

## **ADDRESS BY TERENCE GOODLACE ON THE LAUNCH OF THE COM FUEL CELL**

**31 MARCH 2015**

- The Minister of Trade and Industry, Honorable Dr Rob Davies
- Deputy Minister of the Department of Mineral Resources, Honorable Mr Godfrey Oliphant
- The Ambassador of Japan, His Excellency Mr Shigeyuki Hiroki
- Member of the Mayoral Council, Honorable Madame Matshidisoe Mfikoe
- President of the Chamber of Mines of South Africa, Mr Mike Teke
- General Secretary of the National Union of Mineworkers, Mr Frans Baleni
- Director General of the Department of Trade and Industry, Mr Lionel October
- Director General of the Department of International Relations and Cooperation, His Excellency Ambassador Jerry Matjila
- Partners of the Platinum Power Fuel Cell, Executives from the Chamber of Mines of South Africa, the Industrial Development Corporation, Egoli Gas, Mitochondria and the Department of Trade and Industry
- Executives representing our Launch Sponsors Lonmin, Anglo American Platinum, the Embassy of Japan, the Japan External Trade Organisation and Implats
- Honorable Guests

It is indeed a great pleasure to be given the opportunity to discuss Implats' thoughts on fuel cells with particular reference to the opportunity it offers South Africa.

As you will have no doubt picked-up by now, we are very excited about the prospects of fuel cells. Albeit early days, we're starting to see the roll-out of fuel cells in fairly large numbers in niche uses as the energy solution of choice. And we are here today to celebrate just one of the many roll-outs that we will, no-doubt, see in the future.

It is our firm view that as platinum has a high degree of recyclability, the continued development of our markets is required to ensure the long-term sustainability of our business. Historically, approximately a third of platinum demand has been used in autocatalysts, one third in industrial applications and one third in jewelry and investment markets. Despite tightening legislation and the green-shoots of growth in the rest of the world, platinum demand growth remains relatively flat as efforts to reduce costs take centre stage.

However, fuel cells are certainly a strong possibility that may offer the platinum industry significant growth opportunities.

As we all know, South Africa is a country with immense natural resources, great intellectual capital and a dynamic future. In excess of 80% of the world's platinum group metals can be found in this country. Platinum has the opportunity to profoundly influence the climate change debate and strong collaboration between private business and the South African Government will enable the country to seize this opportunity. This will establish an environment in which fuel cells can be developed, manufactured, distributed and supported in line with Government's imperatives to accelerate economic growth, develop rural areas and create employment.

It is clear to see that successfully establishing a fuel cell industry in South Africa is a win for our nation, a win for the people of South Africa and a win for our industry, including Implats.

At Implats, we have been playing a role in facilitating the development of the fuel cell market in South Africa by working closely with the Government, and at the same time working with industry to create enabling environments for fuel cells and investigating opportunities to use the technology in applications in our mining and metallurgical operations.

We have successfully partnered with the Department of Trade and Industry to encourage and support greater beneficiation of platinum. The opportunity for South Africa to take a leading role in the fuel cell value chain is a learning curve, but it is clear that public / private collaboration must be encouraged to drive the agenda of both our technology partners globally and the local industrialization imperative.

Implats has partnered with Mitochondria Energy - a local energy business responsible for this installation at the Chamber of Mines - to develop and deliver fuel cell solutions which provide sustainable economic returns. Amongst our other activities is also the development of a 1.8MW hydrogen-fed fuel cell power solution at our Springs refineries. These cells will be fuelled from hydrogen off the pipeline supplied by Sasol and Air Products. It marks the largest single site installation of hydrogen fuel cells in the Southern Hemisphere. In close collaboration with Mitochondria, the DTI, the IDC and Fuji, our equipment supplier, the project will start in the second quarter of 2015.

We envisage this being rapidly followed with the execution of a larger installation at the refineries with the ultimate goal of moving our refineries off-grid. The second phase is expected to deliver 8MW of fuel cell driven power from a natural gas source, with the final phase delivering in excess of 10MW.

On the mining front, we are working to convert our underground LHD's from diesel driven power into fuel cell hybrid configurations. Here we are collaborating with local mobile mining equipment manufacturers, Mitochondria and our international fuel cell partner, SerEnergy, to integrate solutions that offer a superior cost and carbon solution for underground mining. We expect that this conversion will provide Implats a competitive advantage in underground materials movement and provide our miners a healthier and safer working environment.

To move this on from a high-potential industry to a real economic force needs coordinated action to support market development and supply chain activity. It requires a multi-ministry government response and a clearly articulated vision for the future – a vision jointly endorsed by public and private sector stakeholders alike.

The window of opportunity to do this is open. And with strong collaboration and a long term approach, we look forward to being one of the participants in successfully implementing this vision.

Thank you.