

I. Executive Summary

Madison Wind is the name of James Madison University's team for the Department of Energy's Collegiate Wind Competition. The team consists of 30 students from the College of Business, Engineering, and Integrated Science and Technology departments. The students were divided into five sub teams: the rotor team, the electronics and gearing team, the business plan team, the market issues team, and the support team. Together, students along with faculty advisors worked toward the April 18th portfolio delivery deadline and the May 5-8 presentation component. The non-profit, Madison Wind Solutions, LLC spawned as a result of the business team's efforts to create a proposal to distribute the prototype wind turbine to those living in energy poverty.

Madison Wind Solutions, LLC exists as a non-profit to bring clean, sustainable energy to communities which currently lack a reliable electricity source. This is accomplished by selling wind turbines to local communities and entrepreneurs who can use the turbines to provide power to cell phone charging stations, light fixtures, radios, cooling units and other small electronics that require small amounts of power. This non-profit is designed as a startup that carries out the design, assembly and distribution of portable, small-scale wind turbines throughout rural sections of Kenya. Energy poverty remains a significant problem across Kenya, even though individuals own various electric technologies such as lighting, cell phones and cooling systems, but lack the necessary electrical power to consistently and reliably power such items.ⁱ Due to the lack of a developed electric grid across much of the country, small-scale renewable energy will succeed by providing energy relief to meet the needs of millions of individuals.ⁱⁱ

ⁱ <http://www.csudp.org/energy-documentary>

ⁱⁱ <http://www.csudp.org/energy-documentary>