



## **ROLE OF LOCAL URBAN PLANNING IN EAST ASIAN CITIES IN REDUCTION OF GHG EMISSION AND ENERGY USE**

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### **ABSTRACT**

East Asian countries have increased their GHG emissions and energy use rapidly in these few decades. Urban Environmental Management Project of Institute for Global Environmental Strategies has pursued a research on growing GHG emissions and urban energy use trends in East Asian mega-cities, Tokyo, Seoul, Beijing and Shanghai and showed their respective attitudes towards these global environmental issues. The research indicates that only the local government of Tokyo has been active in making CO<sub>2</sub> related policies and other governments are yet to apply any explicit policies. Considering the rapid urbanization and motorization of this area, it is obvious that urgent local policies towards the GHG mitigation are needed.

This research will focus on defining possible local urban planning policies in East Asia for mitigating GHG emissions, in view of the fact that the per capita energy consumption in dense urban area is lower than that in non-urban areas in Tokyo, the most developed city in East Asia. Their policies includes development controls, intensive land use, mixed land use, pedestrian friendly developments, introduction of public transit systems, traffic calming measures, car sharing, and so on. The paper will also look at other urban planning policies to reduce GHG's in the US and Europe, which have already tried many different attempts at the local level. In the end, with the help of multi criteria analysis, some synergistic urban planning policies for the area will be proposed.

**Key words:** East Asia, GHG emissions, Urban planning