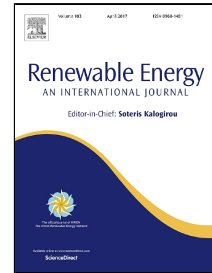


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Techno-economic and reliability assessment of solar water heaters in Australia based on Monte Carlo Analysis

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Highlights

- The reliability of solar water heaters with flat plate collectors (FPC) in Australia
- Estimation of component failures using Monte Carlo analysis based on a modified inverse Weibull probability distribution function
- Reliability study of FPC solar water heaters with different storage tank materials
- Assessment of non-scheduled service cost based on maintenance cost distribution
- Economic analysis of solar water heaters with glass-lined storage
- Sensitivity analysis and comparison of specific thermal cost of solar water heaters against conventional systems

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