

US Invests In Oxide Fuel Cells

The United States Department of Energy has announced the selection of nine projects for its Solid State Energy Conversion Alliance (SECA) Core Technology Program portfolio that it says will address specific challenges in scaling up and integrating solid oxide fuel cells into advanced central generation power plants. The Core Technology Program extends fuel cell technology to new levels of performance through exploration, research and development of fresh concepts suggested by SECA Industry Team. “The Core Technology Program participants include universities, national laboratories, small businesses and other research institutions. SECA fuel cells are ideal for use in central generation applications, enabling efficient and economic systems for carbon capture,” DOE says. DOE says the fuel cells emit practically no pollutants (nitrogen oxides and sulphur oxides) while consuming much less water than other advanced power generation technologies. “Power plants based on SECA fuel cells and coal gasifiers – units that turn solid coal into gaseous fuel – will generate power with overall efficiencies greater than 50 per cent, compared to approximately 25 per cent for traditional coal-fired power plants, including carbon dioxide capture processes,” says DOE. “These systems will enable the clean, efficient and cost-effective use of coal,” it adds.

[Source essa news]