

# The Joule Thief uses cans as a battery power

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(PhysOrg.com) -- Thanks to a child's toy and the mind of T.H Culhane visitors to the explorer's symposium at the National Geographic headquarters got to take a look at how the world of aluminum cans we use every day can be used to power batteries. The project began, as many things do, with a video on YouTube. In this video a child uses aluminum cans to make a very small and simple battery.

This type of [battery](#), known by its nickname as a joule thief, is being used by T.H Culhane to create a plan to bring more inexpensive energy to the rural parts of the world. The joule thief can be used with any cold beverage holder, when it is done for a child's experiment.

The joule thief uses a weak charge in order to create and then convert the power from the can into real power that can be used in a variety of different applications. In this case the power was used to convert a dead AA battery. That battery was able to yields 1.2 volts of power that is then sent to a 3 volt LED light. It is able to power the light with its energy savings.

Culhane is taking his innovation to Nepal first. The system, which would rely on the aluminum cans left by excess tourist activity. The plans involve setting up both solar and biogas plants that will run on this technology. The cans initially will be filled with water and wood ash, which allows it to collect potassium hydroxide. Over time the system will use simple electrodes to set up batteries.

*Joule Thief video.*

**More information:**  
via [National Geographic](#)

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