

# Fuel Price Trends and Forecast

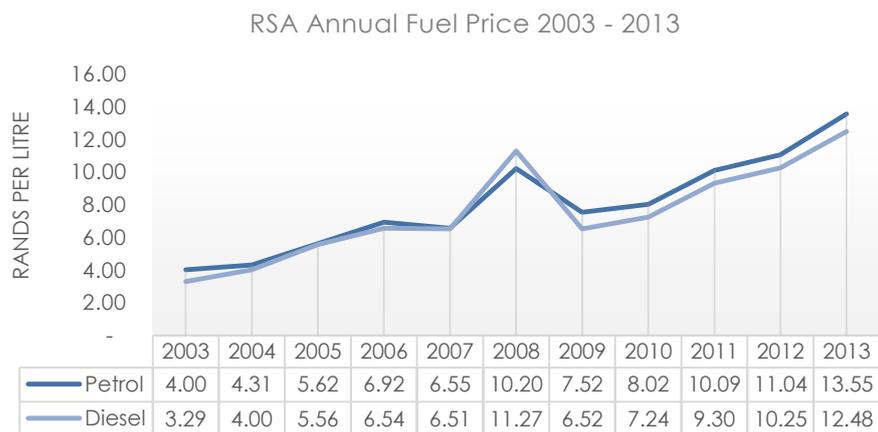
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A sharp increase in the price of fuel captures both the corporate sector and private community's attention and directly impacts South Africa's economy. More to the point, our corporate sector clients are struggling to manage rising operational expenditure and it has become a virtual nightmare to try and budget/ estimate the single biggest expense in fleet.

In completing more than 50 detailed fleet reviews, our Eqstra Fleet Consulting team was able to prove that fuel now contributes **between 38% & 44% of overall corporate fleet cost**, dependent on the fleet mix.

In light of this fact it is alarming to note that within 15 years the price of fuel has increased by more than 560%. This increase is equal to an average increase of 13% year on year. Considering the average CPI over the same period was 5.25%, effectively fuel increases have surpassed the CPI index by staggering 247%.

Figure 1: RSA Annual Fuel Price 2003 - 2013



There does appear to be a slight "slowdown" during the last five years, with fuel increasing on average 12% YoY since 2009, but as the graph below indicates, increases on petrol still remain higher than the 15 year trend-line.

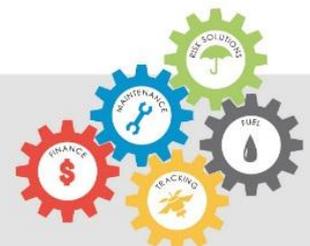
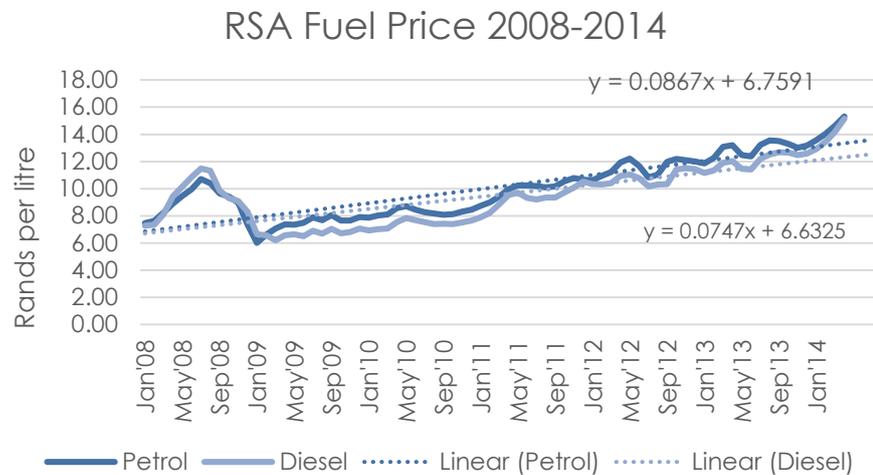


