

SMART CITY

As a city driving the Japanese economy, Tokyo brings together a host of urban functions. Leveraging the advantages of this concentration, efforts are underway to transform Tokyo into a Smart Energy City through the sharing of energy among buildings and promoting the use of renewable energy.

COMMENT

Miki Muraki Professor, Graduate School of Engineering, Chiba University

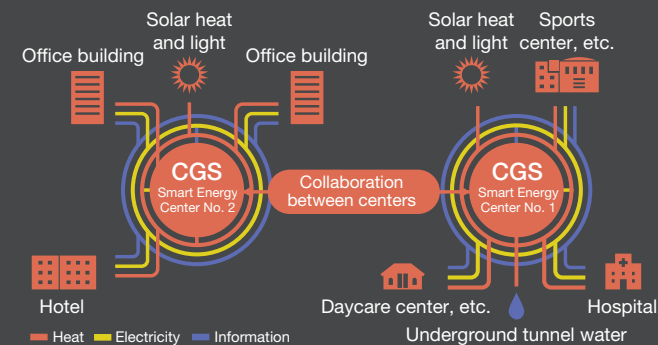
She actively offers proposals regarding urban environments and energy as an expert in city master plans, wide-area planning, and development of low-carbon cities. She holds a doctorate in Engineering.

Tokyo, uniquely positioned to balance environment and economy

It is hard to find a major metropolis anywhere that continues to undergo renewal to the same extent as Tokyo. If this city, with its high concentration of energy demand and extensive development, actively implements low-carbon policies through urban development projects, it would lead the world's cities on the environmental as well as the economic front. In so doing, it will be important to adopt the perspective of making everyone happy—considering the benefits for private companies and consequently making low-cost energy available to the residents. The status of global companies now makes it desirable for them to locate their offices in low-carbon real estate. In central Tokyo and other central areas as well, if the city makes wise use of energy such as by networking commercial and cultural facilities, hotels and other various facilities and making use of the unused energy they emit, its value as a city will increase dramatically and attract attention from around the world.

Urban development for efficient energy use

A smart energy network is being built among facilities that have different peak energy use times, such as office buildings, commercial facilities, hotels, and hospitals, for sharing energy and employing sunlight and other new energy sources. (Area north of Tamachi Station East Exit, Minato-ku)



Building heat demand (for air conditioning, water heating, etc.) is illustrated on this map. It can be noted that there is high demand for heat in central Tokyo and areas around train stations where there is high economic activity.

Incineration plant
Heat demand
High
Low