



Centron is looking to play an increasingly important role in creating a low carbon economy in carbon intensive SA.

*By Ian Armitage*

As we've seen in the local press, South Africa is looking to introduce a carbon tax to reduce harmful greenhouse gas emissions, although nearly two-thirds of emissions will be tax exempt until 2020 to lessen the economic impact on industry.

In its 2012/13 budget the treasury proposed a 60 percent tax-free threshold on annual emissions for all sectors including, electricity, petroleum, iron, steel and aluminium.

It is a significant move, and with President Zuma's commitment to reduce greenhouse emissions by 34 percent by 2020 and 42 percent by 2025, SA businesses are under pressure to find "credible and economically viable solutions" to reduce their carbon footprint.

According to some, the country's greenhouse gas emissions rank in the top 20 worldwide, accounting for almost half of Africa's emissions.

It is a serious issue and many, as we've seen in previous editions of South Africa magazine, have already started committing to a greener supply chain.

Green is a top agenda item.

"Companies are becoming more aware," says Steve Mummery, managing director of Centron Energy SA. "South Africa has taken a leading role within Africa to protect the environment with the aim of contributing to a cleaner, healthier environment for current and future generations. We clearly saw this at COP 17 in Durban last year where we had great interest from local and overseas visitors at our stand."

To help meet the challenge head-on, just under three years ago, Centron Energy SA introduced a solution to "significantly reduce emissions" from all diesel and petrol engines. It is called Centron fuel enhancer and it is a patented and environmentally safe fuel technology that is registered with the E.P.A and blended locally through

Improchem, which is part of the A.E.C.I Group in Durban, for the local and African markets that Centron serves.

The product has a "proven track record" and not only reduces harmful exhaust emissions and greenhouse gases but also reduces fuel and operating costs by "enhancing the quality of the fuel" and creating a cleaner more efficient fuel burn.

"The use of proven, tested fuel enhancers helps to achieve reduced operating costs, emissions and maintenance thereby improving performance and increasing productivity," says Mummery. "Several industries are under pressure. The South African mining and metals industry in particular is feeling the strain of reducing its energy intensity and improving the quality of the fuel used, particularly in underground mining operations where safety is paramount and the need to reduce harmful gases in the fuel is of major concern to the safety, health and environmental officers of the various mining groups and of course the mining unions safeguarding the well being of its members. The mining industry has been well documented in actively seeking alternative measures to help keep the industry sustainable and competitive in the global market."



Centron premium eco-friendly fuel solutions

According to Mummery, Centron "can play a major role" in this initiative as it is "compatible with all Diesel and Petroleum fuel blends" including certain Bio-Fuels.

"But this is far more than just selling a fuel additive," he says. "The SA Government estimates that up to 25,000 sustainable jobs will be created in the next five years in the green industry and listed companies that are implementing sustainable environmental policies tend to find favour with their global investors and customers and even the share price can reflect this mindset when people, profit and planet come into play. Centron is working on some very interesting initiatives in the Bio-Fuel industry in SA and Africa with non

food crops, as a five percent blend of certified Bio-Fuel is generally accepted in traditional fuel with Centron used to stabilise further the end product. This is becoming more critical as we look to reduce foreign oil dependency and the need for fuel supply security.

"Another area of interest is renewable energy, taking used engine oil and transmission oil from a mining company or municipality and turning it back into a usable spec fuel to be reused on site without the oil having to leave the site, with Centron as the catalyst to treat the final product.

"We are also looking at ways to improve heavy fuel oil which is a low grade of oil used in boilers and furnaces and produces very high emissions."

Centron can be used as both an upstream and downstream product in the petroleum industry at refinery level, distribution level and OEM level, Mummery says.

"We are also looking to introduce a retail programme in 2013."

One stumbling block could be cost. He isn't concerned.

"We recognise that cost is always an issue but it shouldn't be as Centron is proven to bring about independent documented fuel savings of up to 15 percent," Mummery says. "In a diamond mine that has been using our product for over two years, and uses approximately one million litres of diesel per month, we averaged a fuel saving of 13.9 percent across their entire operation. That was documented in their latest annual report. This is a saving of over 100,000 litres of fuel per month at an average price of R10.00 per litre, not to mention a significant reduction in harmful emission gases across the entire operation."

Mummery's challenge is capitalising on the undoubted opportunity.

"What we want to do is to create a premium fuel services business in South Africa and across Africa as this is a multi-million dollar business in the States.

"As with human beings, we are only as good as the food/energy we put into our bodies, the same applies to fuel. One wants to put the best fuel into your car or mining equipment to get the best performance out of it and increase its lifespan and of course asset value. With the global deteriorating fuel quality this is becoming critical.

"The SA government is also looking to introduce low sulphur fuel 15 PPM in 2017 onto the market down from the current 50 PPM currently available at the pumps," he adds. "This in itself creates problems particularly with older equipment and engines as the removal of sulphur causes the fuel to become drier which causes lubrication problems which can severely affect pistons

Clean Air Testing Solutions

Clean Air Testing Solutions (CATS cc) was established early in 2010 and is an independent testing facility performing vehicle emission tests in the fuel industry.

We quantify harmful emission levels as well as green house gas levels. Our focus is on developing accurate testing protocol and standard procedures through the use of the GHG protocol guidelines.

We use these guidelines for sustainable development, as well as industry best practice for performing vehicular environmental emissions, fuel consumption and vehicle maintenance saving tests for small and bulk fuel users.

These practices are undertaken with the use of EPA accredited and certified GREEN fuel enhancers by making use of EPA approved and accredited testing equipment.



Fuel Filters before and after

Opacity before and after

Centron in action



Centron automated dosing system at a diamond mine in Lesotho



CLEAN AIR TESTING SOLUTIONS

Our mission is to promote environmental well-being in all aspects by performing test work according to international best practices.

We strive to provide a totally supported monitoring and evaluation service based on ethics, integrity, honesty and professionalism, while engaging with the latest technology in the field, to provide solutions by minimising harmful emissions and reducing the carbon footprint.

We offer the best possible customer service experience by providing:

- Superior value
- High quality & relevant technology
- Customised testing and services
- Superior service and support offered to protect the quality of our current environment and provide appropriate solutions for the benefit of present and future generations



and injectors. As we have found in the States, Centron acts as a super lubricant through the fuel to counteract the dryness of the fuel in an eco-friendly way and will certainly help the SA government with this process.

"We are currently working actively with mines in South Africa and across Africa, including rail service providers and transport companies across the continent. We are also working with a leading cellphone company in Nigeria to reduce its fuel consumption and emissions in the thousands of base station generators it operates in Nigeria and west Africa."

Centron is looking at the marine industry too, and even defence forces and motor sport in South Africa, Mummery says.

"The reduction of fuel consumption is fundamental to sustainable development," adds Gregg Campbell, a keen environmentalist and key account manager at Centron Energy. "By dealing with the root cause of any problem, negative symptoms are automatically being mitigated

and triple-bottom-line savings are being achieved thereby creating a revenue source that can pay for the longer term sustainable development technologies such as Hydrogen and fuel cells. The opportunity to reduce our fuel consumption, carbon emissions and maintenance and increase asset value reduces local foreign oil dependency, increases local GDP and increases forex reserves, encourages foreign direct investment and ultimately secures not only local national security, but the security of our global village and our future generations."

Mummery concludes: "This is a technology that is here and now and is an African solution to an African problem embracing people, profit and planet."

Centron Energy is a company we expect to hear a lot more of and is certainly one to watch as South Africa transitions to a low-carbon economy. END

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