

Students Build Bike-Powered Charging Station from Scratch

Source: treehugger.com

Published: December 13, 2012



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As we become more and more dependent on our gadgets, we also are continually seeking out better ways to power them, from [solar-powered chargers](#) to human-powered ones. We've seen ideas for [piezoelectric sneakers](#) to [movement-powered iPhones](#), but one idea that always seems to come back is [pedal power](#). Why not use the energy you create pedaling a bike charge to our gadgets too?

There have been quite a few incarnations of this idea, but it's always refreshing to see a fresh take on it, especially when it's a group of students who go full DIY and build a bike charging station completely from scratch, including the bike. That's just what a team of Northern Arizona

University students did to not only help fellow students recharge their smartphones, but to also educate them about the energy their gadgets are using.

[NAU says](#), "A cross-section of NAU students contributed to the project and built each bike component. Engineering students, computer science students and students from NAU's triathlon and cycling teams all played a role in the charging station's development."

"We worked with the electrical engineering students and computer science students directly to create every piece from scratch," said NAU senior Matt Petney, an engineering student.

The Bike-Powered Charging Station took a year to plan and construct. It features bike parts donated from the university's Yellow Bike Program, a bike-sharing initiative, a battery for storing the energy generated by the pedals and a small touchscreen that shows how much electricity a person produces. A USB outlet lets users plug in their gadgets for charging.

"This is a device where people can actually feel what power is and where it is coming from. This station will give students a physical idea of the energy they use," said Petney.

The charging station will be located in the school's engineering building first and then moved around to different campus buildings to reach as many students as possible.
