

Accepted Manuscript

Lowering greenhouse gas emissions in the built environment by combining ground source heat pumps, photovoltaics and battery storage

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PII: S0378-7788(18)32040-1
DOI: <https://doi.org/10.1016/j.enbuild.2018.09.026>
Reference: ENB 8812



To appear in: *Energy & Buildings*

Received date: 5 July 2018
Revised date: 6 September 2018
Accepted date: 16 September 2018

Please cite this article as: G.B.M.A. Litjens, E. Worrell, W.G.J.H.M. van Sark, Lowering greenhouse gas emissions in the built environment by combining ground source heat pumps, photovoltaics and battery storage, *Energy & Buildings* (2018), doi: <https://doi.org/10.1016/j.enbuild.2018.09.026>

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Highlights

- Development of a techno-economic and environmental assessment model.
- Assessment of 16 residential ground source heat pumps combined with PV and batteries.
- Direct use of PV by ground source heat pumps of 19% and emission reduction of 80%.
- Additional policy measurements are required for profitable heat pump investments.

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