Implications of new Greenhouse Gas Reporting Regulations for business

By Simon Clarke

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After being in draft format for nearly two years, the National Greenhouse Gas Reporting Regulations were published by the minister of Environmental Affairs on 3 April 2017. This briefing document provides a short summary of part of the regulations and highlights what we believe to be some of the key issues for business.

Download the full regulations here.

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South Africa is undoubtedly moving to some form of carbon pricing regime. The timing and format (carbon tax, carbon budget or combination thereof) is still unknown, but the greenhouse gas (GHG) data reported to government as part of these regulations will form the basis for this carbon pricing regime. Companies impacted by the legislation therefore need to make sure their data is accurate and complete as it will have financial implications.

Few changes have been made to the final regulations so there should be no major surprises. But for companies that have not been following the draft regulations, there are some important considerations that are outlined below.

Reporting boundaries. Companies must define their reporting boundaries based on operational control, defined by the regulations as “the full authority to introduce and implement its operating policies at the company”. For companies that have been using the GHG Protocol Corporate Accounting and Reporting Standard for reporting of their GHG emissions historically and have adopted a slightly different approach, either financial control or equity share, this will need to be addressed.

Inclusion / exclusion of certain emissions. The regulations require companies to exclude emissions from mobile combustion (essentially emissions from vehicles) as well as emissions from purchased electricity and refrigerants. Emissions from waste and waste-water treatment are included (provided you exceed the threshold – see the point below on thresholds). If your current GHG emissions inventory is not set up to include or exclude these sources, you may well end up over or under-reporting your emissions.

Emission factors and methodology. The regulations refer to the "Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories (2006)" as the basis for calculating emissions. These guidelines have been translated for South African companies into a slightly easier format by the Technical Guidelines for Monitoring, Reporting, Verification and Validation of Greenhouse Gas Emissions by Industry (hereafter referred to as the Technical Guidelines). To understand the reporting requirements properly, the regulations and the Technical Guidelines must be read together. The most important methodological considerations are:

- The emission factors to be used must be in line with the IPPC requirements and are mostly provided in the Technical Guidelines. For companies that previously relied on the UK government's DEFRA as a source of emission factors, this will need to change. There are also South African specific emission factors for certain fuels, such as diesel and petrol, which companies must be aware of.
- Companies must report their GHG emissions for carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O) separately. Global warming potentials (GWP), which are a measure of how much a GHG contributes to global warming relative to CO_2 for these gases, are also specified in the regulations and must be sourced from the IPCC Third Assessment Report.
- The IPCC Guidelines divide emissions into four main categories, termed sectors (which are Energy, Industrial Processes and Product Use (IPPU), Waste and Agriculture, Forestry and Land-use (AFOLU)), which are further divided into several sub-sectors. Companies will need to determine which sector and sub-sector their emissions fall into.
- The IPCC Guidelines provide several options for calculating the emissions, described as tiers. There are three levels of tiers: one, two and three. Each tier has an associated increasing level of detail and accuracy, with the tier three method requiring the most accurate approach. The regulations specify which tier to use, usually either tier two or three.

Thresholds per source category. The regulations provide thresholds per emission source, above which companies are required to report. In the energy sector this is typically 10MW for the energy sources, and varies for other categories (e.g. five tonnes of waste per day for waste disposal sites and 4-million bricks per month in the brick manufacturing sector). For most companies, the most important part of this is that the 10MW refers to the design capacity and not how much fuel you consumed. In addition, it is not linked to one piece of equipment larger than 10MW. The regulations provide an example of six 2MW boilers, equating to 12MW, that would then exceed the threshold. Interestingly, this approach may require a company with a number of sites with back-up generators to trigger the 10MW threshold, even if no diesel was consumed for that year in those generators.

Calendar year. Reporting needs to be done on a calendar year basis. For companies whose financial year does not end

in December, this will require a good system to cater for this requirement.

Timing. The regulations don't explicitly state this but it is expected that companies will need to report their 2017 data by March 2018. As an aside, the Department of Environmental Affairs is asking companies, through their industry associations, to provide historical data so that the National GHG Inventory is more complete.

Registration. Companies will need to register their company and the facilities that exceed the threshold on the South African National Atmospheric Emission Inventory System (NAEIS) which will serve as the reporting portal for GHG data. Note that the GHG module on the NAEIS is not functioning yet but it is understood that this will be ready by March 2018. The regulations require facilities to register within 30 days of publication of the regulations. Although companies are required to register the facilities that exceed the threshold, it is our understanding that because reporting is done per IPCC category, facility level reporting is not mandatory. This allows for companies with multiple sites to consolidate their data. For example, the six sites with 2MW boilers could then report emissions from coal (assuming they are all coal-fired boilers) collectively under a single line item in the NAEIS.

Validation and verification. The regulations don't require verified data, but if the competent authority deems the data to not be transparent, complete or correct, they may undertake on-site verification and validation which the company will be responsible for paying for.

What actions should you take?

Companies must register and familiarise themselves with the NAEIS and ensure they are ready to report by March 2018. Many companies have been reporting their GHG emissions data for a number of years so the transition to mandatory reporting should be relatively straightforward. However, it is important that your GHG inventory is set up to allow for:

1. Clarity on your boundary approach, focused on operational control for mandatory reporting.
2. Disaggregation of emission sources (e.g. mobile and stationary combustion) per facility.
3. Transparency on emission factors and GWPs and the ability to easily change these. The IPCC Guidelines and the Technical Guidelines must be consulted in this regard.
4. Ability to easily include or exclude emission sources (e.g. exclusion of emission from electricity for mandatory reporting but inclusion for voluntary reporting).
5. Clarity around design capacities of fuel combustion equipment.
6. Monthly data capture and reporting, particularly for companies with financial year-ends that are not in December.
7. Verification of your GHG data. It is recommended that this is conducted by an organisation that understands the

requirements of the IPCC Guideline.

ABOUT THE AUTHOR

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