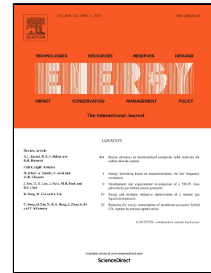


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Coupling waste heat extraction by phase change materials with superheated steam generation in the steel industry

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Highlights

- A PCM-based steam generator for recovering fluctuating waste heat is proposed;
- The use of Al-12%Si alloy as PCM is proposed;
- A methodology for sizing the PCM-based steam generator is proposed;
- A steady production of superheated steam is achieved;
- Electricity production is increased while system size is reduced.

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