

## Accepted Manuscript

Predicting Danish residential heating energy use from publicly available building characteristics

Martin Heine Kristensen , Adam Brun , Steffen Petersen

PII: S0378-7788(18)30095-1  
DOI: [10.1016/j.enbuild.2018.05.011](https://doi.org/10.1016/j.enbuild.2018.05.011)  
Reference: ENB 8552



To appear in: *Energy & Buildings*

Received date: 9 January 2018  
Revised date: 7 March 2018  
Accepted date: 5 May 2018

Please cite this article as: Martin Heine Kristensen , Adam Brun , Steffen Petersen , Predicting Danish residential heating energy use from publicly available building characteristics, *Energy & Buildings* (2018), doi: [10.1016/j.enbuild.2018.05.011](https://doi.org/10.1016/j.enbuild.2018.05.011)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**Highlights:**

- Hierarchical bottom-up building energy model of Danish detached single-family dwellings.
- Publicly available building characteristics.
- Approx. 50% of residential building energy use is explained by simple building characteristics.
- City-scale predictions with a mean bias error of approx. 2%.
- Building-scale predictions with a mean absolute error of approx. 25%.
- Predictive capabilities of statistical approaches are comparable to physics-based approaches.

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/6727201>

Download Persian Version:

<https://daneshyari.com/article/6727201>

[Daneshyari.com](https://daneshyari.com)