outage due to disasters and other phenomenon by realizing complete self-sufficiency in water and electricity as per the attached.

(\*OTS is an abbreviation for “On the Spot”)

TOKAI’s OTS House was constructed in October 2017 as a conceptual housing in Shimada City, Shizuoka Prefecture. Since then, demonstration work continuously has been performed with a focus on OTS House’s primary function, a function realizing complete self-sufficiency in water and electricity. In parallel with the demonstration work, TOKAI also welcomed many visitors mainly from housing manufacturers, building firms, facility manufacturers, administrative representatives and researchers involved in energy and environment. Various opinions and suggestions were obtained from them. (Number of visitors exceeded 500 as of July 2019)

TOKAI’s product development of OTS House was carried out based on the data and know-how obtained from the demonstration work, which lead to the commercialization of independent housing (standardized housing) and a facility package realizing self-sufficiency in water and electricity. Sales will be promoted from these two sectors.

The TOKAI Group, under the TLC (Total Life Concierge) vision, provides a wide range of lifestyle infrastructure services that are closely related to the lives of our customers such as gas, the internet, CATV, Aqua (bottled water delivery), and electricity. Furthermore, in the field of residential environment, the Group is engaged in housing and renovation businesses, also making proposals. Initiatives toward provision of products and services that will contribute solving local and social issues, and efforts to improve customer satisfaction will continue to be made.

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TOKAI CORPORATION

## **Commencement of Sales of “OTS House” Realizing Complete Self-sufficiency in Water/Electricity**

TOKAI CORPORATION (headquarters: Shizuoka City, Shizuoka Prefecture, Representative Director and President: Katsuo Oguri, hereinafter “Company”) has been conducting a demonstration work of conceptual housing “OTS House” since October 2017. OTS House is an image of a near-future housing where complete self-sufficiency in water and electricity is realized to ensure a normal life as usual even in the face of power and water outage due to disasters and other phenomenon.

The Company is pleased to announce that OTS House has been commercialized based on the data and know-how obtained from the demonstration work, and that sales will be launched from July 23, 2019.

### 1. Overview

The Company and each TOKAI Group companies provide a wide range of lifestyle infrastructure services that are closely related to the lives of our customers such as gas, the internet, CATV, Aqua (bottled water delivery), and electricity. Furthermore, in the field of residential environment, the Group is engaged in housing and renovation businesses, expanding the TLC (Total Life Concierge) concept which provides comprehensive support to our customers’ lives.

In the course of further expanding each service, the Company had been working to formulate a house equipped with functions required in the current and near-future social environment. As a facility to embody this, development of conceptual housing “OTS House” was advanced in Shimada City, Shizuoka Prefecture. OTS House was completed in October 2017, and since then, demonstration work continuously has been made with a focus on OTS House’s primary function, a function realizing complete self-sufficiency in water and electricity.

In particular, a family of four was assumed to recreate the situation of water and energy use. Then, detailed data were collected and analyzed to verify the feasibility of self-sufficient functions, optimizing facilities and equipment which compose them from a perspective of environmental performance and economic efficiency. Furthermore, in parallel with the demonstration work, the Company welcomed visitors from housing manufacturers, building firms, facility manufacturers, researchers involved in energy and environment, local residents, and consumers who were interested. As a result, various opinions and suggestions were obtained from them. (Number of visitors exceeded 500 as of July 2019)

Based on the optimized facilities obtained through the demonstration work, and opinions and others received from all the visitors, the Company started the development of the OTS House with an eye toward commercialization. Sales will be launched to the general public from July 23, 2019.

The Company will actively offer and sell OTS House with an aim to establish it as a new style of Japanese housing.