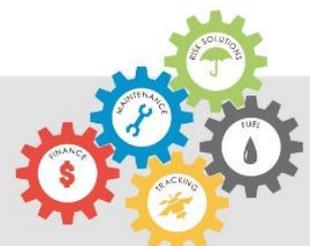
Figure 2: RSA Monthly Fuel Price 2008 – 2014



At reef, 95 and 93 petrol grades now cost R14.32 and R14.11 per litre, respectively, and the wholesale price of diesel (0.05%) is R13.39 on the reef. The Ministry of finance further announced a 12c/ litre fuel and 8c/litre diesel levy increase effective on the 2<sup>nd</sup> April which will push petrol closer to the R14.50/litre mark.

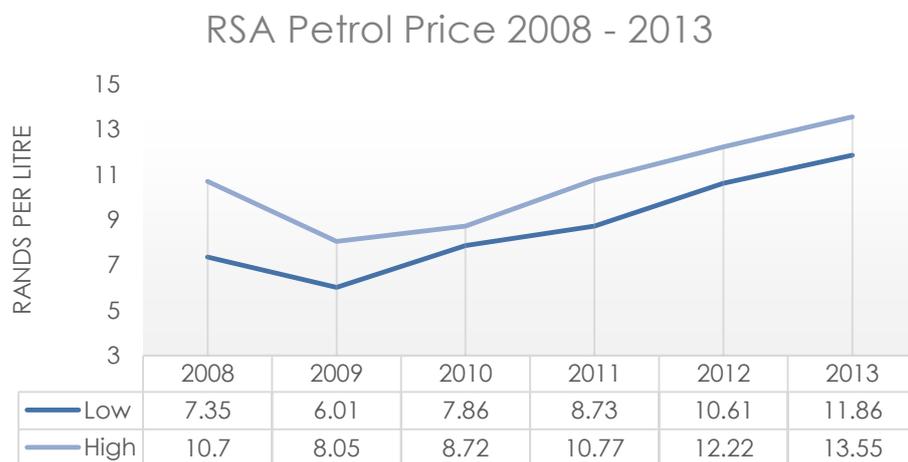
And whilst the **12-13% increase appears to be a statistical indication in terms of estimating by what % we can reasonably budget** for increases it remains virtually impossible to predict pricing. The key factors that will impact our pricing in the following year are:-

1. **Weakening of the rand** will increase the costs – economist are predicting a dismal year for the rand, as opposed to a recovering US\$
2. **Global supply of crude oil** – The EIA projects world petroleum and other liquids supply to increase by 1.3 million barrels per day in both 2014 and 2015. Projected world fuel consumption is however anticipated to also grow by an annual average of 1.2 million barrels per day in 2014 and 1.4 million barrels per day in 2015. The supply/ demand characteristics could however materially change if non-OPEC countries continue to increase supply capacity, with predictions that this increased supply could add additional 3.9 million barrels per day by as early as 2015.



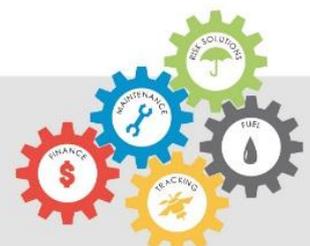
With the above in mind energy price forecasts remain highly uncertain, and the current values of futures and options contracts suggest that prices could differ significantly from the forecast levels (Market Prices and Uncertainty Report). WTI futures contracts for June 2014 delivery, traded during the five-day period ending March 6, 2014, averaged \$101/bbl. **Implied volatility averaged 18%**, establishing the lower and upper limits for the market's expectations of monthly average WTI prices in June 2014 at \$87/bbl and \$118/bbl, respectively compared to a high in 2013 of \$111/bbl.

