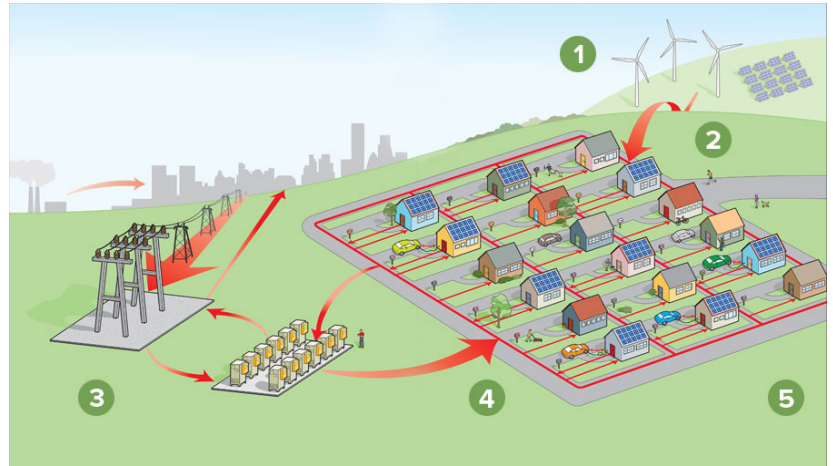




TRENDS ANALYSIS

Microgrids

These small, locally powered energy grids have become increasingly popular in urban and suburban areas. They have been installed by residential communities as well as by large institutions, as the idea of decentralized energy production using renewable sources has taken hold. The IEEE released a standard for design and operation of independent “distributed resource island systems” (standalone microgrids) in August of 2017.¹ Self-healing “smart” grids have also become a powerful asset in smaller grid installations.



Home Energy Storage

Batteries have swept into our lives in the form of electric vehicles; over the past two years, consumer-level flow batteries such as the Tesla Powerwall have become a staple in the environmentally conscious household. With batteries in every garage and home, a powerful storage capacity could be harnessed if they were interconnected and controlled with Powerbank’s system.



Renewables

Perhaps the trend with the longest trajectory to the present time, renewable energy sources such as solar panels and wind turbines are more affordable and practical than ever. With Powerbank, energy creators can earn back their investment even more quickly, too.



Locavorism

You subscribe to a Veggie Box or go to a farmers’ market and support your local agricultural producers, so why aren’t you buying locally generated renewable power from community members? Building Powerbanks into a microgrid allows just that, without the upfront cost of installing your own array of solar panels or turbines. When and if you do so, you’ll be able to sell any excess energy you create, too.



¹ Prior standards were released for design, operation, and integration of microgrids with traditional electrical power systems. They can be viewed here: http://grouper.ieee.org/groups/scc21/1547.4/1547.4_index.html

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