

Creation of New Values by Means of Condominium Renewals

Renovation example: *Sustaina Branche Hongyotoku* (Ichikawa City, Chiba Prefecture)

The Haseko Group is working on Japan's first condominium project to achieve virtually zero CO₂ emissions during building operations by completely renovating an existing corporate housing apartment to further operate research and technological development for realizing a decarbonized society. As part of the project, the Group is conducting renovation work on "*Sustaina Branche Hongyotoku*."

Of the 36 units in this condominium, 13 have been set up as RESIDENCE LABO experimental residential housing for shaping the future, with different verification experiments being carried out in each unit. Through the maximum exploitation of IoT devices and AI technology, as well as technologies for extending the life of buildings, energy-saving technology, and wellness housing technology, we will utilize the various data obtained from actual

living environments in research and technological development aimed at creating new housing value, as we work to achieve the "optimization of living" through LIM*.

This project was selected for the "Next Generation Housing Project 2022" which contributes to public awareness of leading technologies, as a "residential-type experimental home for creating future housing with smart home systems," in the "Leading Businesses of Sustainable Buildings etc. (Next-Generation Housing) program in FY2022 2nd" conducted by the Ministry of Land, Infrastructure, Transport and Tourism.

For more on the RESIDENCE LABO's main initiatives, see the project page.

*LIM: The concept of utilizing information related to living accumulated by condominium buildings, such as the condition of the building, the use of facilities, and residents' movements since people started living there.



Before renovation



After renovation

RESIDENCE LABO

居住型実験住宅で未来をつくります。

全36戸のうち13戸を「居住型実験住宅」としてデザイン。IoT機器やAI技術などを最大限に活用して、各種センサーから取得する生活データを研究・技術開発に活かすことを目的としています。



The digital transformation (DX) of the Haseko Group

The Haseko Group is undertaking digital transformation (DX) with the aim of making further progress as a "corporate group for housing to create great living." We are working to improve productivity in the design and construction of housing complexes that utilize the latest technology, raise the quality of life for their residents, and create safer, more secure, and more comfortable living environments. We will leverage the comprehensive strengths of our Group to create new value in housing and living.

ICT condominiums

By harnessing the power of ICT (information and communications technology), including sensor networks, AI and cloud service applications, we are promoting the creation of high-value-added condominiums. We have implemented a variety of cutting-edge technologies to make everyday life more convenient and comfortable, such as facial recognition auto-locks for common and private entrances, smart locks for entrances of residential units, parcel delivery boxes, and an app for residents that is linked to the weather and earthquake sensors installed in the building.

The different types of digital data acquired from the ICT condominiums are collected and analyzed as "living information" on the BIM & LIM Cloud information platform, and then combined with BIM data to create new value, such as improving the convenience of residents and extending the lifespan of the building. Most recently, a demonstration experiment is planned for an "all-facial recognition condominium" at WORVE Naha Izumizaki.

Conceptual diagram of LIM (Living Information Modeling)

