



# Platinum

the Power to  
*Improve Lives*

May 2002

The Newsletter of the International Platinum Association

## The Power of Platinum to Improve Lives: a Communications Programme for the 21st Century

**D**id you know that it has been estimated that about 1 in 4 of the goods manufactured today contain platinum or Platinum Group Metals (PGMs) or that PGMs play a crucial role in their manufacture? Most people do not. Many people have no idea of the contribution which platinum makes to enhancing their daily lives and how it will influence their future choices in power generation, transportation and healthcare.

This is the backdrop against which the worldwide platinum mining, refining and fabrication industry – under the auspices of the International Platinum Association (IPA) – has launched an ambitious, multi-year, multi-country educational effort. The communications programme, which has been dubbed *The Power of Platinum to Improve Lives*, will raise the awareness of media, legislative, regulatory and political audiences in the European Union and United States about the role of PGMs in a variety of applications affecting nearly every facet of human life.

Most familiar as an increasingly popular choice in jewellery, platinum and its five related metals (palladium, rhodium, ruthenium, iridium, osmium) can be found in a multitude of consumer goods, including fountain pens, ceramic glazes, hard disks for computers, and other electronic products, such as mobile phones. They are an essential component in the catalytic converters built in most of today's motor cars to clean up their exhaust emissions and in some of the medicines used to treat cancer. In addition, PGMs play a vital role in the manufacture of a wide variety of other products including fibreglass, fertilisers and gasoline.

During at least one point in your day, it is likely that you use or benefit from an item which owes its existence to platinum and its sister metals. In the future, you are likely to rely on platinum to an even greater extent: essential as a catalyst for low-temperature fuel cells, platinum promises to be the spark that ignites an energy revolution when efficient, non-polluting fuel cells become commonplace energy sources for vehicles and buildings.

PGMs play a crucial role in improving our quality of life. Environmental technologies, such as fuel cells and catalytic converters, and medical and surgical applications, including retinal implants for improving sight, all rely on PGMs.

Yet, despite this significant role, PGMs are little understood.

*The Power of Platinum to Improve Lives* communications programme will focus on a variety of key activities designed to highlight the role of PGMs in enabling technology worldwide. These activities will include:



The IPA's official website - [www.platinuminfo.net](http://www.platinuminfo.net) - is to be launched on July 1, 2002.

raising the awareness and understanding of the role of PGMs in a variety of applications among influential figures in the worlds of commerce, politics and government; dissemination of platinum industry background information; and the provision of information to reporters and media outlets.

In each market, the communications programme will rely on a number of new resources that will demonstrate the power of platinum. Key among these resources will be a new website – [www.platinuminfo.net](http://www.platinuminfo.net) – which will be launched later this summer. The Web site will provide a readily accessible resource for information about PGMs, their applications and related issues to a worldwide audience. In addition, new information kits providing background information on the many ways in which the power of platinum influences everyday life will be provided to key audiences.

In the 21st Century, we can confidently predict platinum will become the metal of choice for a wide variety of new applications, from fuel cells to technological advances we may not even dream of today. Increasingly, the power of platinum is progress. And for the platinum industry, *The Power of Platinum to Improve Lives* is the communications programme that will define this message for the world.

## In this Issue

1

Communications Programme

2

Sustainable Development

3

Interview: Jeremy Coombes

4

Message from Marcus Nurdin

www.platinuminfo.net

## World Summit on Sustainable Development: The Distant Road to Johannesburg

The first global environmental summit in Rio in 1992 elevated "sustainable development" to the top of the international political agenda. The decade since has seen the Kyoto Protocol on Climate Change about to enter into force, and the UN Convention on Biological Diversity ratified by 177 countries.

The key question for the next stage in this process – the forthcoming UN World Summit on Sustainable Development (WSSD) – is: has the world's environment improved? A tripling of the population in the last 70 years, increases in irrigation and industrial development have meant that global water resources have been severely stretched.



