Harnessing Earth's Power through Recycled Materials

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For my science fair project, I created a device made completely out of recycled materials that uses wind and solar energy to charge the batteries needed for a heart defibrillator. The purpose of the experiment involved being able to transform items that people usually throw away into something that can generate electricity. Also, by doing this experiment, I gained a knowledge on multiple means of kinetic energy. In order to design and create this device, I took apart a fan motor and transformed it into a generator by placing magnets into the armature and testing its voltage by using a drill to spin the armature (the drill acted as a controlled variable of wind), and creating an electromagnetic field which in turn created electricity (I tested the voltage output with a Multimeter). I then made a solar panel by soldering cracked solar panels together with a soldering iron and wire (I tested the voltage output with a Multimeter). I then created a sturdy base that supported the panel and windmill and combined their output to charge a defibrillator and/or other medical supplies. From my experiments and results, I conclude that with the correct amount of research and experimentation, it is possible to create a device that uses recycled materials to charge a de