

# 4 Other Initiatives

In addition to the initiatives outlined above, Tokyo Gas promotes a number of businesses in its efforts to contribute to the evolution of a total energy business. Of those businesses, this section contains profiles about smart energy networks, the real estate business and the hydrogen business.

## 1 Smart Energy Networks

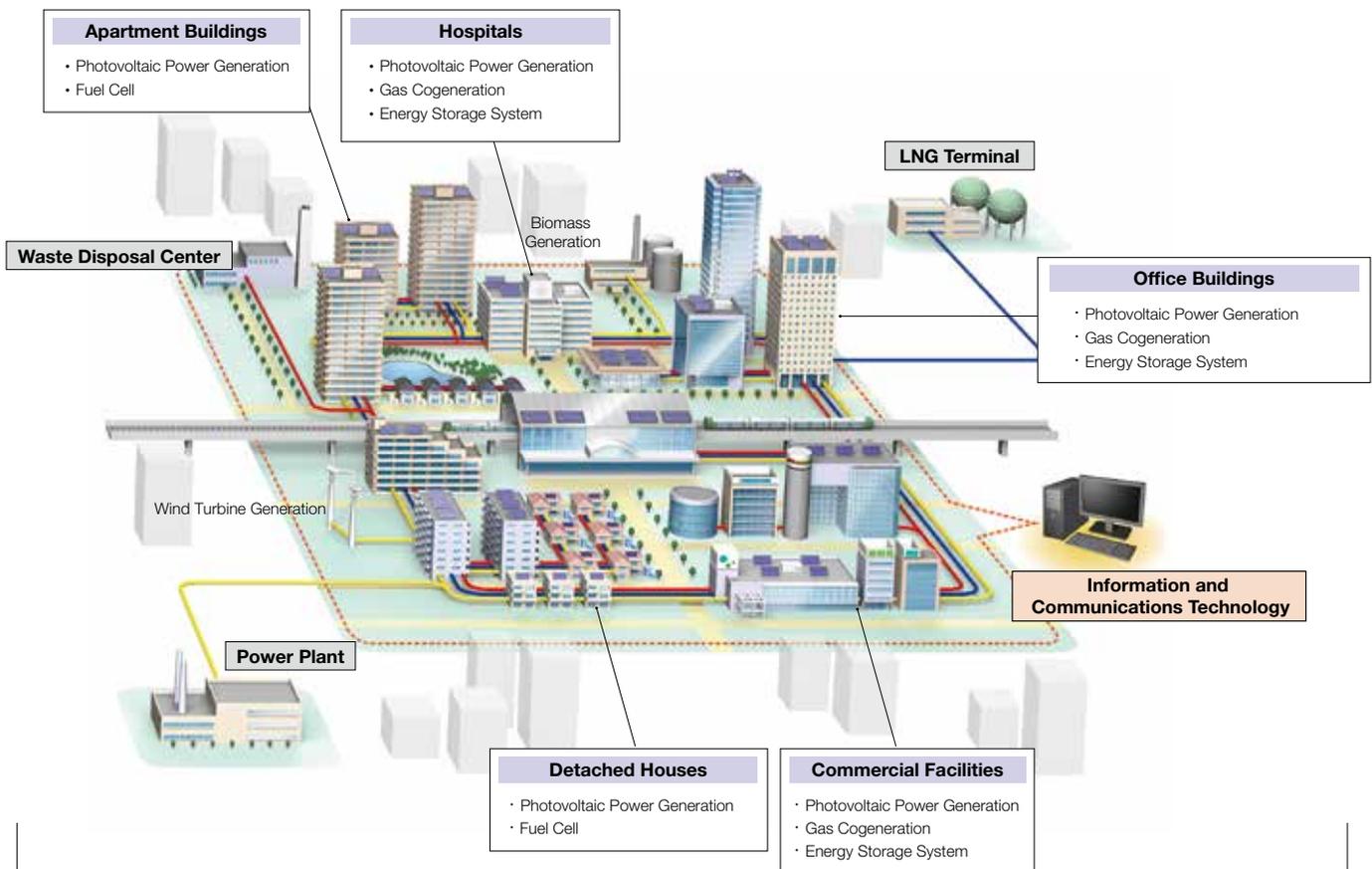
A combination of renewable energy and gas cogeneration system, a smart energy network provides optimum control by means of information and communication technology (ICT) and realizes energy

conservation and reduced CO<sub>2</sub> emissions by the comprehensive utilization of electric power and heat within the network.

