

FOR IMMEDIATE RELEASE

No. 3930

Customer Inquiries

Media Inquiries

Information Technology R&D Center
Mitsubishi Electric Corporation

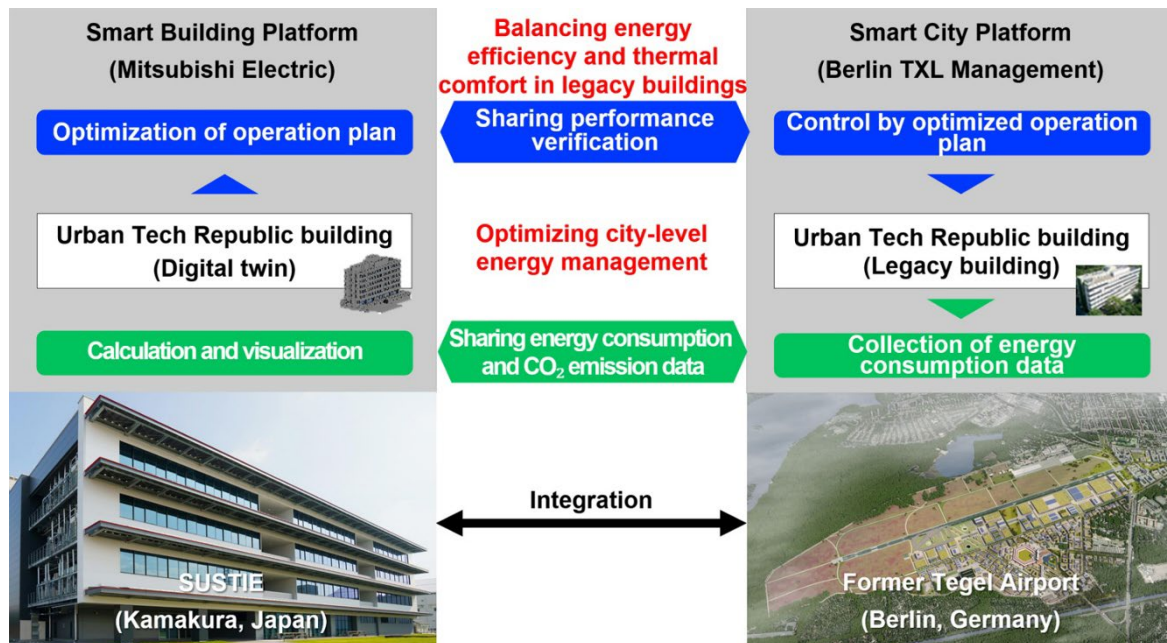
Public Relations Division
Mitsubishi Electric Corporation

www.MitsubishiElectric.com/ssl/contact/company/rd/form.html

prd.gnews@nk.MitsubishiElectric.co.jp
www.MitsubishiElectric.com/en/pr/

Mitsubishi Electric to Demonstrate Smart Building and Smart City Technologies in Legacy Building at Berlin's Urban Tech Republic

Aiming to balance energy efficiency and thermal comfort as well as expand city-level energy optimization



Smart building and smart city technologies for demonstration
© Berlin TXL Management GmbH / Macina

TOKYO, August 25, 2026 – [Mitsubishi Electric Corporation](https://www.mitsubishi-electric.com) (TOKYO: 6503) announced today that it will demonstrate smart building and smart city technologies at an innovation and research district being developed in the Berlin TXL project¹ at the former Tegel Airport in Berlin, Germany on September 1. Using a legacy building² at the Urban Tech Republic,³ the demonstration aims to improve energy efficiency, thermal comfort and operational efficiency, and also explore the potential for optimized energy management at the district-level by leveraging building data such as CO₂ emissions. The initiative will include technologies developed and verified at [SUSTIE™](https://www.mitsubishi-electric.com/sustie), Mitsubishi Electric's ZEB (net Zero Energy Building) technology test facility in Japan. This will be the first time these technologies are applied to a legacy building outside of Japan.

¹ Launched in 2021 to create a smart city at the site of the former Berlin Tegel Airport, tackling challenges facing 21st-century cities.

² A 53-year-old steel-framed building with seven floors above ground and one basement level to be used as the demonstration facility.

³ An innovation district for urban technologies located in the Berlin TXL development area.

