

MEDIA STATEMENT

THE MINERALS COUNCIL WELCOMES THE LAUNCH OF A PILOT HYDROGEN VEHICLE PROJECT

Johannesburg, 16 October 2023. The development of a green hydrogen economy in South Africa took an important step forward with the collaboration between Anglo American Platinum, BMW Group South Africa and Sasol South Africa to conduct a trial of hydrogen fuel cell vehicles, Minerals Council South Africa says.

As countries around the world reduce their environmental footprint by reducing greenhouse gas emissions and address climate change concerns, green hydrogen is a vital component in the shift towards green energy sources.

For South Africa, which is the largest supplier of platinum group metals (PGMs), the use of green hydrogen in the auto sector is an important development that could generate demand of up to 5 million ounces of PGMs a year if hydrogen fuel cells are used in 10% of the global car market. This will underpin job security for the 175,000 people employed in the PGM mining sector.

South Africa's production of PGMs in 2022 amounted to 269.5 tonnes, 5.5% lower than the 285.3 tonnes recorded in 2021. Export volumes for the entire basket of the six metals that comprise PGMs fell by nearly 13% to 230.7 tonnes in 2022 from 264.6 tonnes the year before. Local sales volumes were 15.7 tonnes in 2022, a 24% increase from 12.6 tonnes in 2021.

PGMs are used to make auto catalysts and in a wide range of industrial applications. Platinum is used to make jewellery and it, along with its associated metals, provides an important investment option for investors. PGMs are used in the electrolysis of water to split hydrogen and oxygen, and in hydrogen fuel cells to generate electricity for mobile or stationary applications.

As the world reduces exposure to fossil fuels, there will be a reduction in the number of vehicles using petrol and diesel engines which use PGMs in autocatalytic systems in exhausts to scrub out pollutants. For South Africa's PGM sector, the green hydrogen economy provides a critical market for their metals to continue playing an important role in greening the economy.

The Minerals Council and its members are engaged in the early stages of a project to understand the role the local mining industry can play in South Africa's nascent green hydrogen economy and to encourage the use of PGMs.

The project between Anglo American Platinum, BMW and Sasol is an important development for the industry as the hydrogen fuel cell powered *BMW iX5 Hydrogen* performs in real-world



conditions. Anglo American Platinum provides the PGMs used to make hydrogen and convert it to electricity. Sasol will provide the green hydrogen and the mobile refuelling system.

This project comes soon after the launch of the world's largest mine haul truck with a 290-tonne payload by Anglo American at the Mogalakwena platinum mine in Limpopo. Sasol produced its first green hydrogen at its Sasolburg facility in June.

Green hydrogen, which is created from renewable energy sources, is a source of electricity for use in fuel cells to power heavy duty transport, aviation, shipping as well as industrial processes in making steel, cement and chemicals. Green hydrogen can play a major role in South Africa's economy and its transition to cleaner energy sources.

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