At the present time, Tokyo Gas is advancing several projects in collaboration with government and business partners.

<p><b>Examples of Recent Initiatives</b></p>	<ul style="list-style-type: none"> <li>• July 2014 Construction commenced of Smart Energy Center in the wharf district of Toyosu, Tokyo (supply scheduled to begin in fiscal 2016)</li> <li>• November 2014 Construction of a smart energy network in Japan's first innovative urban community in a city block area in the north I district from the east exit of Tamachi station, Tokyo</li> </ul>
<p><b>Future Strategies</b></p>	<ul style="list-style-type: none"> <li>• Commence construction of second Smart Energy Center to expand the smart energy network in the north district from the north exit of Tamachi station</li> <li>• Initiate commercialization study with a view to business participation in Nihonbashi-Muromachi District Urban Redevelopment Electric Power and Heat Supply Plan, a smart city project that will be the first in Japan to include a fully developed urban area</li> </ul>

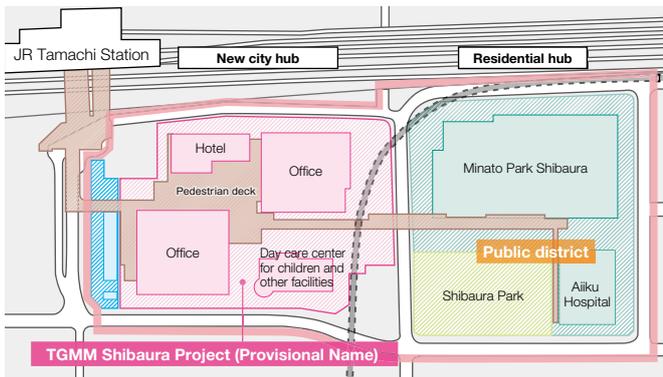
Diagram of a Smart Energy Network



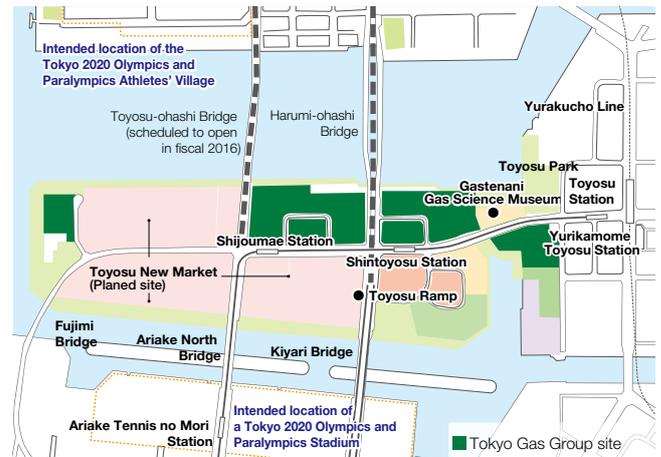
## 2 Real Estate Business

Tokyo Gas holds high-potential, large-scale sites in such locations as Tamachi and Toyosu in the Tokyo metropolitan area. While limiting risk, the Company develops its real estate holdings and works to improve asset value by their effective use. We are installing smart

energy networks, an advanced energy system, in those assets that are not yet developed and, in concert with efforts to improve asset value, will promote initiatives as an energy business partner.



Tamachi Station East Exit Northern District Redevelopment Plan



Toyosu District Redevelopment Plan

## 3 Hydrogen Business

Attention has been focused on hydrogen vehicles for their low environmental impact and as replacements for conventional, gasoline-powered vehicles. Hydrogen vehicles utilize electric power, generated by a chemical reaction between hydrogen and oxygen in a fuel cell, to drive electric motors. The city gas provided by Tokyo Gas consists primarily of methane (CH<sub>4</sub>). Therefore, we are able to extract

hydrogen from this gas to create fuel for hydrogen vehicles.

In addition to automotive innovation and reducing the cost of the vehicles, making hydrogen vehicles more widespread necessitates bringing down the cost of the hydrogen fuel. Tokyo Gas, however, believes that the supply of hydrogen at a stable price will boost the market penetration of hydrogen vehicles.

In December 2014, as part of the initiatives toward greater hydrogen utilization in the years to come, Nerima Hydrogen Station—the first commercial hydrogen station in the Kanto region—was opened and commenced sales. A hydrogen station under construction in Saitama City, Saitama Prefecture, is planned to commence sales during the current fiscal year. We will continue to review future construction, while monitoring social conditions and the market penetration of fuel cell hydrogen vehicles.



Ceremony marking the filling of a hydrogen vehicles