

With funding from Switzerland's Innosuisse and later the Swiss Federal Office of Energy (SFOE), they embarked on an ambitious mission: refining the salt battery's ceramic electrolyte for greater stability, efficiency, and cost-effectiveness. Research at Empa revealed the challenges and rewards inherent in salt battery chemistry.

Originally developed for electric cars, nowadays they supply mobile phone antennas with electricity, and tomorrow perhaps entire districts: The salt battery is a safe and long-lasting battery technology with huge potential.

The battery that should have been installed in the A-Class was a so-called salt battery. In contrast to most other batteries, in which the cathode and anode are immersed in a shared pool of liquid electrolyte, the electrolyte in a salt battery is a solid, namely a ceramic ion conductor based on sodium aluminum oxide.

The facilities cover the entire production of sodium metal chloride cells and complete batteries: Shaping and sintering of the solid electrolyte, production and of the cathode materials, cell assembly and testing, battery assembly and testing, system design and application integration including the battery management system.

Originally developed for electric cars, nowadays they supply mobile phone antennas with electricity, and tomorrow perhaps entire districts: The salt battery is a safe and long-lasting battery technology with huge potential. Empa researchers are collaborating with an industrial partner to further develop these special batteries.

Web: <https://www.gennergyps.co.za>