Connective Industries

Elevators, Escalators and Building Services

May 28, 2026

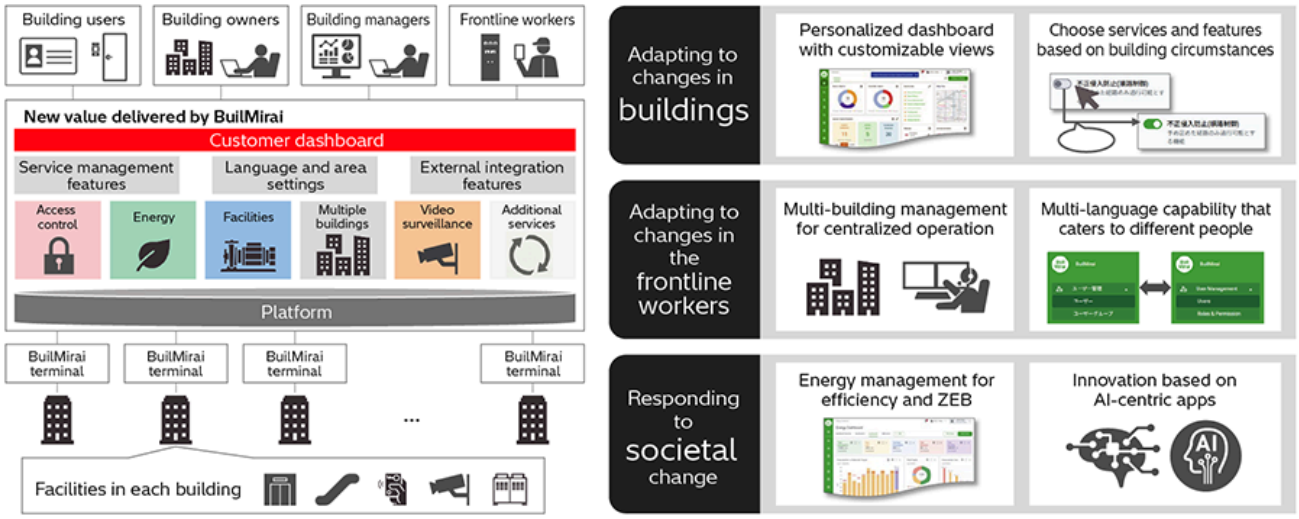
Building Systems

1. As-a-service Option for BuilMirai that Delivers Digital Services to Transform Building Value

With the launch of HMAX for Buildings: BuilMirai, Hitachi has made its BuilMirai systems available in as-a-service format, thereby helping to realize a harmonized society in which the environment, wellbeing, and economic growth are in balance. The service provides integrated building management systems that combine Hitachi's operational technology (OT) and domain knowledge with GlobalLogic's digital engineering skills in agile development and other fields. By securely linking building facilities to a cloud-native platform, it enables consolidated management that extends across multiple buildings while also delivering value in ways that adapt to changes in buildings, frontline workers, and society as a whole.

The first of these systems is an access control service that became available in October 2025. Equipped with an easy-to-use user interface and the scalability to cope with changes in building facilities or the number of people working there, the service helps customers improve their operational efficiency.

BuilMirai services are being progressively expanded to make buildings more valuable. Plans include a dashboard that lets users choose the information they need from the wide range of management information available, multi-building management features that facilitate the transition from on-site to centralized building management, and energy management for reducing consumption and becoming a net-zero-energy building (ZEB). Hitachi is also seeking to use artificial intelligence (AI) to deliver greater efficiencies and automation in building management.



