# 95 kWh energy management

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Energy management is the practice of monitoring, controlling, and optimising energy consumption in buildings by utilising technologies to enable practices designed to reduce energy waste, energy costs, and energy efficiency.

It"s also a powerful way to cut costs, enhance corporate social responsibility efforts, comply with regulatory standards, and enhance process efficiency. By implementing these strategies, businesses can significantly reduce their carbon footprint, enhance operational efficiency, and attract investors who value sustainable practices.

Energy use and associated emissions have risen by 60% since 1992. According to the U.S. Department of Energy, energy accounts for nearly 35% of all energy consumed in the U.S. and generates 826 million metric tons of CO2 emissions. To meet our 2050 climate goals, energy management is critical in reducing emission targets and adhering to evolving environmental regulations.

Energy management is vital for industries where energy consumption is high and operational efficiency is crucial. In manufacturing, even across complex, global facility portfolios, an energy management system can reduce energy costs by up to 30%. By optimising energy use, companies can not only save money but also increase the lifespan of their equipment and reduce maintenance costs.

As the global energy landscape shifts toward renewable sources, effective energy management helps organisations transition smoothly, ensuring they remain competitive and sustainable in a rapidly changing market.

Standard with 11 kW, optionally with 22 kW: charging at home The Audi e-tron will typically be recharged most often at home. And each charging cycle costs the owner just a few seconds of time, i.e. the time required to connect and disconnect the charging cable. In most cases, the electric SUV is charged overnight and then sets off the next morning with a fully charged battery and a range of more than 400 kilometers (248.5 mi) according to the WLTP test cycle.

Together with a home energy management system, the connectcharging system offers intelligent functions. In this case, the Audi e-tron can be charged with the maximum power available with consideration of other consumers in the household to avoid overloading the electrical system. Customers can also define their own personal priorities, such as charging when electricity is less expensive. If the home is equipped with a photovoltaic system, the car can be charged preferentially using the electricity generated by the system, and charging even considers forecast phases of sunshine.

In addition to direct current, the electric SUV can also be charged on the move with alternating current at AC

chargers, with up to 11 kW as standard and at 22 kW with the optional second on-board charger. The car is connected to the charging station using the standard mode 3 charging cable. Roughly 95 percent of all existing charging points in Europe currently conform to this standard.

22 liters (5.8 US gal) of coolant circulate around the 40 meters (131.2 ft) of cooling pipes in the Audi e-tron. Being the hottest components in the powertrain, the electric motors provide the thermal management system with a large quantity of heat. The standard heat pump uses their waste heat - up to 3 kW of actual power losses are efficiently used for heating and air conditioning the interior. Depending on the outside temperature, that can boost the Audi e-tron"s range by up to ten percent in customer operation.