

CALIFORNIA STATE SCIENCE FAIR 2008 PROJECT SUMMARY

Name(s)

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Project Number

J0839

Project Title

Can Water Power the World?

Abstract

Objectives/Goals

To create a power source using just a liquid and metal cans

Methods/Materials

On a table, place a plastic container upside down

Place a reservoir on the top of the container

Make plastic tubing where water flows through two cans and lands into two cans at the bottom Let water flow and see what happens between the nails

Results

This method is quite impractical for purposes in a private home, given that it takes about 24 million liters to make a single kilowatt-hour. However, some waterfalls in the world flow at about 12 million liters per second, this would mean that each kWh would be produced every 1.8MW. This translates to about 16GWh of energy each year.

Conclusions/Discussion

Each person uses only 10 MWh each. Therefore, this could produce electricity to about 1600 people. This could easily power two small towns! For example in Idaho, here is a town named Swan Valley. It's population is 210 and is near a waterfall. This fall, even if it has only 1/8th the waterflow, could still power the whole town.

Summary Statement

Making renewable energy from water

Help Received

My mom bought the materials