

THE DEVELOPMENT OF A MODEL FOR ENERGY MANAGEMENT IN SMALL BUILDINGS WITH ENERGY COVER FROM AN AUTONOMOUS HYBRID ENERGY SYSTEM (HES)

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Abstract: *This paper presents a model that has been developed to simulate the Energy Management for small isolated communities, such as islands, small buildings and rural villages, green houses, and in general for applications without access to an electric grid. This model is based on a hybrid stand-alone energy system (HES) and consists of five sub models, that are, a small Wind turbine generator (WG) model, a PV array model, the Battery back up storage model, the Diesel generator (DG) model and the Control model.*

Key words: *buildings, renewable energy, renewable hybrid energy systems, life cycle cost, energy management.*

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