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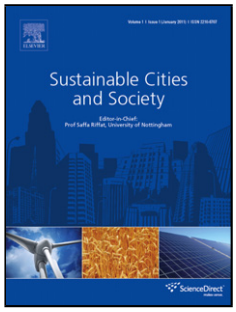

Title: Simulating the Inter-Building Effect on Energy Consumption from Embedding Phase Change Materials in Building Envelopes

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PII: S2210-6707(16)30032-4
DOI: http://dx.doi.org/doi:10.1016/j.scs.2016.03.001
Reference: SCS 382

To appear in:

Received date: 15-9-2015
Revised date: 23-2-2016
Accepted date: 3-3-2016

Please cite this article as: Han, Y., and Taylor, J. E.,Simulating the Inter-Building Effect on Energy Consumption from Embedding Phase Change Materials in Building Envelopes, *Sustainable Cities and Society* (2016), http://dx.doi.org/10.1016/j.scs.2016.03.001

HIGHLIGHTS

- Urban building networks and urban microclimates are inextricably interwoven.
- Phase Change Materials (PCM) have been shown to reduce building energy use.
- We assessed the potential of PCM to mitigate inter-building effects on energy use.
- An urban block in four cities with different PCM configurations was simulated.
- Simulation results show up to 17% reductions in annual HVAC energy consumption.