THE HOUSE THAT GENERATES MORE ENERGY THAN IT CONSUMES

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A panel of experts from the Welsh School of Architecture at the <u>University of Cardiff</u>, designed and built a prototype detached house that is capable of producing more power for the electricity grid than it needs to consume, with manufacturing costs similar to those of a comparable home. Part of efforts to achieve near-zero carbon housing by 2020, the <u>Solcer House</u> combines reduced energy demand, renewable energy supply, and energy storage in its design. To reduce its energy demand, the house was built with a high degree of thermal insulation to prevent air leakage, and follows an innovative energy-efficient design that includes low-carbon cement, insulation panels, external insulation plaster, solar collectors, and aluminum windows and double glazing. The south roof of the house is covered with glass photovoltaic panels, fully integrated into the design of the house, which do not impede the passage of natural light.

The home's energy systems integrate solar generation with storage to power both its combined heating, ventilation and hot water system, as well as efficient electrical systems including appliances, LED lights and a heat pump.

There are no comments yet.