

Plant-e makes street lights come alive from living plants

January 15 2015, by Nancy Owano



Credit: Plant-e

Living plants generate electricity; more specifically, energy can come in the form of a byproduct of photosynthesis in plants. All that is needed is light, carbon dioxide and water. Plant-e is a company that builds on that potential source of energy, aiming to do business with products that can generate electricity from plants. Based on natural processes electrons are harvested from the soil and electricity is produced while plants keep



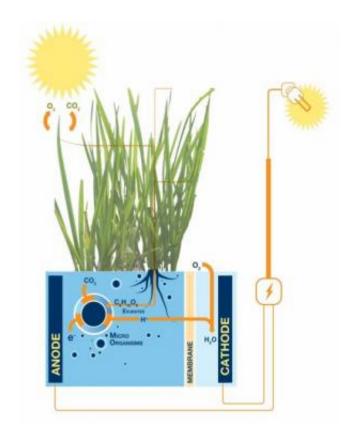
growing. The approach they use does not require damaging the plant in order to harness its energy.

The company was founded back in 2009 as a Wageningen University spinoff by David Strik and Marjolein Helder. The team is enthusiastic over the fact that the energy is not only renewable and sustainable but potentially available to everyone. In urban areas, the roofs of buildings and houses are suitable for such plant projects. As plants grow, they produce more sugars than they need, and the excess is discharged back into surrounding soil and break down, releasing protons and electrons. Plant-e conducts electricity by placing electrodes into the soil. The electrons can be harvested as electricity.

The latest news about the company, from Cat DiStasio in *Inhabitat*, is that the <u>Dutch</u> company's ambition to harvest electricity from living <u>plants</u> continues and is being used at two sites in the Netherlands. *Yes!* reported that in November, more than 300 LED lights were illuminated by Plant-e in a project called "Starry Sky" at Hembrug. Plant power is also being used near the company's headquarters in Wageningen. Both projects have involved native <u>aquatic plants</u> supplied by local greenhouses, said *Yes!*

Plant-e's ultimate goal is to include every region in the world. Inhabitat said that "Company founders hope that their technology will someday be used to provide power in poor areas of the world where plant life is abundant, such as in rice paddies or near wetlands. If they can figure out how to do this in a cost-effective way, it means that this new clean energy could bring electricity to people who have never had it which, by current estimates, is nearly 25 percent of the world's population."





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Already existing rice fields could be equipped with the company's technology but every kind of wetland is qualified. *Yes!* magazine said in that instance, <u>engineers</u> would place a tube horizontally below the surface of a wetland, peat bog, mangrove, rice paddy or delta, and use the same process as the modular system.

More information: plant-e.com/

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