



Schneider Electric's Square D™ Energy Center I Photo source Schneider Electric

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SMART HOME POWER MANAGEMENT SYSTEM REDUCES POLLUTION AND CONSUMPTION



AGRICULTURE & ENERGY

A single panel monitors home energy supplies and provides guidance on best times to use

Spotted: Schneider Electric's Square $D^{\mathbb{M}}$ Energy Center helps move consumers one step closer to net-zero living. Bringing together a connected metre, thermostat, solar inverter and back-up power generator, the energy centre goes beyond smart living to create a fully sustainable home power management system. The central panel provides oversight for a range of distributed energy resources, including solar, utility and wind, in one single place and is designed to allow for future additions of new supply sources.

Users can switch between types of power with an app and the artificial intelligence monitoring system identifies either a normal or a critical load requirement. On a regular day, appliances, heating and cooling systems and charging systems are all supported. Should something occur to limit the amount of available power, the system automatically switches to critical load mode and shuts down any device not deemed essential. Throughout the day, the energy centre monitors costs and alerts users to the best times for various tasks, such as charging an electric vehicle, or switching to solar energy.

Introduced at CES 2021, the energy centre is scalable for use at all levels, from small residential setups to vast public hubs of transport and commerce. The company plans to make the system available commercially by mid-2021.

With homes remaining at the epicentre of most peoples' personal and professional lives for the foreseeable future, a number of innovations continue to make living spaces more sustainable, as well as more healthy. Springwise has spotted an eco-friendly 'Fitbit' for home water metre, and a concept window that uses sunlight to improve air quality.

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Takeaway:

Making it easier for consumers to use sustainable energy sources is an important way for advocates and businesses to expand take-up of available alternatives. Systems that connect with and help maximise the efficiency of larger purchases, such as solar panels and hybrid vehicles, combined with ease of set-up and assistance in making the most of pricing variations, all build consumer confidence. When added to the growing acceptance and use of IoT devices, the methods for achieving carbon neutral living proliferate, allowing individuals and households to design truly bespoke sustainable lifestyles.