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Predicting Danish residential heating energy use from publicly available building characteristics

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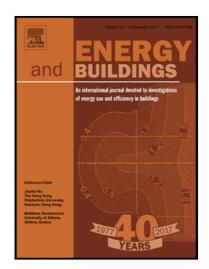
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Highlights:

- 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.



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