[1] How Offering BuilMirai as a Service Transforms Building Value

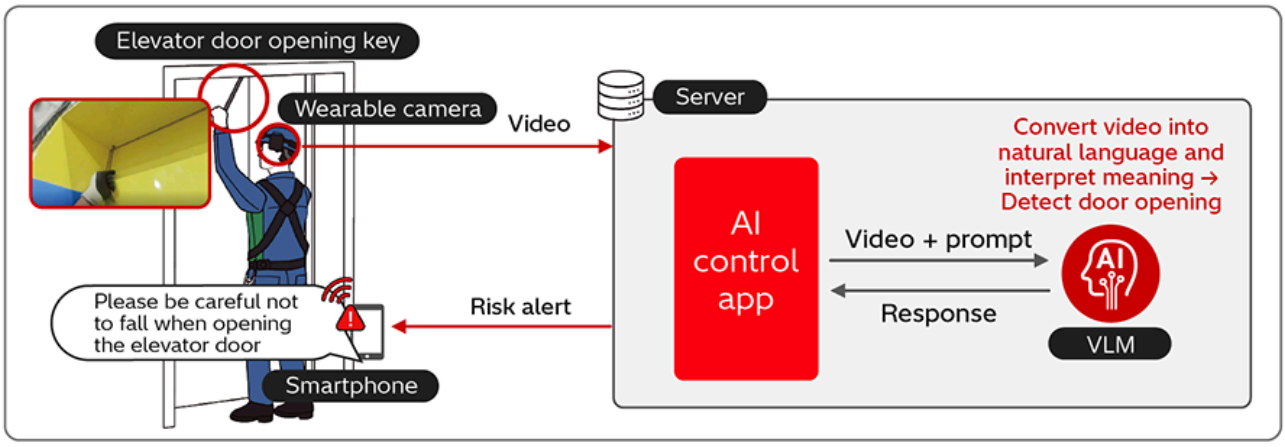
2. HMAX for Buildings: BuilMirai AI-based Video Intelligence Solution

Businesses involved in the maintenance of social infrastructure are running up against the limits of how well they can maintain safety through a reliance on human input, suffering from falling numbers of skilled technical staff and labor shortages associated with the aging population and low birthrate. The loss of the craft skills held by experienced engineers is raising workplace safety risks and making it harder to maintain quality of work. In response to these issues, Hitachi has combined its many years of domain knowledge with a vision language model (VLM) that integrates vision and language understanding, using these to develop capabilities for the real-time detection and warning of dangerous activities such as those that might result in a fall.

The system takes first-person video acquired from a wearable camera and uses the vision encoder in the VLM to convert it into numeric vectors. These are fed into the large language model (LLM) along with the prompt. The AI operates in real time to transform the information into a natural language summary and an understanding of what it is

seeing. It sends a notification to the engineer's smartphone if it detects any hazards or violations of procedure. In the future, Hitachi intends to continue with development to protect the safety of technical staff working in a wide range of industries.

Accidents are prevented by issuing an audible warning when video from a wearable camera identifies actions that could catch a worker by surprise and put them at risk (such as the opening of an elevator door)



