Ceres sign agreement with Shell to design a SOEC Module

In June 2024 Ceres signed a further contract for the second phase of its collaboration with Shell, to cooperate in the design of a 10MW solid oxide electrolyser ("SOEC") module to produce green hydrogen at 36kWh/kg, for use in large-scale industrial applications such as synthetic fuels, ammonia and green steel.

Ceres has been working with Shell since 2022, leading to the deployment of a 1MW SOEC system at Shell's R&D facility in Bangalore, India. Key to this is the significant efficiency gains offered by SOEC technology, which results in approximately 35% more hydrogen produced per unit of electrical energy when coupled with heat from industrial processes. The project will examine pressurised systems that can drive further efficiency, performance, and integration with other processes, targeting a module level efficiency of less than 36kWh/kg of hydrogen.