### 2. Basic concept and main functions of OTS House

The name “OTS” stands for “On the Spot,” indicating the basic concept of housing where one is protected and feels secure by just being there. The Great East Japan Earthquake and 2016 Kumamoto Earthquakes significantly changed the awareness of security for lifeline services and basic daily life infrastructure in Japan. The house envisioned here is where a normal life is ensured even when infrastructure such as water and electricity are cut off in case of disasters, and where usual everyday life is more secure, safe, convenient, and economical through the TOKAI Group’s one-stop services which cover each and every lifestyle infrastructure.

OTS House which will be put on sale from July 23 also complies with this basic concept. In addition to the three pillars of function (a house securing water supply, electricity supply, and a living) which continuously have been disseminated since the construction of this conceptual housing, a concept of “a house securing families” has been raised in areas including housing structures and floor plans, and reflected in the designs.

(1) The House securing water supply

OTS House realizes domestic water self-sufficiency which utilizes rainwater and does not depend on waterworks system. Rainwater that falls on the building and on the ground of OTS House is collected and stored in a rainwater tank with a maximum capacity of 17,000 liters. It is then generated as domestic water through an RO (reverse osmosis membrane) water purification system, and supplied to the building. In addition, part of domestic wastewater discharged is purified and recirculated as domestic water. This realization of domestic water circulation has reduced domestic wastewater of general household by approximately 40%. Therefore domestic water self-sufficiency is achieved with rainwater.



This system which realizes domestic water self-sufficiency with rainwater was commercialized through a joint research with Daigaku Sangyo Co., Ltd. (Headquarters: Hamamatsu City, Shizuoka Prefecture; Representative: Yoshiyasu Sobukawa), Aqua Design System Co., Ltd. (Headquarters: Kochi City, Kochi Prefecture; Representative: Ryosuke Takeda), and the Company. Patent has been applied as an “architectural structure enabling domestic water self-sufficiency with rainwater as water source.” (Patent Application Number: 2019-44286)



(2) The House securing electricity supply

OTS House realizes electricity self-sufficiency which furnishes large-volume solar panels and large-scale storage batteries and does not depend on grid power. The building is designed to allow installment of solar panels as many as possible. Its power generating capacity is 9.36kW, approximately two to three times larger than that of conventional homes.



Furthermore, to respond to the electricity demand during the nighttime, and to be self-sufficient even when electricity generated from solar panels are few due to situations such as bad weather, OTS House is equipped with large-scale stationary storage batteries with an overwhelming storage capacity of 48kwh, approximately ten times larger than that of general emergency storage batteries (storage capacity: 3kwh to 5kwh). Storage batteries have been installed to OTS House by Variostor Corporation (Headquarters: Takamatsu City, Kagawa Prefecture; Representative: Masatoshi Mitsuya) with which the Company has built cooperative relationship and jointly conducted demonstration work. In addition to its storage, OTS House is able to supply consumption electricity to residential buildings up to a generation capacity of 10kVA (equivalent to 100 ampere) in times of power outage.



(3) The House securing families

The design concept of OTS House is a “house securing families”. In both the first and second floor, spaces for the family such as the family room and bedrooms are located in the center. In addition to the exterior walls, facilities, furniture, halls, and stairways are arranged as if they are “another piece of wall”. The double wall heightens a sense of security from a perspective of crime-prevention and privacy. Furthermore, a family room is created on the first floor and a “library available for all family members” on the second floor, facing the outside similar to a veranda. By creation a common place where family members can get together, OTS House is designed to make possible reduction of energy consumption such as in lighting and air-conditioning in a natural way.



This concept and basic design was formed under the collaboration between Tsubame Architects Inc. (Headquarters: Shinjuku-ku, Tokyo; Representative: Takuto Sando) and the Company.

(4) The House securing a living

OTS House realizes one-stop support by covering various lifestyle infrastructure services which the TOKAI Group offers while proposing economic advantages. For example, liquefied petroleum gas (LP gas) has come under the spotlight again as distributed energy resource that can be stored as a stockpile. In the communications and broadcasting area, ultra-high-speed internet access with a maximum transmission speed of 10 Gbps and high-definition 4K broadcast are available. Moreover, the bottled water delivery service regularly provides safe drinking water (water dispenser) with satisfaction, and the cutting edge home security service protects the family and the building. OTS House offers safe, secure, and convenient lifestyle in a style truly embodying the concept of TLC.



