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## Energy Management of a Multi-Source Energy Production System

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**R**enewable Energies (RE) allow decentralized production of electricity, thus helping to offer a palliative solution to the problem of electrification of isolated sites.

The objective of this article is to size and propose an energy management method for a multi-source system. This method of energy management is an algorithm that allows the sharing of energy between the various components of the system at all times. The sizing makes it possible to obtain good overall operation and to limit the cost of the installation.

Our power management strategy is an optimized power management technique of drastically limiting conversion losses within the system. It consists in reducing the size of the components of the system as well as the production costs.

Keywords: Sizing – Multi-source system – Management strategy – Algorithm – Energy – Optimized management.