Technology for Coping with Power Outages and Assisting Recovery

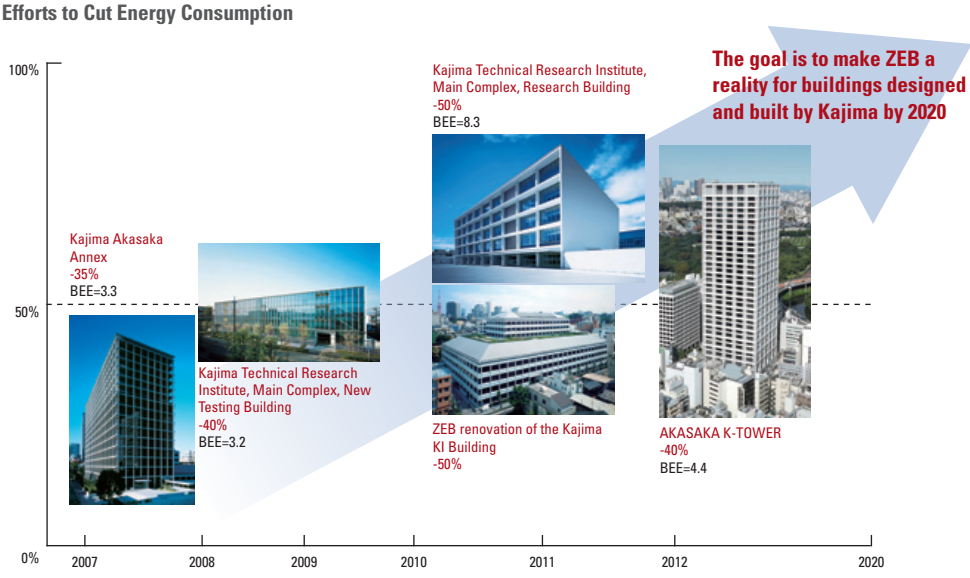
CASE 03

Demands continue to grow for ways to protect the environment and create a low-carbon society. The ZEB concept for ultra-energy-efficient buildings is attracting even more attention as a result.

Four Initiatives to Make ZEB a Reality

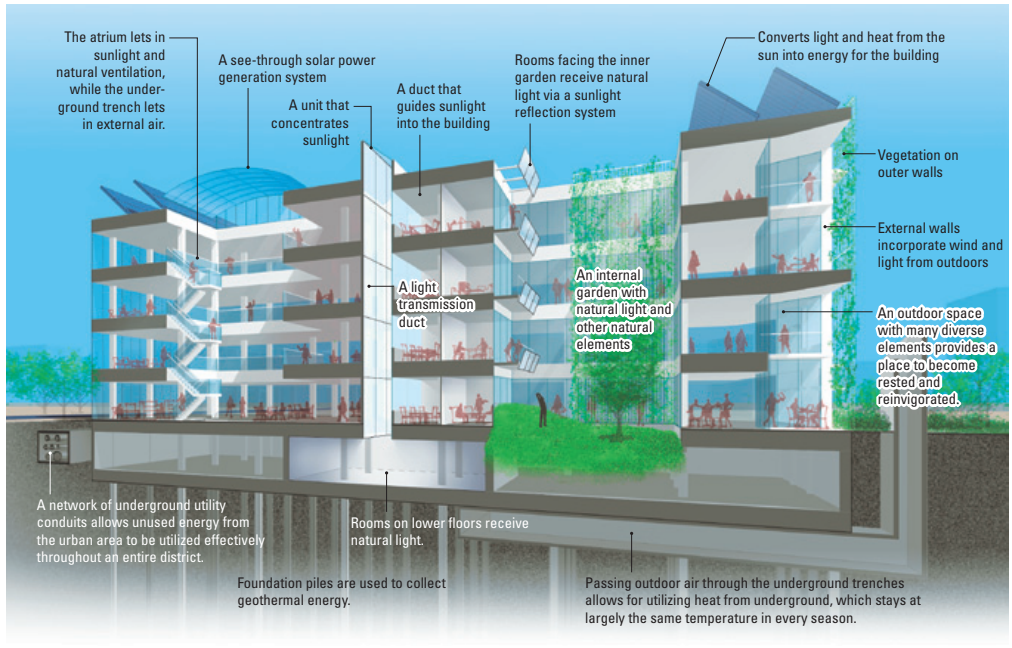
The Zero Energy Building (ZEB) concept has the goal of cutting the energy consumption of a building to virtually zero by conserving energy and using renewable energy. Kajima is pushing forward with technological development in the four areas below to meet this objective. The first is "eco-design." This entails using building designs to raise the energy efficiency of air conditioning, illumination and other equipment. The second is "eco-work styles." Here, the goal is to achieve both comfortable and energy-efficient workplace environments by redesigning the work styles of building occupants and altering their mindsets. The third is "energy management." Here, wasted energy is

Efforts to Cut Energy Consumption



* BEE (Built Environment Efficiency) is a measure of environmental efficiency that is based on CASBEE (Comprehensive Assessment System for Building Environmental Efficiency).

largely eliminated by closely supervising and fine tuning energy consumption for building operations. The fourth area is "renewable energy." This involves promoting the application of solar, wind and other renewable energy sources that do not produce CO_2. By developing technologies in these four categories, Kajima is aiming to make ZEB a reality by no later than 2020.



A Smart Electricity Management System Developed by Kajima Becomes Operational

Operation of the Kajima Smart Electricity Management System is now underway at Kajima Akasaka Annex, one of our headquarter buildings in Tokyo.

This demand-response system, integrating Kajima's numerous energy conservation technologies and expertise, automatically controls power consumption according to fluctuations in demand for electricity. Electricity users can cut their consumption depending on overall demand for electricity so that power saved can be supplied to other users.

By using the preset demand-response level, the Kajima Smart Electricity Management System automatically achieves optimum control of electricity consumption at any time of day and for any level of power conservation. This system can reduce peak electricity demand by more than 20%. Furthermore, automating electricity conservation measures makes it possible to cut energy consumption by much more. This innovative system can be applied to new and existing buildings alike. Accordingly, we are escalating our marketing efforts to capture the huge potential demand anticipated.

Structure of the Kajima Smart Electricity Management System