

October 10, 2017

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

## Completion and Unveiling of “OTS House,” Base for Achieving Complete Self-sufficiency in Water/Electricity and Representing Near-Future Housing

TOKAI HOLDINGS CORPORATION (Headquarters: Shizuoka City, Shizuoka Pref.; President & CEO: Katsuhiko Tokita) and its four subsidiaries: TOKAI CORPORATION, TOKAI Communications Corporation, TOKAI GAS CORPORATION, and TOKAI Cable Network Corporation (hereinafter “TOKAI Group”) have built the conceptual housing “OTS House” which represents home in the near future in Shimada City, Shizuoka Pref., to develop, examine, and demonstrate the services related to our future daily lives. The Group announces today that the facility is completed and is open for public viewing.

### 1. Overview

TOKAI Group provides a wide range of life infrastructure services that are essential to the day-to-day lives of our customers such as gas, the internet, cable television (“CATV”), bottled water delivery, and electricity. In the field of residential environment, the Group engages in the housing and renovation businesses, while expanding the Total Life Concierge (“TLC”) concept, which provides comprehensive support to our customers’ lives.

In the process of further improving these services, TOKAI Group has worked to formulate a house with functions required in the current and near-future social environment and developed the conceptual residence named “OTS House” in Shimada City, Shizuoka Prefecture, which embodies the vision.

The construction of the house started in April 2017 and proceeded smoothly. Following the completion of the construction and implementation of various functions, OTS House is now open to the public from October 10, 2017.

TOKAI Group will develop, examine, and demonstrate many new services and products through OTS House. The Group will present this facility to many stakeholders including our customers, shareholders, business partners, local community, and employees to propose the way of life in the near future which we envisage.

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

The name “OTS” stands for “On the Spot,” indicating the basic idea of the house where you are protected and feel secure. The Great East Japan Earthquake and 2016 Kumamoto Earthquakes dramatically changed the recognition of security for essential utilities and life-oriented infrastructure. TOKAI Group explores the vision of the house in which you can live as usual even when the system infrastructure such as water and electricity is shut down in case of disaster, and in the normal situation, you can stay there feeling secured and safe, and live a convenient life while saving money every day as the Group offers one-stop services covering all kinds of life

infrastructure.

To embody this basic concept, OTS House is built based on the three functions: securing water supply, electricity supply, and living.

#### (1) The House securing water supply

OTS House supplies the domestic water it consumes without the use of waterworks system by utilizing rainwater. Rainwater that falls on the building and the ground of OTS House is about three times\* more than the amount of water a family of four needs per year. The building and the inner court are designed specifically to collect rainwater efficiently. The water impounded in the tank of up to 10 thousands liters will be cleaned through the clarification system and supplied to the residential building as domestic water. Also, sewage will be filtered using the reverse osmosis system, and the purified water will be stored again in the tank to be recycled as domestic water. The house achieves the self-sufficiency of domestic water through the water cycle, and approximately 40% of living drainage is reused.

\*Data studied by the Company

#### (2) The House securing electricity supply

OTS House has two types of power-generating equipment, solar panels and the home fuel cell Ene-Farm, to supply electricity it consumes without purchasing grid power. The house building is designed to install the solar panels as many as possible, so its power generating capacity is two to three times larger than that of a conventional home, with the output power of 9.9 kW. Moreover, the Ene-Farm adopted is a solid oxide fuel cell (SOFC) which focuses on power generation efficiency and generates stable electricity (the output power of 0.7 kW) constantly.

Excess electricity generated by the solar panels during the daytime is captured in a battery storage system to be used during the night time. OTS House uses not only the general stationary battery for homes but also an electric vehicle as a battery. The electric cars have more power storage capacity than the stationary battery so it can adapt to a sudden increase in electricity consumption without connecting to grid power. The house is generally isolated from the power grid system as it can supply the electricity it consumes by itself.

#### (3) The House securing a living

One of the primary purposes of OTS House is to provide an opportunity for the visitors to actually see and experience the full range of life-oriented infrastructure services placed in the house that is offered by TOKAI Group. For example, liquefied petroleum gas (LP gas) has come under the spotlight again as a distributed energy resource that can be stored as a stockpile. For communications and broadcasting, ultra-high-speed internet access with maximum 10 Gbps of data rate as well as the high-definition 4K broadcast is available in the House. Moreover, bottled water delivery service provides the safe drinking water (water dispenser) regularly and the cutting edge home security service protects the house and family. TOKAI Group proposes the safe and convenient living environment where you can feel secured by delivering the one-stop service that allows you to use the full range of services, support, and maintenance programs by contacting either the employees or the call center of the Group. OTS House truly embodies the concept of TLC.

OTS House also demonstrates the system of opening and closing the front and room doors using facial recognition technology as well as smart mirror, a kind of smart home electronics, that the user can display a large variety of useful information on the mirror.

TOKAI Group aims to create and develop services which gain currency with customers by testing and demonstrating the new services and products of each business area while enthusiastically launching the projects such as product/service testing survey where the customers can participate.

### 3. Creation of new products through the strengthened collaboration with manufacturers and business partners

OTS House is built to achieve complete self-sufficiency in water and electricity, and create and develop the new services and products at each business area of TOKAI Group.

Especially with NEC Corporation (Headquarters: Minato-ku, Tokyo; President and CEO (Representative Director): Takashi Niino) with which we have built strong cooperative relationship through the development of OTS House, we will continue to collect and examine the utilization/operation data for self-sufficiency in water and electricity, discuss concrete issues to sell other services and products, and accumulate various know-how to develop the powerful products. In addition, we will build the cooperative framework with other equipment manufacturers and service providers to discuss a wide variety of services and products that cater to the needs of households, commercial and public facilities.

### 4. Plans for the OTS House

OTS House is open to the public from October 10, 2017. TOKAI Group demonstrates various functions placed in this house and at the same time, presents this facility to our stakeholders including the customers of TOKAI Group to show our broad initiatives and propose our services and products installed in the house (viewing tour is by reservation only).

Later on, guests will be invited to visit and stay overnight to experience life in OTS House. Further information will be disclosed on the website mentioned below promptly when details are decided.

Website of OTS House: <a href="http://ots.tokai.jp/">http://ots.tokai.jp/</a>
---

### 5. Overview of OTS House construction

Location: 1-2-6 Baranooka, Shimada-shi, Shizuoka

Site area: 280.91m<sup>2</sup>

Total floor area: 142.61 m<sup>2</sup> (timber structure panel construction, two-story)

## 6. Exterior and interior of OTS House



(Pic. 1: Full view of OTS House taken by the drone. The roof sloped to one side and the vast inner court to collect rainwater efficiently. A rainwater tank is buried under the court, which can store a maximum of 10,000 liters of water.



(Pic. 2: Interior; living room. The family gets together in this room so the energy can be saved. Wide two-story ceiling facilitates the air circulation and curb energy consumption of air conditioner.)



(Pic. 3: OTS House at night. Exterior and passive design achieve both self-sufficiency and aesthetics by enhancing the beauty of nature)

[For further information on OTS House]

TOKAI HOLDINGS CORPORATION Management Strategy Division

(Please contact to Ooi, Kiuchi, Hattori, or Suzuki)

TEL : 054-273-4936 (Weekdays 9:00-12:00, 13:00-17:45)

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