

Evaluation System for Local Energy Management to Support Rebuilding Planning for Municipal Governments

Tsuyoshi Fujita¹⁾, Takuya Togawa¹⁾, Satoshi Ohnishi¹⁾, Makoto Ooba²⁾, Yujiro Hirano¹⁾, Tomohiro Taniguchi³⁾

¹⁾National Institute for Environmental Studies (16-2 Onogawa, Tsukuba, Ibaraki, Japan 305-8506)

²⁾Nagoya University (Furo-Cho, Chikusa-Ku, Nagoya, Japan 464-8603)

³⁾Avant Associates (Shibuya Park plaza 5F, 1-11-8 Shibuya, Shibuya-Ku, Tokyo, Japan 150-002)

Summary

This article discusses the evaluation system for local energy management to support rebuilding planning for municipal governments. Followed by the review of socio-economic backgrounds of rebuilding city planning, key concepts for system development are discussed. The system structure is provided to support legitimate global warming prevention local plans by municipal governments in Japan. The system is developed to identify the potentials of local energy supply such as co-generation systems or green energy systems as well as to analyze the local energy demand patterns with a quantitative and spatial analysis. The system enables the decision stakeholders for the priority sets of energy supply and demand technologies with appropriate social systems.

Key Words: renewable energy, unutilized energy, location optimization, low carbon city, smart energy city