[2] Operation of AI Solution for On-site Technical Staff

3. Urban Ace HF Mirai: Next-generation Standard Elevator Model

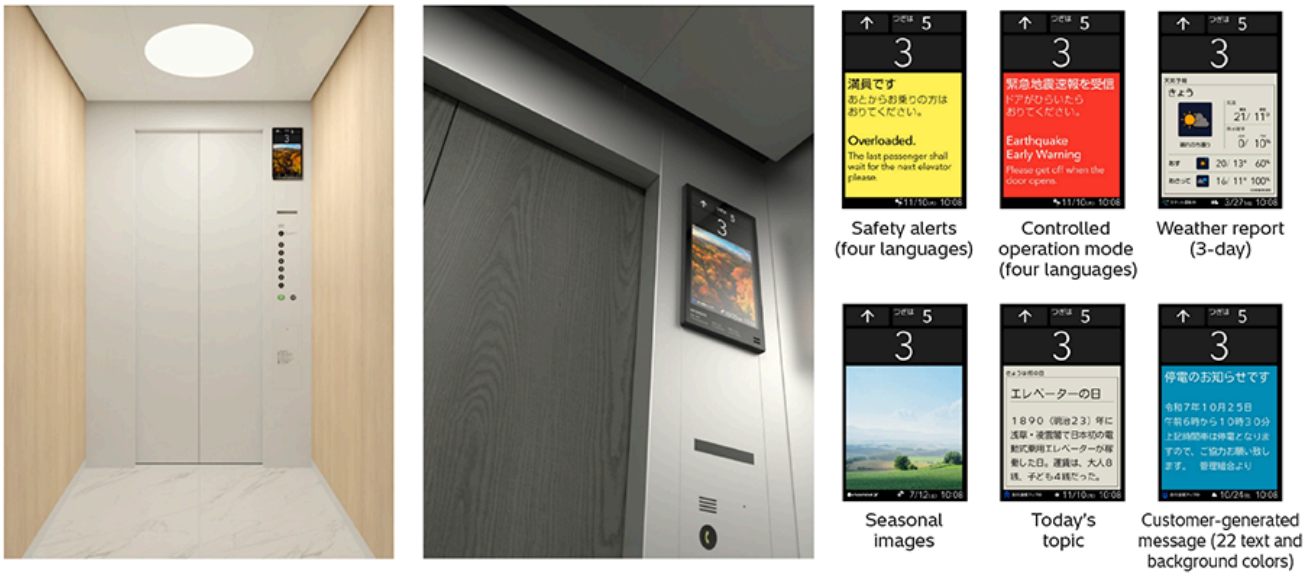
Hitachi's next-generation standard elevator model, the Urban Ace HF Mirai, went on sale in April 2026. The new model incorporates further enhancements to the design features and functions of previous models and is available in a range of specifications chosen for the smart building era. The stylish new design that harmonizes with building interiors was overseen by the international designer Naoto Fukasawa and features a wood-and stone-finished design that conveys a sense of natural materials. The control panel features a 12.1-inch indicator to present more information with greater clarity and the elevator supports integration with the BUILLINK support tool for information gathering and remote monitoring of building equipment in real time. This equips the elevator to provide users with content such as news or weather reports and building managers with real-time operational monitoring and maintenance information in an easily intelligible format.

Disaster response performance has also been improved to boost resilience. This takes the form of enhancements to the Helios Drive feature that enables the elevator to restore itself to temporary operation after an earthquake, with the system now able to restart after earthquakes up to the lower end of intensity 6 on Japan's seven-stage seismic scale compared to the lower end of intensity 5 previously[*1]. Other enhancements

have equipped the elevator with functions for digital transformation (DX), including interoperation with robots and non-contact elevator hailing using authentication by smartphone. This makes the elevators more convenient to use under a range of scenarios and facilitates the unimpeded movement of people and goods.

The elevator plays its part in achieving sustainable urban development through its environmental performance, with energy efficiency having been improved by a regenerative converter that reuses regenerated electric power. Through integration with BuilMirai, a digital service that embodies Lumada 3.0, it also delivers new value for smart buildings. In the future, Hitachi intends to create new value to support the future of cities and the people who live in them.

*1. Depends on the architecture and other conditions in the building concerned



[3] Interior of Urban Ace HF Mirai (left) and Example LCD Indicator Screens (right)

4. Installation of Hitachi V2X System at Cielia City Condominium Near Hoshida Station

Hitachi has installed a Japan-first vehicle-to-X (V2X)[*1] system at the Cielia City condominium complex of Kanden Realty & Development Co., Ltd. located near Hoshida Station[*2]. The system uses photovoltaic power generation to charge electric vehicles (EVs) and batteries. During power outages, it can draw power from the EVs and use stored electricity to keep elevators operating.

Installation of the system means that, under normal operation, electricity from the photovoltaic power generation system can be used to charge batteries and the EVs operated by a car sharing service. Once the batteries are fully charged, the excess power is used for communal lighting, thereby reducing overall electricity consumption.

During power outages, such as when a natural disaster occurs, electricity from the photovoltaic power generation system, EVs, and batteries is supplied to the elevators and communal lighting to maintain access to higher floors that are difficult to reach via the stairs, thereby enabling the delivery of necessities like water and food.

