Environmental Performance Assessment of Municipalities with the “CASBEE-City” Tool

Shun KAWAKUBO
Assistant Professor, Faculty of Engineering and Design, Hosei University

A comprehensive, nationwide assessment of whole municipalities in Japan was conducted using the Comprehensive Assessment System for Built Environment Efficiency (CASBEE) tool specifically designed for city scale assessment (CASBEE-City). As with other tools in the CASBEE family, CASBEE-City is also based on the concept of environmental efficiency and calculates the value for built environment efficiency (BEE). In this study, BEE was calculated by using public statistical information and visually displayed on a map through a geographic information system (GIS) to understand the current situation of all municipalities in Japan under the same assessment criteria (same assessment items, thresholds and rating functions). Such city scale assessment and the visualization of the results are expected to assist citizens, governments and other stakeholders in determining which municipalities and regions should be the focus of future sustainable development efforts.