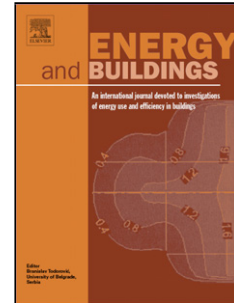


Accepted Manuscript

Title: Quantifying the benefits of a building retrofit using an integrated system approach: A case study

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PII: S0378-7788(17)31883-2
DOI: <https://doi.org/10.1016/j.enbuild.2017.10.090>
Reference: ENB 8110

To appear in: *ENB*

Received date: 30-5-2017
Revised date: 19-9-2017
Accepted date: 29-10-2017

Please cite this article as: Cynthia Regnier, Kaiyu Sun, Tianzhen Hong, Mary Ann Piette, Quantifying the benefits of a building retrofit using an integrated system approach: A case study, *Energy and Buildings* <https://doi.org/10.1016/j.enbuild.2017.10.090>

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Quantifying the benefits of a building retrofit using an integrated system approach: A case study

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Highlights

- Retrofitting existing buildings is critical to reducing energy use and GHG emissions
- Integrated system (IS) retrofits consider interactions among building systems
- IS retrofits enable load reduction, equipment downsizing and improved technologies
- A simulation study was performed to quantify the benefits of IS retrofits
- IS retrofits show much greater energy and cost savings over traditional retrofits

Abstract

Building retrofits provide a large opportunity to significantly reduce energy consumption in the buildings sector. Traditional building retrofits focus on equipment upgrades, often at the end of equipment life or failure, and result in replacement with marginally improved similar technology and limited energy savings. The Integrated System (IS) retrofit approach enables much greater

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