The Solar System: A Green Power & Water Cleaning Invention for Improved Life Quality in Developing Communities

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Two critical necessities for people in developing communities are generating affordable power and accessing clean water. According to a joint WHO and UNICEF 2015 monitoring report, 9% of the global population do not have access to clean drinking water and twice that number have no access to electricity. The SOLAR SYSTEM is a solution to this problem. The SOLAR SYSTEM, made from readily available materials, is a power-producing machine that increases the output of a solar panel by over 80% while simultaneously providing safe drinking water. This is achieved through the use of four distinct components working together as an integrated system: 1. A mechanically rotating platform that tracks the path of the sun, increasing the power output of the solar panels by up to 35%, whilst itself using no power. 2. A counter-balanced water drip system, connected to the rotating platform by the tension of springs. As the water drips out of the storage bottles to the water filters, the tension of the springs relax at such a calibrated rate that the platform follows the path of the sun. 3. A reflector system, which focuses more light energy on the solar panels which increase power output by up to another 40%. 4. Energy harvesters and heat exchangers, which produce up to an extra 16% power and cool the solar panel.

Awards Won:

Fourth Award of $500