Through the addition of interoperation with a wide range of equipment and the incorporation of energy management systems (EMSs), Hitachi will continue working to build a sustainable future by making greater use of renewable energy and playing its part in achieving a decarbonized society while also reducing the load on the environment.

*1. The general term for technologies that involve the interconnection and interoperation of vehicles and various other systems. In the energy sector, progress is being made on the commercialization of V2X systems that enable the mutual supply of electric power by connecting electric vehicles to homes, commercial buildings, or the electricity grid.

*2. The first installation in Japan of a V2X system that officially supports elevators from Hitachi Building Systems Co., Ltd.

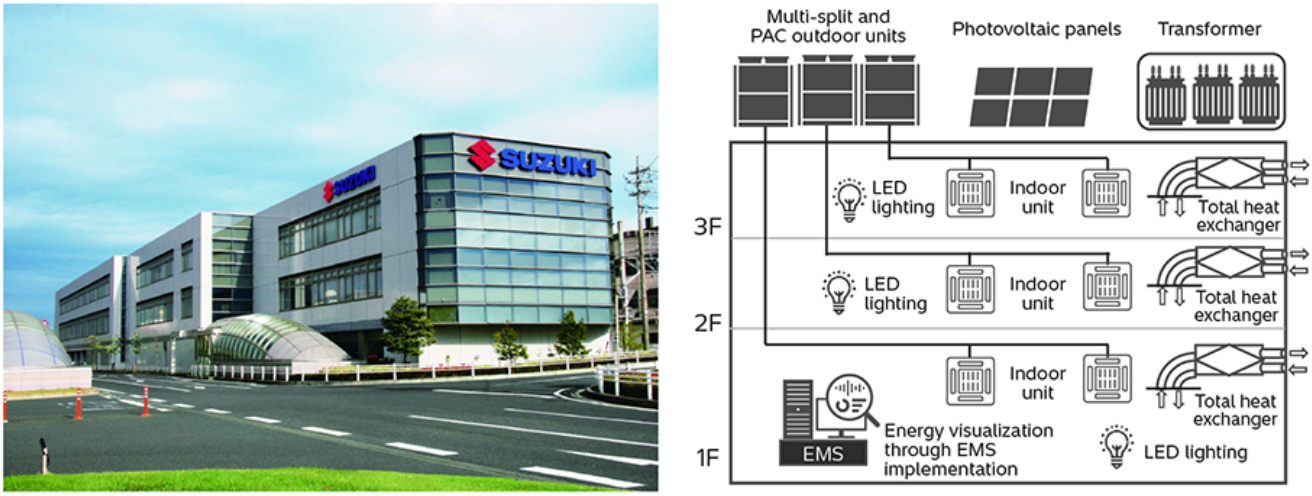
[4] V2X System (left) and Cielia City Condominium near Hoshida Station (right)

5. Transformation of Suzuki Plaza into a ZEB

Hitachi serves as a ZEB planner, providing support to owners and others wanting to turn their building into a ZEB. To assist with its green transformation (GX), Suzuki Motor Corporation has recently commissioned Hitachi, Ltd. and Hitachi Building Systems to

provide consulting and undertake refurbishment work to transform its Suzuki Plaza in Hamamatsu City, Shizuoka Prefecture into a ZEB.

EMilia is an integrated energy and facilities management service that is part of Hitachi's suite of Lumada solutions. In addition to using EMilia to keep track of energy consumption at the plaza and to provide centralized management, the ZEB project also encompasses work on upgrading the energy-efficiency of building systems. In practice, this will involve upgrading the package air conditioning system to a more energy-efficient model, switching to light-emitting diode (LED) lighting, upgrading electrical distribution systems, and the installation of photovoltaic panels. The installation work is being undertaken by Hitachi Building Systems. The goal of the project is to have the Suzuki Plaza certified as a "Nearly ZEB."



