

The Hydrogen Engine as Enabler to Decarbonize Mobility

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Hydrogen is going to be a key player for the energy transition in order to abate GHG, providing opportunities also to the sector of transportation thanks to its properties, e.g., high gravimetric energy density. Beyond fuel cells, another technology is emerging that allows to take advantage of Hydrogen properties to decarbonize mobility: it is the Hydrogen Engine.

It has some key strengths, e.g., take advantage of existing production sites, existing supply chain, no compromise in driving range, capability to operate in heavy duty conditions and others. Moreover, H₂ combustion in ICE promotes a very clean, fast and complete combustion process, with negligible engine-out pollutants.

Aim of the presentation is to introduce the Hydrogen Engine to the audience, showing an overview of its characteristics and of development activities.