

Sources of Renewable Energy to Break our Fossil Fuel Addiction

Innovations offer sustainable energy alternatives that are kinder to the environment

Fossil fuels like oil or coal are not only dwindling, they also contribute to [climate change](#). What most consumers want is a cost-effective alternative energy source that doesn't contribute to global warming. Countries can reduce their carbon emissions and save money when they invest in renewable energy sources. Here are some incredible projects from around the world that are pushing the boundaries of sustainability by generating and storing power naturally.

Solar Roof

In a single hour, the sun produces enough energy to power the earth for an entire year. Helping homeowners to harness that energy has just gotten easier with Tesla's new [Solar Roof Tiles](#). When combined with projected energy savings, roofs made with solar tiles will cost less and last longer than conventional roofs. The solar tiles come in Tuscan, slate, textured or smooth glass which helps to maximize curb appeal. Tesla is joining forces with Panasonic to start manufacturing the tiles, with orders [open from April](#).

Powerwall

Whether you have a solar tiled roof or a [more traditional solar system](#), you still have to either connect to the grid or store your power for those times when the sun doesn't shine. In the past, storage meant that you would have to invest in costly battery banks that took up space and were not very environmentally friendly to manufacture or dispose of. Now [Tesla's Powerwall](#) is a discreet battery panel that stores enough energy to power your home for an entire day.

The slim [Powerwall](#) profile is compact and comes with a built-in inverter. They are stackable, so you can be sure you are never without power. They are easy to install and can be placed either indoors or outdoors. The system is completely automated and requires no maintenance.

Energy Kites

Makani is a company owned by Google that is working on kites that are able to provide a source of sustainable wind energy. Wind energy only accounts for around [3% of global energy production](#) at the moment, but Makani hopes to make it more accessible. Makani energy kites offer a cheap and easy solution as they eliminate [90% of the material used in wind turbines](#). The kites operate on the same

principles as a wind turbine, but with much lighter materials which make them easier to install and maintain. They are perfect for remote areas or disaster zones. Rotors on the kite help to launch it in the air. When in flight, it acts like a wind turbine, moving around it's tether in a circle. This produces energy which is sent down the tether to the ground station. Each kite is capable of generating [600kW of energy](#).

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