

THE UNIT COST AND INFRASTRUCTURE CHALLENGE FOR HYDROGEN FUEL CELL BUSES



(Partner, Avalon Consulting)









The technology is still some distance away from full-scale commercial deployment. The buses currently have a hydrogen capacity of 30 kg and provide a range of 350 km. At a manufacturing cost of Rs 300-400/Kg of hydrogen, the per kilometre cost of running the vehicles is between Rs 25.7 to 34.3, which is significantly higher (more than 10x) than other fuel sources.

There are also issues around the supply chain of green hydrogen, especially considering the nature of hydrogen being of low density, highly inflammable, odorless and corrosive. It requires highly specialised infrastructure along the supply chain including pipelines, storage tanks, transportation vehicles, gas leak sensors, etc.