Figure 3: RSA Petrol Price 2008 - 2013



The volatility of oil pricing is further proven when we analyse the yearly lows and highs in actual SA fuel pricing for the past four years. Whilst the trend appears to be fairly consistent it contradicts the 13% increase, with an average difference of 15.93% between the lowest price and highest price per annum during the last 5 years.

To place this in context, the average fleet vehicle consumes approximately 5,000 litres per annum. At the start of 2013 this would equate to an annual cost of R59,300 - however at the end of December the same calculation results in an annual cost of R67,750 which is a 14.1% increase in real financial terms.



It is therefore important that we try and understand the key factors that influence the fuel price in an effort to pro-actively predict future increases/ decreases.

### Factors affecting fuel prices

#### • Supply side factors

Brent Crude oil is refined to produce petrol and diesel and the cost of crude oil is traditionally the single greatest factor affecting fuel prices over time, it is therefore fundamental to understand factors that drive the supply of crude oil. According to the US Energy Information Administration (EIA) (2010) the supply of crude oil is influenced by:

- The rate and cost of production, which in turn depends the technology used;
- The size of crude oil stockpiles, which can buffer the impact of large price changes;
- The size of remaining crude oil reserves and cost of providing new wells;
- Unplanned interruptions to production due to war, extreme weather or catastrophe;
- Cartel policies, such as OPEC's production quota and target price; and
- The global demand for crude, which is heavily influenced by seasonal factors in the USA and the sustained growth of the Chinese & Indian economy with resulting increases in car ownership.

#### • Demand side factors

The two factors that underpin the demand for petrol are the number of consumers and the rate of consumption. The number of consumers is a function of the number of vehicles and the number of drivers, (Pekol: 2010). Both these increase with population and can be affected by:

- The cost of purchasing and maintaining a motor vehicle;
- Individual's disposable income – generally higher disposable income is associated with higher consumption, including consumption of vehicle.
- Taxation incentives for purchasing and running motor vehicles.

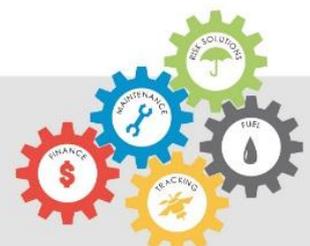
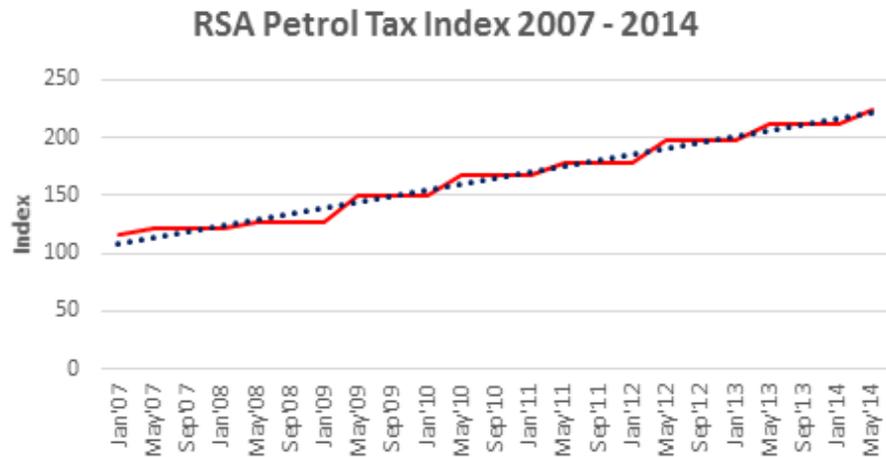
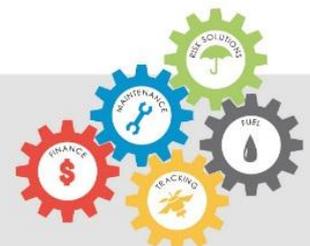


Figure 4: Impact of Tax/ Levies on fuel



In summary, for a given number of motor vehicles' consumers, the rate of petrol consumption depends on:

- The fleet mix – e.g. vehicle type, number of cylinders, and engine size; we anticipate a steep increase on CO<sup>2</sup> taxation during 2014 – with current average taxation only equating to approximately 1c per kilometer. This is hardly a motivator for purchasing more fuel efficient vehicles, and indications in the budget speech are that the minister of finance is due to review taxation upwards to motivate better buying behaviour/ choice.
- The “vintage” profile; newer vehicle are more fuel efficient; the average age of corporate fleet vehicle in SA is currently estimated at 48-52 months, whereas private vehicle age is estimated around 54-60 months. This is likely to increase as companies and individuals are hard pressed to replace vehicles and with the market showing a shift back to buying 2<sup>nd</sup> hand vehicles instead of replacing with new models.
- How well vehicles are maintained; case studies have proven that maintenance can impact between 8-12% in consumption
- The level of congestion on the road network; it is proven that 1 minute idling equates to the same fuel consumption as 1.5km of driving and with our roads becoming more congested costs will increase
- Vehicle loading patterns (i.e. for freight vehicles); case studies on light commercial vehicles have shown that



overloading could increase fuel consumption by as much as 28%

- The demographic and the driver experience characteristics of drivers; case studies have shown that driver behaviour alone impacts between 7 & 12% of fuel costs
- The level of economic activity; data from 2007-2012 has shown that during a severe depressed economic environment companies drastically reduce the overall mileage on their fleets, opting to rather retain the vehicle longer by reducing its use.

### Other factors

Over and above supply and demand side factors, fuel prices are also influenced by:

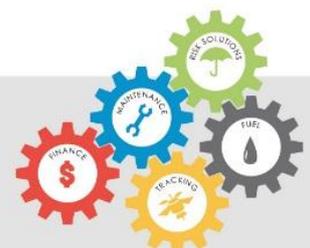
- Impact of taxation – local governments are forced to tax fuel at higher rates to make up for the budget short-falls due to depressed economy
- The impact of a rand/dollar exchange rate – a weaker rand tends to increase the import cost of oil and push the domestic price of fuel up

Figure 4 indicates that since the beginning of 2007, petrol tax index has been constantly trending upward with only one major tax relief which took place in February/March 2010. The increase in petrol tax rate is a domestic factor that also has a serious effect on petrol prices. It is therefore important to account for changes in fuel tax in your annual fuel budget.

### The future

We cannot predict with certainty what will happen in the future with prices of crude oil and petroleum. We can only speculate using statistics.

According to Shell SA figures, petrol and diesel were expected to increase by 46 – 48 c/l and 52.18 – 54 c/l respectively during the first two quarters of 2014. Based on these figures, **ceteris paribus**, we anticipate fuel price to be even closer to R15.00 per litre by the middle 2014 and likely to exceed R15.50 per litre if the current trend continues. This raises the need for fleet operating companies to be stringent in managing driver behaviour



and budgeting for fuel cost as well as the choice of vehicle fleet mix.

With the above in mind, and considering the South African trend we would recommend that at least 15% annual inflation is budgeted for fuel when preparing your vehicle travel budget. We would also recommend that you review your fleet mix and operational costs at least every two years to ensure the optimal fleet is being run. To this effect **our next white paper will focus on the optimal replacement cycle taking all cost factors into consideration.**

Eqstra Fleet Management has various solutions that can assist you in understanding and managing fuel costs more effectively. In particular our GPS solution has been instrumental in delivering savings in excess of 7% to clients by making sure driver behaviour is effectively managed.

Our Eqstra Fleet Consulting team has also been able to deliver more than R62m in savings initiatives during the last 18 months by simply reviewing the clients historic data, and working with the client to develop a more efficient mix and management structure.

We would urge you to contact us through either your account manager or by making direct contact with our Fleet Consulting team if you require any assistance in this regard.

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