While pollution from industrial installations has been reduced, environmental degradation – such as climate change and air quality – has continued due to

increases in transportation. Biological diversity thins, thanks to poaching and land use trends. The rise in waste means having to rethink the way we use all our resources in the next decade.

It is in this context that the UN World Summit will review progress – or the lack of it – since 1992, with a view to creating a global momentum for real environmental, social and economic improvements. Held in Johannesburg from 26 August to 4 September 2002, the Summit is billed as the largest United Nations convention to date. Those attending – governmental and administrative representatives, civil society including NGOs, and the business community – will be looking for tangible demonstrations of progress and ideas for near-term actions – particularly from business.

In recognition of the important contribution which Platinum Group Metals are making in providing smog free healthier air and cleaner energy with reduced CO2 emissions, the International Platinum Association intends to publish a leaflet at the end of the Summit. This will set out the role of PGMs in the search for environmentally-friendly technologies.

### FreedomCAR

#### A breakthrough in automotive fuel cell technology or just

In January 2002, US Energy Secretary Spencer Abraham closed down the government's 8-year automotive efficiency research in favour of a new fuel-cell-based programme called FreedomCAR (Freedom Cooperative Automotive Research). A public-private partnership between the Department of Energy and automobile manufacturers, it got off to a good start with the launch attended by senior representatives from the Big Three automakers. Under the programme, government and private sector participants will fund long-term research activities into fuel cell technologies for cars and trucks that are "more efficient, cheaper to operate, pollution-free and competitive in the showroom."

There is no doubt that the Summit will attract the attention of the world's media. However, from national delegations so far only Tony Blair and Jean Chretien (British and Canadian Prime Ministers, respectively) have confirmed their attendance. Mr Blair will take six cabinet members and has seconded two senior officials to the South African environment and tourism department to help with the Summit's planning.

Civil Society Organisations (CSOs) are expected to turn up in large numbers – some estimate 70,000 individuals. In an attempt to avoid disruptive protests, they are organising a Global Forum for NGO delegates prior to the Summit (16-21 August) to agree common positions. CSOs includes various groups, from think-tanks and academic groups, from labour unions to environmental and development NGOs. They have a very varied agenda that, most notably, includes the establishment of a new world environment organisation, on a par with the WTO, and a commitment from industry to identify poverty eradication solutions.

The business community, through Business Action for Sustainable Development (set up by the World Business Council for Sustainable Development) has launched a "multi-media showcase of sustainable development initiatives", which will profile projects to promote sustainable development from all over the world: [www.virtualexhibit.net](http://www.virtualexhibit.net). BASD will also host a Business Day on 1 September, to discuss key issues more informally with CSOs.

Some businesses are developing environmental agreements with stakeholders. One example is the mining companies which have developed agreements with indigenous communities in Australia and New Zealand: <http://www.ameef.com.au/mmsd/pdfs/report/acil.pdf>.

But as CSOs such as Friends of the Earth, complain that "business will use the Summit to present itself as the (only) solution to global problems", it appears that attempts to partner with industry may be simply a pipe dream.

Furthermore, the official preparations have so far not gone to plan. At the Third Preparatory Committee meeting in New York, a draft text for an action plan failed to bring together even a hint of an agreement. The fear that no clear decision will be reached by Heads of States until the last days of the Summit is coming closer to a reality. And with the physical preparations for the Summit still largely uncompleted, it looks like the Road to Johannesburg appears to have a lot of ground to cover.

Despite the reservations of many non-governmental energy efficiency advocates in the United States – fuel cells, they argue, are not as market-ready as hybrid cars and other currently available products – this has launched a new era in fuel cell development in the United States. In the four months since the launch of the FreedomCAR initiative, fuel cells have received more coverage and attention from mainstream media and influential organisations in the United States than at any time in the past 10 years.

