Implications of the carbon price on business, IT and the internal audit department
By Barbara Albert

A price on carbon in Australia is quickly approaching. Having a price on greenhouse gas emissions is an important step in moving our country to a low carbon economy, as pollution now comes with a price. From 1 July this year companies that have direct emissions greater than 25,000 tonnes at a facility will have to purchase one carbon permit per every tonne of carbon they are emitting. In the first three years the price will be fixed and will start with $23 per tonne, increasing by 2.5% in real terms for two consecutive years.

In July 2015 the scheme will move to a ‘Cap-and-Trade Emissions Trading Scheme’, in which carbon permits will be traded in the market, rather than having a fixed price attached to them. The price for carbon permits will be determined by supply and demand forces, like in the stock market. It will be possible to bank or borrow permits, and we will see carbon derivatives entering the market. Because of the uncertainty that a floating carbon price creates amongst businesses, the government has provisioned for a floor and a ceiling price for the first three years of the Emissions Trading Scheme.

The cap-and-trade system allows Australia to join the global carbon market. This means that carbon emitters can choose to purchase international carbon permits to offset an entity’s carbon liability, with a 50% limit until 2020. Australia’s big banks are already participating in the European, as well as the New Zealand Emissions Trading Scheme; and they are getting geared up for being a leading force in the Australian Emissions Trading Scheme.

The carbon pricing mechanism will only be directly relevant to large emitters, which will affect no more than about 500 companies. These companies will have to produce a solid carbon inventory to know their carbon obligations under the scheme. Previously, it did not cost money to emit carbon into the atmosphere, and
thereby causing global warming and climate change. Now, industry is forced to factor in the cost of carbon emissions in their business, just as they factor in material and labour costs.

Carbon pricing will affect the relative competitiveness of companies. Goods that are produced with lots of energy input will become more expensive compared to the ones that need less energy during their production. This means that depending on the exact price elasticity of a product, consumers are likely to choose the cheaper (i.e. less carbon intensive) product. The carbon pricing mechanism will thus drive businesses to reduce their carbon emissions to decrease their carbon liability. Businesses will look at the cheapest carbon avoidance and reduction strategies available to them, and as every company does so, we will end up with the cheapest carbon reduction across our whole economy.

The carbon pricing mechanism will only apply to the top emitters in this country, but not all sectors will be equally affected, as some are excluded from the scheme. Sectors that are the prime targets include:

- Electricity generation (power plants)
- Industrial processes (e.g. steel production)
- Landfill sites
- Fugitive emissions (e.g. mining operations)

Given that electricity generation will face a price on their carbon pollution, the immediate impact that all organisations will feel from 1 July is a rise in electricity prices from 15% to 20%\(^1\). Exactly how much electricity prices will increase for an individual company will depend on the state the company resides in, and on the electricity supply contracts that are in place. But one thing is certain: The more energy consumption a company has, the more impact it will feel through rising electricity prices.

Traditionally we have enjoyed low electricity prices in Australia, which used to be in the bottom third in comparison to other OECD countries. No one cared about how much energy they consumed, because it formed such a small expense in terms of overall operating costs. Nowadays organisations need to pay a lot more attention to their energy consumption as it directly affects their bottom line and competitiveness. Energy management is the new buzz word in the market and lots of companies are undertaking energy audits, to see where electricity is being consumed in an organisation.

Electricity is needed to run our air conditioning systems in the office; it is also needed to provide lighting. A large part of it is also consumed by IT and communications equipment. We need electricity to run our laptops, desktops, tablets, phones, monitors, routers, switches, printers, fax machines and our power hungry data centres. Greening the Information Technology infrastructure plays an important part in helping an

\(^1\) The carbon price is not the only reason electricity prices are going to rise: Our network infrastructure needs billions of dollars in investment to cater for our growing energy needs.
organisation reduce its energy consumption and thus its carbon emissions. Green IT will help with making a company more competitive.

Apart from causing emissions, Information Technology will play a strategic role when it comes to carbon compliance processes, risk management and acting on carbon opportunities. IT will be the enabler of providing exact carbon information to management, the board, and to the government. Gathering carbon relevant data across the organisation needs to be done in a rigorous and robust way, so that the information is complete, accurate and timely and that it will be able to withstand an audit.

Currently, a significant number of companies are still relying on spread sheets to capture carbon relevant data. However, spread sheets might not be able to provide the data integrity controls that are needed to deliver accurate information to management and the government. There are numerous carbon software solutions in the market that can help a company with their new information needs, but the adoption rate is still slow. Companies are also starting to put in bespoke carbon software to help with their reporting needs.

From an internal control perspective it is important to have assurance over the end-to-end process for identifying, collecting and calculating carbon emissions across the enterprise. The legislation requires a high level of accuracy of the emissions information provided to the regulator. Underreporting emissions could lead to significant fines and reputational damage. Overstating emissions may lead to over purchase of carbon permits and therefore an unnecessary cost impact. Considering the tight timeframes of the legislation becoming effective and the current level of maturity around capturing and reporting carbon emissions, internal audit teams should focus their attention on the following key aspects:

- Have all sources of emissions been identified and catalogued
- Are processes in place to collect and calculate emission information
- How is emissions data integrity handled, specifically when data is held and calculated in spread sheets
- Can reporting timelines to the regulator be met
- Are carbon liabilities and assets reconciled
- Are the management system and key controls documented

In summary, organisations will have to analyse whether they are under any obligation to either report on their carbon, or to report and pay a price on their emissions. IT will be important on two fronts: One, Information and Communications Technology needs to be leaner to avoid the unnecessary consumption of electricity. Two, Information Technology is vital to enable the governance, risk management and controls that are needed for a company to be compliant with the carbon pricing mechanism.

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