The Company’s support staffs will regularly perform maintenance works of OTS House, namely on self-sufficiency functions, water quality of domestic water, housing/individual facilities and equipment.

3. Lineup of OTS House

OTS House marketing will be promoted from two sides - sales of standardized housing, and package sales of facilities realizing self-sufficiency in water and electricity.





(1) Sales of standardized housing

OTS House will be sold as an all-in-one type standardized house, and as a near-future house where water and electricity essential for life is completely self-sufficient, ensuring a normal life even in the face of water and electricity outage.

Line up of standardized housing comes in the following four types: (a) Advance type which is the core model realizing complete water and electricity self-sufficiency, (b) Water Conscious type which emphasizes water self-sufficiency while reducing initial cost, (c) Energy Conscious type which emphasizes electricity self-sufficiency, (d) Value type which is most affordable but realizes self-sufficiency for approximately seven days in times of water and electricity outage. The best type will be proposed according to customers’ needs.

Sales of standardized housing will initially be expanded in areas within Shizuoka Prefecture, but by developing alliances with housing manufacturers and building firms in the future, will aim to expand in broader areas.

#### OTS House Lineup of Standardized Housing

Types		Water self-sufficiency	Electricity self-sufficiency	Standard price* (exclusive of tax)
 Advance	Advance	◎ Complete self-sufficiency	◎ Complete self-sufficiency	43,400,000 yen
 Water Conscious	Water Conscious	○ Self-sufficient under normal conditions	△ Self-sufficient for seven days in times of disaster	37,700,000 yen
 Energy Conscious	Energy Conscious	△ Self-sufficient for seven days in times of disaster	○ Self-sufficient under normal conditions	30,700,000 yen
 Value	Value	△ Self-sufficient for seven days in times of disaster	△ Self-sufficient for seven days in times of disaster	29,600,000 yen

\* OTS House: price of S-31 type

#### (2) Sales of facility package

A facility package which is a combination of facilities and equipment used to realize self-sufficiency in water and electricity, and adopted in the four types of OTS House (standardized house) will be sold to respond to various needs. The package will be sold through sales networks of housing manufacturers and building firms developed by the TOKAI Group, and the renovation market of existing houses.

Sales of facility package will also be expanded initially in sales areas of the TOKAI Group (Shizuoka Prefecture and nearby prefectures in Kanto area) but will aim to successively expand sales in broader areas.

#### 4. Sales structure and promotion of OTS House

As of today, July 23, 2019, sales and sales drives of OTS House will commence through each business channels of the TOKAI Group with the Company playing the key role. For the conceptual house (Shimada City, Shizuoka Prefecture) in particular, tours and sales fairs of standardized housing and facility package will be conducted whenever necessary.