For 10 years, the platinum industry has been at the forefront of the worldwide effort to make the use of fuel cells an economic reality, funding development of fuel cell technologies and supporting fuel cell promotion activities. As a component of fuel cells (such as those

## Interview with Jeremy Coombes. General Manager, Marketing, Johnson Matthey Precious Metals Division

Since 1985 the Johnson Matthey annual Platinum Review, together with the six-monthly interim report, has been an authoritative source of information on Platinum Group Metals not only for the industry itself and our business partners who use PGMs in their own enterprises but also for outside audiences, including journalists, researchers, and traders.

The review seeks to give a complete analysis of the factors behind the supply and demand of platinum group metals. Although we give indications of future trends in the markets, our main concern is to set out very well-researched and accurate information on the production and uses of platinum metals which will serve as a starting point for anyone wishing to understand this industry better. We also single out and comment on some of the current developments in the industry which we believe are making a significant impact on the market.

We are printing 15,000 copies of the English language version of our 2002 edition published this month, plus additional copies translated into Japanese. Copies are available free of charge via the website address given below.



### The review covers:

- Supply and demand of platinum, palladium and rhodium, with additional coverage of the markets in ruthenium and iridium.
- A comprehensive survey of mine production and supply.
- Data on supply and demand over the last ten years.
- Features commenting on the use of PGMs in topical applications.

## Johnson Matthey's Platinum Review 2002



- Demand for platinum rose 8% - to a record 6.15 million oz in 2001. This was mainly due to increased demand from the auto industry for catalytic converters to meet EU Stage III emission regulations. As a result, diesels made up 36% of the new car sales in Western Europe.
- Growth in industrial demand for platinum slowed to 2%; increased use in glass production, petroleum refining and dental alloys was partly offset by the downturn in the electronics sector.
- Demand for platinum in autocatalysts increased by a third to reach 2.52 million oz last year.
- Supplies rose by 11 per cent, with increases from all mining regions.
- Following expansion, South African mines supplied 4.1 million oz of platinum last year, compared to 3.8 million ozs in 2000.
- Demand for palladium in 2001 was down by 25% to 6.73 million oz following the slump in the use of palladium in electronics and the auto sector.

The 2002 Platinum Review will be posted on May 13, 2002, at:  
[www.platinum.matthey.com/publications](http://www.platinum.matthey.com/publications)

## another R & D programme?

under development in the FreedomCAR programme), platinum will contribute to reduced dependence on oil, promote the development of renewable energy, and reduce greenhouse gas emissions.

Although it is still too early to predict success for the FreedomCAR programme, it is clear that it will provide a significant boost for the additional research and development activities necessary for the commercialisation of fuel cells for widespread use in the future. With fuel cell commercialisation starting in earnest this decade, the platinum industry is confident that fuel cells will provide a growing and significant new market for platinum within the next ten to fifteen years.



## Platinum Globe:

# News and views on platinum group metals issues from around the world

**U**SA, Washington DC: Market and Government Boosts for Fuel Cells

As policy-makers seek energy independence, developments in the fuel cell sector give cause for optimism over the longer-term development of the platinum market.

Fuel cells have been enjoying newly found attention on Capitol Hill due to a growing recognition of the need to overcome the technological and cost barriers to replacing foreign oil with reliable, affordable and cleaner-burning energy sources.

Aware that investment in the fuel cell sector is restrained by perceptions that market penetration is some way off, the Bush Administration, while remaining keenly focussed on oil in its National Energy Plan, has proposed much-needed spending to spur commercialisation: \$3 billion to promote hybrid fuel-cell vehicles; the Freedom CAR initiative (see below) will devote \$50 million for fuel cell research from the 2003 Federal Budget; and up to \$5,000 a head in tax incentives for purchases of fuel cell powered or hybrid electric cars.

## Platinum - Beauty beyond the eye of the beholder

Message from Marcus Nurdin, Managing Director,  
The International Platinum Association

**W**elcome to this, the first newsletter of the International Platinum Association. The timing, we believe, is perfect as we have such a good story to tell.