Since [signing a partnership agreement in May 2024](#) with Berlin TXL Management GmbH (formerly Tegel Projekt GmbH), the developer and manager of the Berlin TXL project, the German Branch of Mitsubishi Electric Europe B.V., a wholly owned subsidiary based in Amsterdam, the Netherlands, has been preparing for this demonstration by selecting target buildings and defining technical requirements.

For the demonstration, Mitsubishi Electric will develop an optimal operation plan for the air conditioning system using digital twin⁴ building simulation technology⁵ and optimal operation planning technology, both of which have been verified at SUSTIE. The company expects to verify the prediction accuracy and effectiveness of balancing energy efficiency and thermal comfort in the legacy building. Furthermore, the project will test the effectiveness of building data utilization for district-level energy optimization. This will involve sharing verification reports and CO₂ emission data, calculated from building power consumption, between smart city and smart building platforms.

Going forward, Mitsubishi Electric will use the results of this demonstration to develop technologies that contribute to balancing energy efficiency and thermal comfort, as well as improving operational efficiency in buildings. The company also aims to establish a model case for deploying building-based, city-level value propositions and solutions in global markets, starting with Europe, thereby contributing to carbon neutrality and well-being.

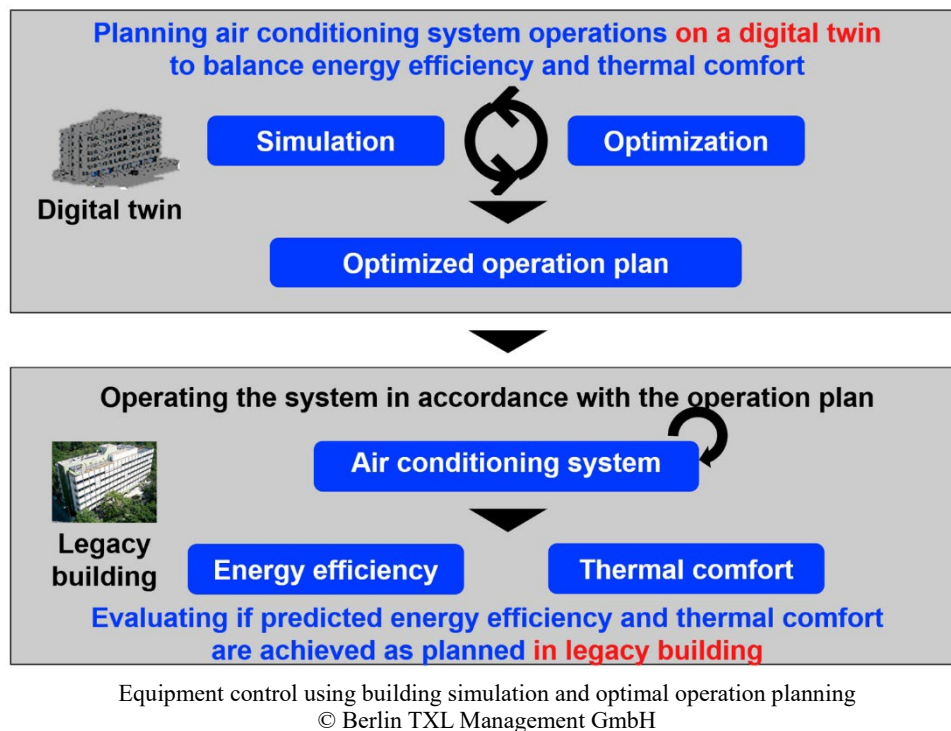
Features of Demonstration Technology

1) Verification of equipment control in legacy buildings using simulation and optimal operation planning

- A digital twin will be constructed to precisely replicate the building's status. The system will predict energy efficiency and thermal comfort by simulating operation plans (temperature settings, dimming rates, etc.), annual climate variations, and occupancy changes.
- Based on these predictions, the system will formulate an optimal operation plan for air conditioning that balances energy savings with occupant comfort.
- An optimal operation plan will be implemented in the building. By comparing predicted values with actual measurements, the real-world effectiveness of the technology is expected to be verified.

