



## Challenges for Renewable Energy Production in Cold Climates 2020

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### Message from the Guest Editors

As renewable energy technologies are generally designed for temperate regions, special attention must be paid to their adaptation to cold climate operations. Without being exclusive, the various research topics that are considered in this Special Issue are as follows:

- Cold climate specific challenges for renewable energy systems and associated technologies;
- Adaptation of materials, lubricants, sealers, battery storage, and other elements associated with renewable energy systems to the operation at low temperatures;
- Ice and snow detection and the estimation of their effect on the performance of renewable energy systems;
- Effect of cold climate on the performance, operation, maintenance, and lifetime of renewable energy systems;
- Mitigation techniques to reduce the effects of cold climates (low temperature, atmospheric icing, snow accumulation, strong winds, etc.) on the operation of renewable energy systems.





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## Message from the Editor-in-Chief

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