"The beauty of platinum goes far beyond its visible splendour in some of the world's most exquisite jewellery. Platinum Group metals have been consistently at the forefront of technological advances for many years.

"But, perhaps because within the industry we have become so accustomed to seeing platinum associated with the most exciting of these developments, we have tended to take for granted that the outside world also understands the extent and depth of our operations and the contribution platinum and its sister metals, which together we refer to as the platinum group metals, make to global environment and the health and well-being of its inhabitants. This is not always so.

There are also early signs that a commercial market is developing for fuel cell products. GM recently announced it may need just one platform to produce its new fuel-cell concept car, the Autonomy, in any body, from coupe to SUV. And nearly all the major automakers are expected to bring advanced fuel-cell cars to the market by 2010. Fuel cells which will provide electricity and heat for your home are expected to be introduced in Europe and Japan starting around 2005. Fuel cell products are being designed that will extend the operating time of your laptop and mobile phone. Fuel cell powered mobile phones are likely to be essential if we are to benefit fully from generation 3 technology. Today you can buy a 500 watt fuel cell back-up power generator on [www.fuelcellstore.com](http://www.fuelcellstore.com) as well as components, demonstration kits, and hydrogen gas storage equipment.

There is still a long road ahead, but it looks as though the platinum industry's early investment in fuel cells, and continued leadership in promoting these clean energy power sources, will pay dividends in the years ahead as fuel cell development comes to dominate the US landscape.

"Hence we have decided that it is time to encourage others to share our pride in the extraordinary qualities of platinum and the other PGMs. We want to broaden appreciation of their "true" value and the benefits of their less glamorous but vital industrial applications which contribute so much to making the world and the environment a better place to live. Moreover, in these applications, one of the real beauties of this precious metal is that a very little goes a very long way indeed."



### Contact the International Platinum Association:

Kroegerstrasse 5, D-60313, Frankfurt, Germany  
Tel: (+49) (0)69 287 941  
Fax: (+49) (0)69 283 601  
e-mail: [info@platinuminfo.net](mailto:info@platinuminfo.net)

Or visit our website [www.platinuminfo.net](http://www.platinuminfo.net)  
from 1 July 2002

The next edition of Platinum: the Power to Improve Lives will be released in October 2002.  
To receive a copy, e-mail Marcus Nurdin at [info@platinuminfo.net](mailto:info@platinuminfo.net)

### IPA Member Companies:

Almazjuvelireexport	<a href="http://www.almaz-holding.ru">www.almaz-holding.ru</a>
Anglo American Platinum Corporation Ltd.	<a href="http://www.angloplatinum.com">www.angloplatinum.com</a>
Engelhard Corporation	<a href="http://www.engelhard.com">www.engelhard.com</a>
Engelhard CLAL SAS	<a href="http://www.engelhard-clal.com">www.engelhard-clal.com</a>
Impala Platinum Ltd.	<a href="http://www.implats.co.za">www.implats.co.za</a>
Ishifuku Metal Industry Co. Ltd.	<a href="http://www.ishifuku.co.jp">www.ishifuku.co.jp</a>
Johnson Matthey PLC	<a href="http://www.matthey.com">www.matthey.com</a>
JSC MMC Norilsk Nickel	<a href="http://www.nornik.ru">www.nornik.ru</a>
Northam Platinum Ltd	<a href="http://www.northam.co.za">www.northam.co.za</a>
OMG	<a href="http://www.omgi.com">www.omgi.com</a>
Stillwater Mining Company	<a href="http://www.stillwatermining.com">www.stillwatermining.com</a>
Tanaka Kikinzoku Kogyo K.K.	<a href="http://www.tanaka.co.jp">www.tanaka.co.jp</a>
WC Heraeus & Co KG	<a href="http://www.heraeus.com">www.heraeus.com</a>
Western Platinum	<a href="http://www.lonmin.com">www.lonmin.com</a>