IPM Facility at the OR Tambo SEZ

IPM has completed a four-storey state of the art industrial facility (one of the biggest in the world) at the OR Tambo Special Economic Zone (SEZ) to produce PGM catalysts and MEA's for fuel cells and electrolysers which can be used to provide local content for electrolyser and FCEV deployment in SA. The facility will be ready for plant commissioning from October 2024 and will be green to the maximum extent possible, with the full roof area designated for solar panels.

The project will take PGMs from SA platinum mines and at full deployment will beneficiate it into MEA's for FCEV and electrolysers at a rate of 3 million units per annum. We will also be able to convert PGMs into PGM chemicals and thereafter into PGM catalysts for fuel cells and electrolysers.

Ground Floor

1st Floor - Catalyst Production & Recycling

2nd Floor - MEA Testing & Laboratories

Roof - Scrubbers/HVAC

Hydrogen Refuelling Station Project (HRS)

Project Description

The Hydrogen Refuelling Station (HRS) is a landmark initiative in South Africa's transition to a hydrogen-powered future. Strategically near the OR Tambo International Airport, the station will produce tons of hydrogen per day—the largest hydrogen source in South Africa. Capable of fueling up to 400 fuel cell trucks and buses, this project offers a cost-effective solution for heavy-duty transportation, with hydrogen production that rivals diesel on a total cost of ownership basis. By significantly reducing carbon emissions and supporting the local hydrogen economy, Isondo's HRS project is paving the way for South Africa to become a global leader in hydrogen-powered transportation.

7 tons per day Green Hydrogen	Relatively pure (99.9%)	Purify, Compress - Multiple Stations	Refuel 300-400 Cars, Trucks and Buses	TCO Equivalent to Diesel

Availability Immediately Available	**Climate Change** Industrial H2 produced by green energy	**Source Cost** Zero - currently vented
Capital No expensive electrolysis needed	**Central Location** Gauteng - Low h2 transport cost	**Financials** Profitable and Sustainable immediately

Key Attributes

Economy Boost SA hydrogen Economy Status	**Capability** Drive hydrogen capability/ lessons learnt in RSA	**Integration** Key link for H2 corridor & greening the airport
Localisation Drive local beneficiation and assembly of FCEV	**Automotive** Protect and drive automotive industry (homeologation)	**Financials** Profitable and Sustainable immediately
	NPV and IRR IRR = 14.1% NPV = €150m	

40000 - 80000 tons Co2 emission saving/annum