

# MAGORI LAB.

## [Optimal control of building operation energy by using AI]

Academic-industry partnership for machine learning and AI control technology for energy conservation and creation in construction sector, Social Cooperation Program

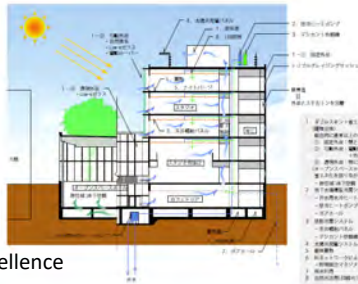
Energy Demand Management Engineering

Engineering/Architecture

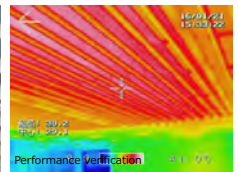
<http://www.magorilab.iis.u-tokyo.ac.jp/>



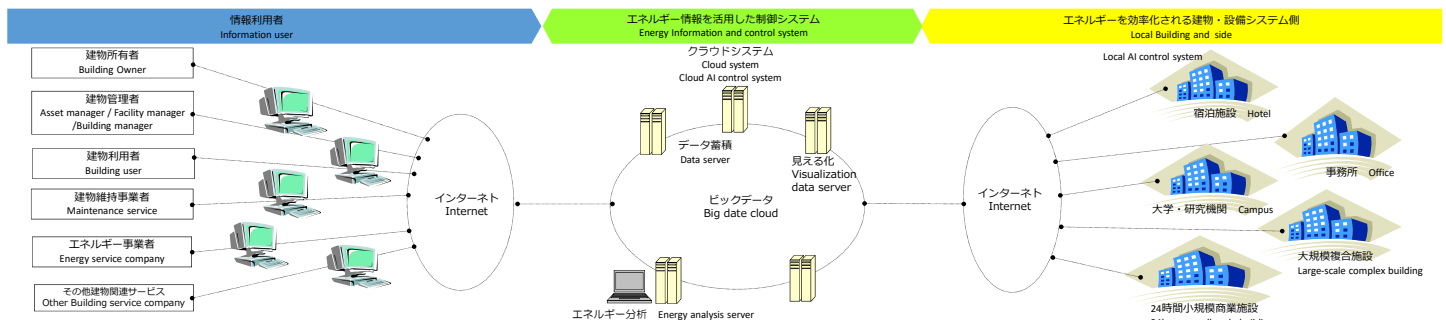
Komaba Center for Educational Excellence  
▲ 67% energy saving



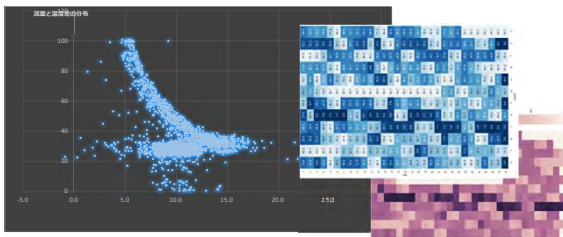
Environment and Energy Conservation store  
▲ 70% energy saving



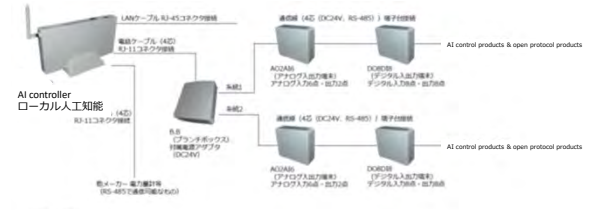
In the next-generation systems energy, we need to optimize utilization of relevant technologies (Sustainable technology, Energy creation, Natural energy, Unutilized energy, Energy interchange, and Energy Conservation.) Using information related to buildings, analyze for optimized control by machine learning and AI. We aim to construct a system that surpasses and coordinates with various smart systems, and we propose social implementation of the next generation platform in cooperation with domestic and overseas, society and companies.



R&D of energy analysis technology by machine learning using big data



Application development research of general-purpose sensor, AI optimization control system



Easy systematization of devices. Individual recognition of individual sensors with open protocol

R&D of Sensor & Control system



Sensor controller



watt-hour meters



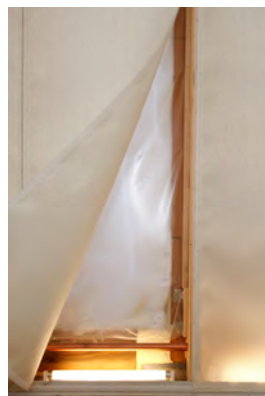
Window thermal sensors



Boiler Thermal sensors



Outside air Thermal and Humidity sensors



Passive + Active insulation



Earthquake acceleration sensor

