

Platinum & Technology, Investing in the Future
2019 Platinum and Hydrogen Industry Summit



Summit Background

Platinum is one of the rarest metals in the world, with unique physical and chemical properties. Renowned as a catalyst, for example in the production of nitric acid for fertiliser and in petroleum refinery, its ability to withstand high temperatures, stability and conductivity mean that it is widely used in a range of applications from the manufacture of fibre glass to auto catalysts and medical devices such as pacemakers and cochlear implants. It is even used to treat cancer.

Platinum is now playing a vital role in the development of the hydrogen economy, as the use of electricity from hydrogen fuel cells is fast gaining recognition as an alternative to electricity from fossil fuels or batteries in electric vehicles.

In a platinum-based hydrogen fuel cell, hydrogen and oxygen are combined to generate emissions-free electricity, with heat and water as the only by-products. Molecules of hydrogen and oxygen react and combine using a proton exchange membrane (PEM) which is coated with a platinum catalyst.

With countries like China leading the way in this rapidly evolving area, the **Platinum and Hydrogen Industry Summit 2019**, with its regional focus, promises to be a timely opportunity to engage with senior experts and industry professionals.

Summit Organizer Introduction

World Platinum Investment Council (WPIC)

The WPIC was created in 2014 by six of the world's leading platinum producers. WPIC's members are: Anglo American Platinum, Impala Platinum, Lonmin, Northam Platinum, Royal Bafokeng Platinum and Sibanye-Stillwater.

Its remit is to stimulate investor demand for physical platinum through both actionable insights and targeted development, providing investors with the information to support informed decisions regarding platinum and working with financial institutions and market participants to develop products and channels that investors need.

WPIC opened its Shanghai office in 2017, since when it has developed partnerships with two domestic enterprises, Shenzhen Hengfu and Chunghai Platinum, to issue platinum bars. In November 2018, WPIC and the Bank of China Shanghai RMB Trading Unit signed a co-operation agreement to assist the Bank in providing support for its platinum business through training and promotion initiatives. Most recently, in February 2019, WPIC signed a co-operation agreement with China Gold Association. In the future, both parties will work together to promote the development of China's platinum investment market.

Anglo American plc

Anglo American is a leading global mining company and our products are the essential ingredients in almost every aspect of modern life. Our portfolio of world-class competitive mining operations and undeveloped resources provides the metals and minerals that enable a cleaner, more electrified world and that meet the fast growing consumer-driven demands of the world's developed and maturing economies. With our people at the heart of our business, we use innovative practices and the latest technologies to discover new resources and mine, process, move and market our products to our customers around the world – safely, responsibly and sustainably.

As a responsible miner – of diamonds (through De Beers), copper, platinum group metals, iron ore, coal and nickel – we are the custodians of what are precious natural resources. We work together with our business partners and diverse stakeholders to unlock the sustainable value that those resources represent for our shareholders, the communities and countries in which we operate, and for society as a whole. Anglo American is re-imagining mining to improve people's lives.

Summit Agenda:

Date: May 24, 2019

Address: Shanghai Pudong New District· China Financial Information Centre· Shanghai Hall
8:00-9:00 **Registration**

9:00-9:30 **Opening Speech & WPIC Partnership Signing Ceremony**

9:30-10:00 **Keynote Speech: WPIC Platinum Quarterly Presentation (Q1, 2019) and The**

Investment Case for Platinum -World Platinum Investment Council (WPIC)

10:00-10:30 **Keynote Speech: Proactive Steps to Boost Platinum Demand**-Anglo

American plc

10:30-11:00 **Keynote Speech: Platinum Group Metals (PGMs) in the Hydrogen Economy**-

Heraeus

11:00-11:30 **Keynote Speech: Accessing the Platinum market via listed Derivatives at**

CME Group -CME

11:30-12:00 **Keynote Speech: Opportunities and Challenges for fuel cells in the transport**

sector -Bloomberg NEF

12:00-12:30 **Keynote Speech: Exploration of market application of hydrogen fuel cell**

-Re-Fire Company

12:20-13:30 **Lunch**

13:30-14:00 **Keynote Speech: Progress in Localization for MEA production**

- Suzhou Hydrogene Technology Co., Ltd.

14:00-14:30 **Keynote Speech: Why Fuel Cells & the Hydrogen Economy is so important**

today-Loop Energy Inc.

14:30-15:00 **Keynote Speech: R&D progress and industrialization challenges of**

hydrogen energy fuel cells

- Wuhan HydraV Fuel Cell Tech. Co., Ltd.

15:00-15:30 **Keynote Speech: Fuel cell development: Application speed is much faster**

than expected

- Beijing Automotive Investment Capital

15:30-16:00 **Keynote Speech: The sunshine of China's hydrogen vehicles is coming**

- Grove Hydrogen Automotive Co., Ltd.

16:00-16:20 **Coffee Break**

16:20-16:50 **Keynote Speech: Making hydrogen transportable – globally and on the last**

mile - Hydrogenious Technologies

17:00-18:00 **Round Table Discussion: Layout in advance, the future development of the**

hydrogen industry

Date: May 25, 2019

Private Session

Theme: Galaxy to H2 Society

7:00-7:30 Gather at the China financial information center and take a bus to ENZONE center

9:00-9:30 **Registration**

9:30-10:30 **Keynote Speech:** Shanghai International Automobile City (Group) Co., Ltd

10:30-11:00 **Keynote Speech:** Development path and application prospect of hydrogen fuel cell technology – Tongji University, Dr. He Song

11:00-11:30 **Q&A and Lunch**

11:30-13:00 **Test drive of a hydrogen fuel cell vehicle and Visit Shanghai Automobile**

Museum

13:30-15:00 From EVZONE to China Financial Information center



Traffic Route

May 24, 2019

Address: Shanghai Pudong New District· China Financial Information Centre· Shanghai Hall

NO.18 Dongyuan Road, Pudong New District, Shanghai, walk 600 meters

