

# MAGORI LAB.

## [Sustainable Building Design & Optimization by Building AI]

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

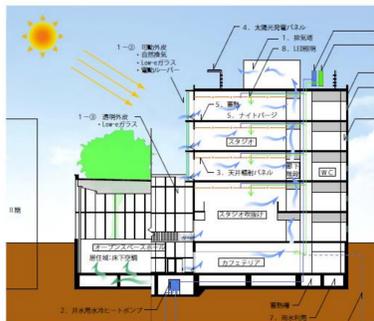
Energy Demand Management Engineering

Engineering/Architecture

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



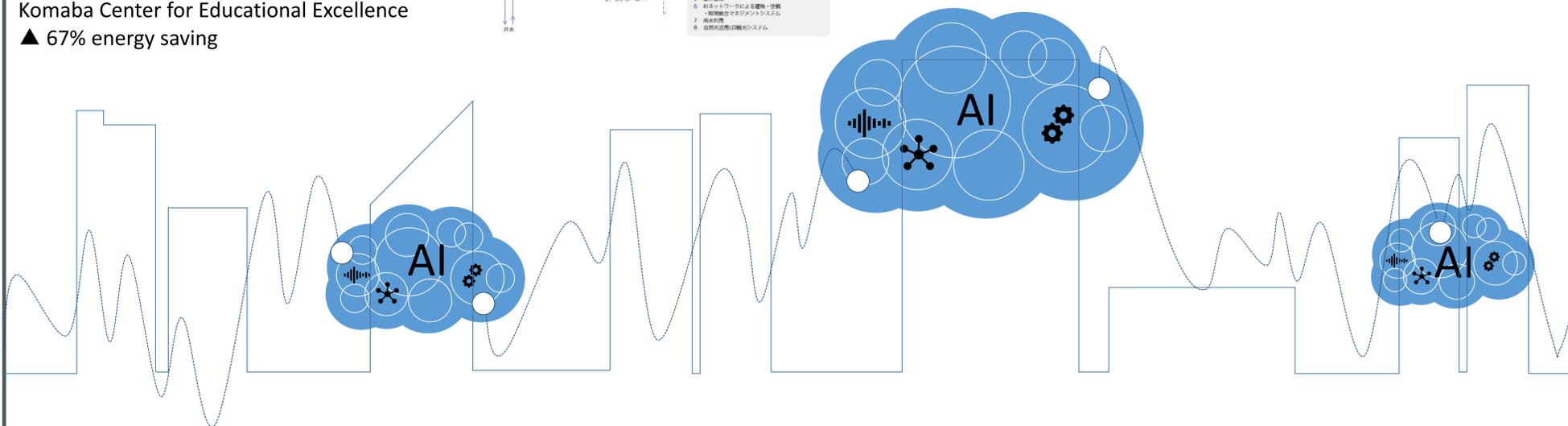
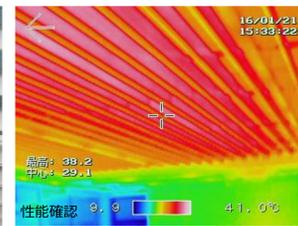
Komaba Center for Educational Excellence  
▲ 67% energy saving



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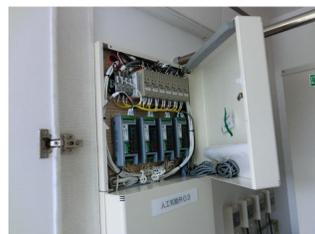
Environment and Energy Conservation store  
▲ 70% energy saving



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.

### Sensor & Control system



Sensor controller  
最適運転制御コントローラ



watt-hour meters  
電力計



Window thermal sensors  
窓面の温度計



Boiler Thermal sensors  
ボイラー温度計



Outside air Thermal and Humidity sensors  
外気温度湿度計

### Thermal insulation Performance evaluation



Passive + Active insulation  
アクティブ+パッシブ断熱

### Earthquake acceleration sensor



Earthquake acceleration sensor  
地震センサー