[5] Suzuki Plaza and ZEB Systems

PAC: precision air conditioning

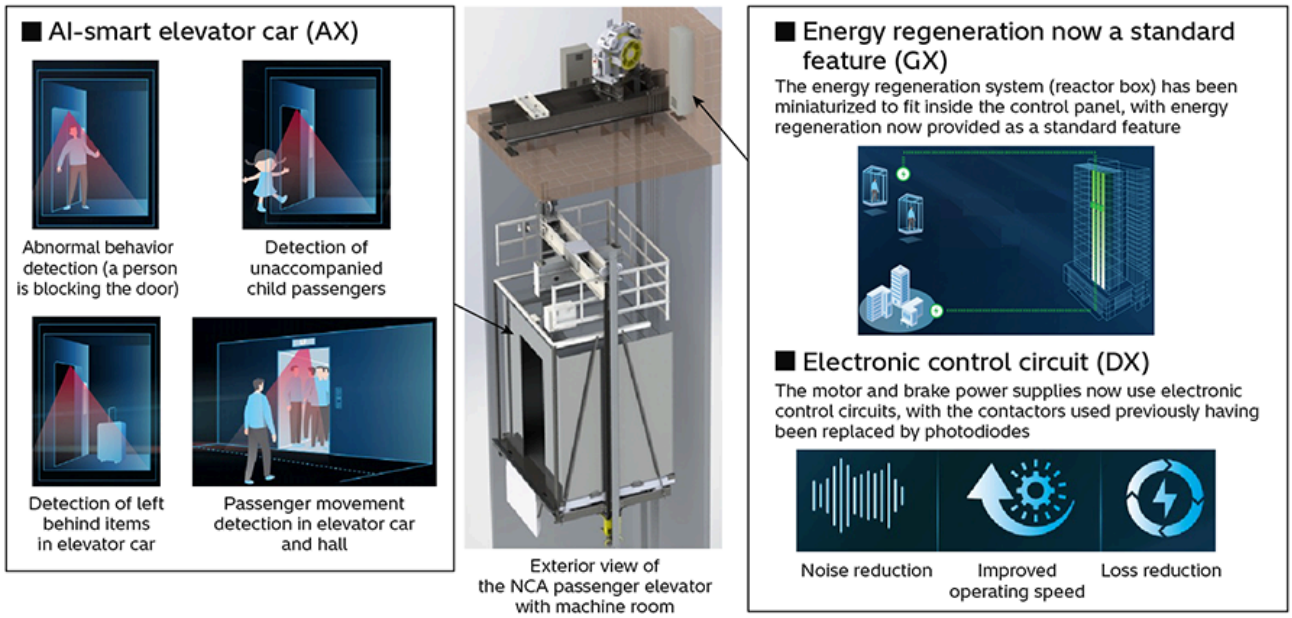
6. NCA Elevator for Putting GX, DX, and AX into Practice

To improve competitiveness in the Chinese market and other global markets, Hitachi has launched two new passenger elevators: the NCA for high-end customers that is supplied together with a machine room and the machine-room-less NCA-MRL. The NCA and NCA-MRL feature GX enhancements in the form of an energy regeneration system that is 90% smaller than previous models, with energy regeneration now provided as a standard feature rather than the option it was in the past. In terms of product DX enhancements, electronic control has been adopted for the motor and brake power supplies in place of the contactor control circuits used in the past and this has been

combined with a Safety Integrity Level 3 (SIL 3) rating, the highest safety standard for industrial machinery. The new models also feature AI-smart elevator cars with object detection that uses time-of-flight (TOF) sensors installed on top of the cars, with use of movement detection in the cars and hall to improve operational efficiency and anomaly detection in the car to improve safety.

Through these features, the NCA and NCA-MRL are putting GX, DX, and AI transformation (AX) into practice, thereby helping to deliver the smart buildings that customers are calling for.

[Hitachi Elevator (China) Co., Ltd.]



[6] How the NCA Puts Green (GX), Digital (DX), and AI (AX) Concepts into Practice