

# Arco FC Hi-Power Module

The first Italian Fuel Cell Engine realized by Arco FC

Arco FC announces the development of 160 kW single fuel cell module for heavy duty applications

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Arco FC is proud to announce that the field testing has commenced of the **ALFA 1** Hi-power module designed for heavy duty applications, such as heavy transport, marine and rail. Able to produce up to 160 kW, the new single fuel cell module whereby energy stored as hydrogen is converted to electricity comfortably generates the power needed to replace fossil fuel engines and with no emissions at the tailpipe (pollutants, CO<sub>2</sub>).

In all-electric vehicles, the themes of battery weight, long charging times and limited range have been characteristic of today's electric technology. Electric propulsion was once not the first choice for heavy duty trucks but, now thanks to **ALFA 1**, Arco FC's 160 kW fuel cell module, even 40-ton trucks will be able to travel more than a thousand kilometers in an all-electric mode. When powered with hydrogen produced using renewable energy, this module enables the climate-neutral transportation of people, goods and commodities via road, sea or rail.

In a fuel cell, hydrogen (H<sub>2</sub>) reacts with oxygen (O<sub>2</sub>) from the ambient air. The energy this reaction releases is converted into electricity, which is used for power traction. Heat and pure water (H<sub>2</sub>O) are sub-products of the reaction. Green H<sub>2</sub> is obtained using electrolysis, in which water is separated into hydrogen and oxygen with the aid of electricity. Generating this electricity from renewables makes the **ALFA 1** fuel cell module a complete solution that addresses air quality and climate change challenges of today. Especially for large, heavy duty vehicles, fuel cells have a better carbon footprint than exclusively battery-electric powertrains.

## ABOUT ARCO FC SRL

Arco FC Srl is a European player located in Bologna, Italy, expert in the development and manufacture of zero-emission fuel cell modules for several applications. With a facility located in Sasso Marconi, Arco FC has Next Gen products based on own proprietary formulations and designed to meet the needs of industrial vehicles and other transportation markets. Read [more](#) about the Company.