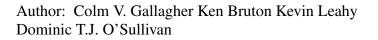
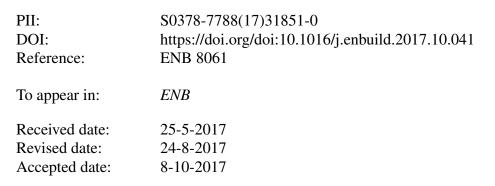
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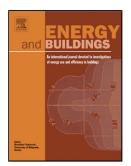
Title: The Suitability of Machine Learning to Minimise Uncertainty in the Measurement and Verification of Energy Savings





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Highlights: "The Suitability of Machine Learning to Minimise Uncertainty in the Measurement and Verification of Energy Savings"

Colm V. Gallagher, Ken Bruton, Kevin Leahy, Dominic T.J. O'Sullivan

August 23, 2017

- The suitability of machine learning algorithms to improve the measurement and verification of energy savings in industrial buildings is presented.
- Six individual modelling algorithms are applied and their prediction accuracy was validated in the context of a case study.
- \bullet Machine learning was found to reduce error by 51.1% compared to an assumed typical approach.
- A higher measurement frequency does not always result in reduced uncertainty in savings quantified.
- The use of machine learning under missing baseline data conditions is shown to be advantageous.

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