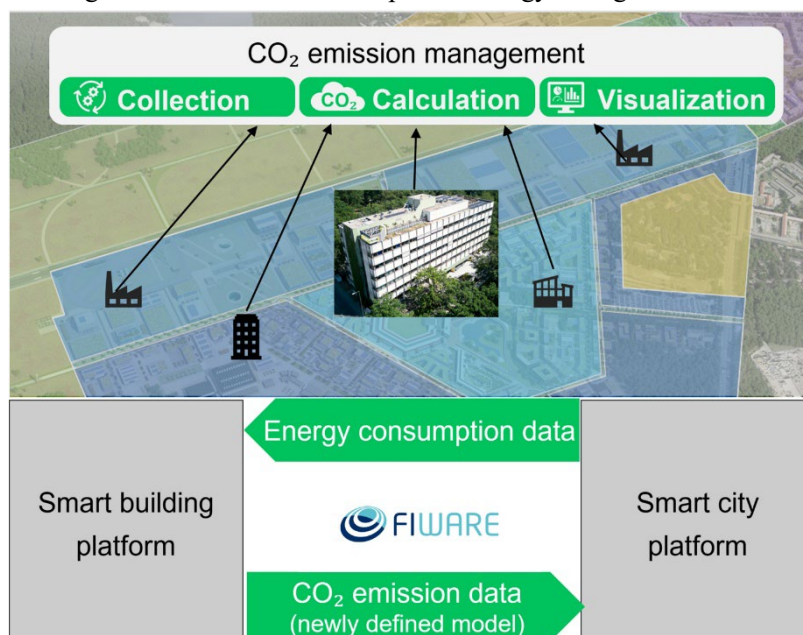
⁴ A technology that uses IoT devices and sensors to collect data on people, objects and events in the physical world and replicates them in a virtual space (cyberspace).

⁵ A technology that predicts energy efficiency and thermal comfort by creating a precise digital replica of the building based on BIM design data (floor area, insulation, etc.) and equipment performance specifications.



2) *Integration of smart city and smart building platforms to verify the effectiveness of building data utilization for city-level energy optimization*

- Operational CO₂ emission data, calculated from energy consumption in the legacy building, will be newly defined as a data model applicable to smart city platforms. This will enable the sharing of CO₂ emission data between smart city and smart building platforms, which operate in different business domains.⁶
- [Berlin TXL Management's smart city platform](#) and Mitsubishi Electric's smart building platform will be connected via FIWARE,⁷ an open-source framework widely adopted in smart cities globally. By sharing CO₂ data and verification reports with the Urban Tech Republic platform, Mitsubishi Electric expects to verify how building-level data can be used to optimize energy management across an entire urban district.



CO₂ emission data linkage between smart city and smart building platforms
© Berlin TXL Management GmbH / Macina

⁶ Since data structures and attributes differ across business domains, a new data model has been defined to accommodate differences between various business sites.

⁷ An open-source platform middleware promoted by the FIWARE Foundation for the development of smart-city solutions.

Summary of Demonstration

Duration	September 1, 2026 – March 31, 2027
Location	Berlin TXL, Berlin, Germany
Details	- Equipment control of a legacy building using building simulation technology and optimal operation planning technology - Integration of smart city and smart building platforms

“SUSTIE” is a registered trademark or a trademark of Mitsubishi Electric Corporation in Japan and/or other countries.

“Berlin TXL” is a trademark of Tegel Projekt GmbH (now Berlin TXL Management GmbH).

“Urban Tech Republic” is a trademark of Tegel Projekt GmbH (now Berlin TXL Management GmbH).

“FIWARE” is a trademark of FIWARE Foundation, e.V.

###

About Mitsubishi Electric Corporation

Guided by its [corporate philosophy](#), Mitsubishi Electric Corporation (TOKYO: 6503) places sustainability at the core of its operations and values stakeholder trust—encompassing society, customers, shareholders and employees. In pursuing profitability, capital efficiency and growth, Mitsubishi Electric works closely alongside customers to develop value-added solutions that address today’s complex challenges while enhancing the company’s sustainable corporate value.

Founded in 1921, Mitsubishi Electric has over a century of experience in delivering reliable, high-quality products and solutions. With over 200 group companies and approximately 150,000 employees worldwide, the company is a recognized global leader in manufacturing, marketing and selling electrical and electronic equipment and systems across a broad range of sectors, including public utility systems, energy systems, defense and space systems, factory automation systems, automotive equipment, building systems, air conditioning systems & home products, digital innovations, and semiconductor & devices.

Mitsubishi Electric recorded consolidated revenue of 5,894.7 billion yen (U.S.\$ 36.8 billion*) in the fiscal year that ended on March 31, 2026. For more information, please visit www.MitsubishiElectric.com

*JPY 160=USD 1, the approximate rate on the Tokyo Foreign Exchange Market on March 31, 2026