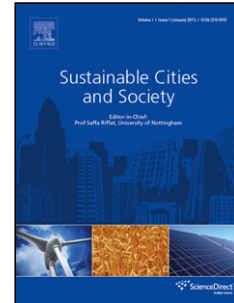


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# Revealing the Mechanism of Urban Morphology Affecting Residential Energy Efficiency in Seoul, Korea

You, Youngsoo<sup>a</sup> and Kim, Saehoon<sup>b\*</sup>

<sup>a</sup> Interdisciplinary Program in Landscape Architecture, Seoul National University  
82-421, Graduate School of Environmental Studies, Seoul National University, 1 Gwanak-ro,  
Gwanak-gu, Seoul, 08826, Republic of Korea

<sup>b</sup> Department of Landscape Architecture, Urban Design Concentration, Graduate School of  
Environmental Studies and Environmental Planning Institute, Seoul National University  
82-410, Graduate School of Environmental Studies, Seoul National University, 1 Gwanak-ro,  
Gwanak-gu, Seoul, 08826, Republic of Korea

\* Corresponding author

Phone: +82-2-880-5662 / Fax: +82-2-874-7181 / e-mail: [skim5@snu.ac.kr](mailto:skim5@snu.ac.kr)

## Highlights

- Direct and indirect effects of urban form and land use on houses' energy efficiency
- Verifying the complex mechanism of thermal problem through SEM method
- Empirical survey on the building level over the broad urban scale
- Policy implication for already-developed residential area on energy issue

## Abstract

This study aims to expand understanding of the urban morphology's role on residential energy demand beyond the previous approach that focused only on the direct effect of physical urban form. This paper suggests the importance of indirect pathways through which three morphological factors—namely urban spatial conditions, land use and architectural attributes—affect the thermal efficiency of residential buildings and then the energy demand.

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