

The Effect of the Decay of Organic Matter on the Energy Output of a Renewable, Solar Energy Storage System

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The Effect of the Decay of Organic Matter on the Energy Output of a Renewable, Solar Energy Storage System. This experiment was conducted to determine if placing organic matter inside an airtight system and allowing time for decay would increase the pressure, and thus increase the energy output of the system. The hypothesis was, if organic matter is placed inside an airtight four-cylinder system pressurized using a solar powered air pump and given time to decompose, then the pressure will increase, thereby increasing the overall energy efficiency. To conduct the experiment, the four-cylinder system was built and organic matter was placed inside each cylinder. Time was given for the matter to decay and the final energy output was determined with a wind turbine and a multimeter. The results showed there was a 1260% increase from the control energy output to the experimental energy output. The results prove the hypothesis. This experiment has tremendous potential and multiple applications to produce renewable energy from leftover food and other organic matter.