

Manufacturing of wind energy generators from waste materials

Two girls Luong Ngoc Dieu Hien and Nguyen Thi Dieu Ai (grades 9, Nguyen Chi Dieu Secondary School, Hue City) has successfully made the wind energy generators from waste material.



Dieu Hien and Dieu Ai with models manufactured power generators wind objects from waste material -
Photo: Snow Science

Manufacturing of power generators wind phenomenon is not a new topic, but the idea of utilizing waste materials in life makes the subject is appreciated.

Dieu Hien said: "With the idea of exploitation and use of green energy sources and make use of waste to protect the environment, we have created this model. Thereby, we applied what they have learned in theory to practice".

According Dieu Ai, generators consisting of two coil parts are taken from the ceiling fans and magnets off damaged computer hard drives. There are also a number of materials to design a vertical axis wind turbine. Generators with rotary system fitted with wind turbines. When there is wind, the turbines will spin and make the magnets rotate around the coils to generate electricity according to the principle of electromagnetic induction. Given the current through the diode rectifier to convert alternating current into direct current. In order to stabilize the power supply, the power source is rechargeable battery in reserve. This model will generate power with a capacity of about 8 V. To increase the capacity can improve and

upgrade parts.

"From the idea to the finished model, we made more than a month. Materials utilized from ceiling fans, broken computers and some scraps of paper are easy to identify as plastic ", Yew Ai said.

Take advantage of these materials used to power generators by Dieu Hien Dieu Ai creative and meaningful environment. At the same time, the model has a low production cost, easy to use, easy to manufacture at home and save. With that, the project has won the second prize in the contest of innovative scientific and technical school students Hue City in 2014.

Mr. Nguyen Trung Dung, Vice Rector Nguyen Chi Dieu Secondary School, said: "The two girls Dieu Hien and Ai area are good academic subjects and are passionate secret of creativity and research. The school is encouraging and enabling them to express their creativity. I am a physics teacher, I appreciate the creativity, especially in the research efforts of the children. The model is very practical applicability ".

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