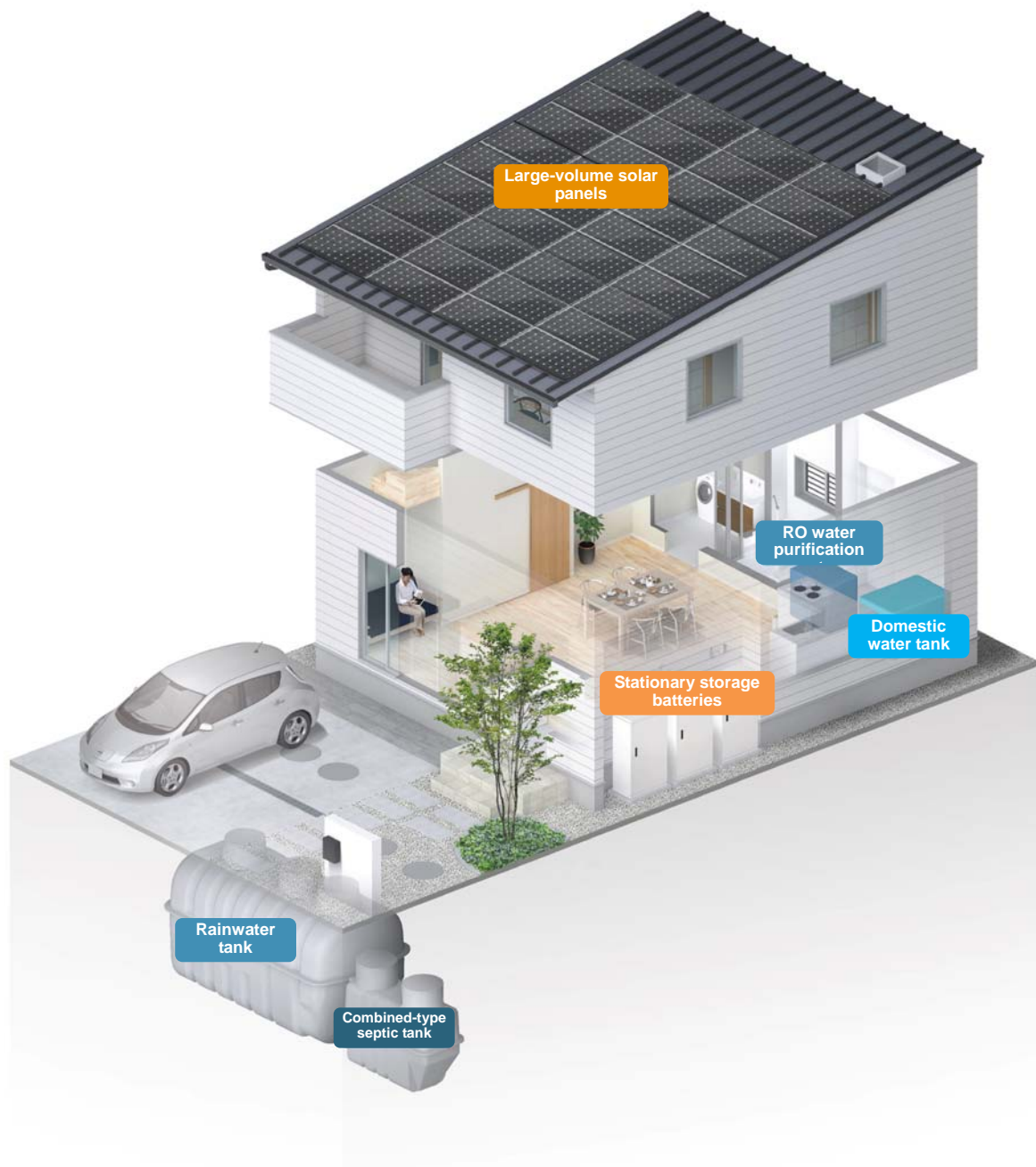
In addition, to commemorate the launch of OTS House, during the period starting July 23, 2019 until March 31, 2020, “OTS House Commemorative Sales Launch Campaign” will start. From August 2019, commercials will also be aired in terrestrial channels in Shizuoka Prefecture and CATV community channels offered by the TOKAI Group, proceeding to further spread and drive sales.

(OTS House Commemorative Sales Launch Campaign” (Campaign period: July 23, 2019 to March 31, 2020)

- Granting of 2,000 TLC points or free gift of QUO cards when reserving or attending OTS House tour
- Free gift of OTS House original tote bag when requesting information materials
- Granting of TLC points equivalent to 2% of contract price when purchasing standardized housing/facility package

Further information on OTS House will be disclosed on the website mentioned below whenever necessary. Tour reservation and request for information materials will also be accepted through this website.

OTS House Website: <http://ots.tokai.jp/>



[OTS House: S-31 type]

**[For further information on OTS House]**

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