Ttreehugger 10 years of Looking Forward

DESIGN TECHNOLOGY TRANSPORTATION SCIENCE BUSINESS LIVING ENERGY SLIDESHOWS SOCIAL

This solar-powered EV charging solution for apartment dwellers is totally rad



© Powertrees Services

Electric cars (including plug-in hybrid electric cars) are now a better automobile solution than gasmobiles for hundreds of millions of people. There haven't been any comprehensive studies showing this, but I'm convinced of it based on the pros and cons of electric vehicles (EVs) and the needs of most people. There are two to three big barriers remaining, however, that are blocking mass adoption.

The first of those is lack of awareness/experience (the reason tens of millions of people don't own electric cars today). Another is that, while the lifetime cost of an electric car is often lower than a "comparable" gasmobile, the upfront cost is higher, turning off potential buyers. This will be addressed sooner or later as batteries improve and come down in price — they've dropped ~31% in price in the past three years, and they are expected to come down another ~30% in the coming three years. The third barrier is that electric car owners primarily need to be able to charge up at home, and many apartment dwellers can't. One of the huge benefits of electric cars is that you can simply plug in when you get home and never have to worry about wasting time and breathing in pollution at a gas station again. However, if you can't plug in at home, it's generally extremely hard to go electric.

There's minor progress being made on this front thanks to some state and local governments, but imagining a that all governments followed suit in the near future doesn't seem very realistic. More promising is a capitalistic solution that can spread quickly, and I just found out about one! Also, it comes with another massive green benefit — the charging stations are solar powered.

A company called Powertree Services, starting out in San Francisco (surprise, surprise), has a plan in place with 100 apartment buildings that beats anything else I've seen in this market. It is going to rent some parking spaces in the buildings' parking facilities, as well as their roofs, and then install EV chargers and solar panels there. Powertree Services is connecting these technologies with Panasonic lithium-ion batteries (like the ones used in Tesla's cars). Apartment dwellers who pay a flat monthly fee can then charge up their electric cars (which they will presumably now buy). Furthermore, if they are out on the town and need to charge up, they can utilize one of Powertree Services' other EV charging spots — providing them with both a charge and a parking space!

Why is this so awesome? Aside from the obviously clean electrons and emission-free driving, the key here is that burdensome responsibilities are taken out of the apartment dwellers' and building owners'/managers' hands. Apartment dwellers don't need to figure out all of the regulations and talk with (often uninterested) building owners/managers. Building owners/managers also don't have to mess with the details of an installation or fund one, and simply get a new cash stream from Powertree Services.

This has so many advantages going for it that I had to pull "totally rad" out of the 1990s (or whenever it originated).