Japanese Urban Policies to Tackle Climate Change

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There are several measures in place to reduce greenhouse gases from urban areas in Japan:

- Energy conservation measures for houses and buildings
    - Compulsory notification of energy conservation efforts
    - Tax incentives
- Low carbon urban design: Compact cities, urban greening, and utilizing the potential energy of sewage
- Promotion of public transportation system: LRT, IC card tickets, bus location system
- Low carbon distribution system: modal shift and efficient truck transport
- Improvement of traffic flow: ITS and elevation of railroad
- Improvement of fuel efficiency of automobiles: Establishing top runner standards and tax incentives

Despite these measures the urban GHG emissions have grown. Main reasons for this are growing dependence on cars, decline of urban green areas, and increase of energy consumption in houses and commercial buildings.

There is now a thrust to the urban policies to reduce GHG emissions, for instance, by promoting compact cities, increasing urban green space, improving sewerage system, and fostering area-wide energy use. Some examples of such measures are as follows:

- Promoting public transportation
    - New urban railways has been put in service from FY2003 to 2005
    - Systems for convenience of train-to-bus transfers have been introduced
    - Introduction of bus location system and non-step buses has made public transport more convenient to use
    - IT has been used to introduce IC train card tickets in several rail and bus carriers
    - LRT (light rail) is being promoted in several cities
- Greening sites and rooftops of buildings
    - Municipal authorities are designating Greening Promotion Zones in which greening of certain proportion of building sites is mandatory
    - Half of the property tax is being waived for green spaces on sites and rooftops of buildings for business use in designated urban areas including Greening Promotion Zones
- Exploiting potential energy of sewage
    - Reduction of N2O emission by raising temperature of incinerators
    - More efficient use and saving of electricity in sewage treatment
    - Extraction of renewable energy from sludge and use of thermal energy of sewage, resulting in refined sewage biogas which is usable as fuel for CNG bus