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Carbon Tax Allowances

The payment of 2019's carbon tax is due this week, on the 31st October 2020. South African Industry has come to terms with the fact that carbon tax will remain a part of our future and as such, it is important that we all understand how to make use of the allowances in the Carbon Tax Act to reduce the cost of the tax.

Before reading further, if you need to refresh your knowledge of carbon tax you can read this insightful article: https://yellowtree.co.za/carbon-tax-act/

As you will note in the article above, every tonne of Carbon Dioxide equivalent (CO_2e) that is emitted to the atmosphere, is priced at R 120 /tonne for 2019. The price per tonne of CO_2e will be R 127 /tonne for the 2020 tax period. This price is set to increase by 2 % more than inflation (CPI) until Dec 2022, whereafter it will increase by CPI annually. To reduce the burden on South African industry, the price of R 120 /tonne has been significantly discounted (by between 60 and 95 %) through the application of 7 different allowances, resulting in a final price of between R 6 and R 48 per tonne of CO_2e. This begs the important question:

Why set the price of carbon tax and then discount it so significantly?

We have to properly understand the answer to this question before we delve into the 7 allowances and how to apply them to determine a taxpayer's carbon tax obligation.

The price of carbon tax, R 120 /tonne, was determined by economists to account for the Rand value of the damage to our economy that arises from the emission of one tonne of CO_2e into our atmosphere. The release of carbon dioxide contributes to global warming, changes in rainfall patterns, water shortages, increased incidences of fire, and to the spread of disease. This puts strain on the national health system, harms communities, constrains food supply and disrupts agriculture and business.

It is possible to build a macro-economic model that attaches a price to the economic cost of global warming, and to then divide this total cost by the quantity of CO_2e emissions that inflicted the damage, so as to obtain a price per tonne of CO_2e. This is how the price of R 120 /tonne was obtained. It would be misleading for government to price the damage to the economy at any value other than its true cost to us as a nation.

Policy makers were then faced with the challenge of addressing the affordability of the tax. They needed a way to introduce the tax gently, to not stifle economic growth, and to provide industry with

time to implement low-carbon technologies. This has been achieved through discounts, known as allowances.

It is also important to remember that allowances provide a less contentious mechanism by which to later increase the price of the tax. It is easier to reduce or remove the allowances, than to increase the price per tonne of CO_2e. If the price per tonne of CO_2e increased from R 6 per tonne to R 120 per tonne there would be uproar, uncertainty, and no ceiling of R 120 /tonne. However, removing a 95% discount to allow the price to increase from R6 to R120 is less contentious because there is an upper limit which provides certainty.

Furthermore, allowances communicate that the true value of a tonne of CO_2e is R 120 /tonne, and not R6 /tonne. Allowances create affordability, provide price certainty, and do not water down the true cost of a tonne of CO_2e to the economy.

What Allowances are there?

There are 7 allowances. The first three, which are shown in yellow beneath, are very simple to apply. Schedule 2 at the back of the Carbon Tax Act lists the various sectors that must pay carbon tax and then provides these sectors with either a fossil fuel, industrial process or fugitive emissions allowance to immediately reduce the cost of the tax. Nothing more than consulting Schedule 2 to obtain the allowances shown in yellow beneath, is required:

a)	Allowance for fossil fuel combustion emissions:	60 %
b)	Allowance for industrial process emissions:	60 - 70 %
c)	Allowance in respect of fugitive emissions:	10 %
d)	Trade exposure allowance:	10 %
e)	Performance allowance:	5 %
f)	Carbon budget allowance:	5 %
g)	Offset allowance:	10 %

The latter 4 allowances above are more complex, and this article will explain these in simple terms. However, please do contact us to support you in verifying your allowances, as errors will be costly and it is prudent to seek the support of process engineers who intimately understand the legislation.

Trade Exposure Allowance Regulations

The trade exposure allowance regulations were passed on the 19th June 2020 as Government Notice (GN) 690. These were created to protect South African exporters from being less competitive in the global economy. Of course, they will only be less competitive until such time as carbon tax is adopted globally and the playing field is levelled.

Schedule A in GN 690 lists the trade exposure allowances that are applicable to taxpayers in different sectors. Obtaining the trade exposure allowance is as simple as reading the percentage from the following table:

Schedule A

SIC	Sector Name	Allowance
210	Mining of coal and lignite	10,00%
221	Extraction of petroleum and natural gas	10,00%
230	Mining of gold and uranium	10,00%
241	Mining of iron ore	10,00%
242	Mining of non -ferrous metals	10,00%
251	Stone quarrying, clay and sand	10,00%
253	Mining and quarrying other non -metallic minerals	10,00%
301	Meat, fish, fruit, vegetables, oils and fats	10,00%
302	Dairy products	4,48%
303	Grain mill products	7,37%
304	Other food products	7,59%
305	Beverages	3,46%
306	Manufacture of tobacco products	7,06%
311	Textiles	10,00%
312	Other textile products	10,00%
313	Knitted, crocheted articles	10,00%
314	Wearing apparel	10,00%
316	Leather and leather products	10,00%
317	Footwear	10,00%
321	Sawmilling and planing of wood	10,00%
322	Products of wood	6,12%
323	Paper products	10,00%
324	Publishing	7,91%
325	Printing, recorded media	0,00%
331 - 333	Coke, petroleum products and nuclear fuel	10,00%
334	Basic chemicals	10,00%

SIC	Sector Name	Allowance
335	Other chemical products	10,00%
336	Manufacture of manmade fibre	4,45%
337	Rubber products	10,00%
338	Plastic products	10,00%
341	Glass and glass products	10,00%
342	Non -metallic mineral products	8,26%
351	Basic iron and steel products	10,00%
352	Non -ferrous metal products	10,00%
353	Casting of metals	10,00%
354	Structural metal products	7,53%
355	Other fabricated metal products	10,00%
356	General purpose machinery	10,00%
357	Special purpose machinery	10,00%
358	Household appliances	10,00%
359	Manufacturing of computing machinery	10,00%
361	Electric motors, generators, transformers	10,00%
362	Electricity distribution and control apparatus	10,00%
363	Insulated wire and cables	10,00%
364	Accumulators, primary cells and primary batteries	10,00%
365	Electric lamps and lighting equipment	10,00%
366	Other electrical equipment	10,00%
369	Electrical machinery	10,00%
371	Manufacture of electronic valves and tubes and other electric components	10,00%
372	Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy	10,00%

SIC	Sector Name	Allowance
373	Manufacture of television and radio receivers, sound or video recording or reproducing apparatus and associated goods	10,00%
374	Professional equipment	10,00%
375	Manufacture of optical instruments and photographic equipment	10,00%
376	Manufacture of watches and clocks	10,00%
379	Radio, television and communication apparatus and professional equipment	10,00%
381	Motor vehicles	10,00%
382	Bodies for motor vehicles, trailers and semi -trailers	10,00%
383	Parts and accessories	9,81%
384	Other transport equipment	0,00%
385	Manufacture of railway and tramway locomotives and rolling stock	10,00%
386	Manufacture of aircraft and space craft	10,00%
387	Manufacture of transport equipment not elsewhere classified	10,00%
389	Motor vehicles, parts and accessories and other transport equipment	10,00%
391	Furniture	10,00%
411	Production, collection and distribution of electricity	4,87%
412	Manufacture of gas; distribution of gaseous fuels through mains	4,87%
413	Steam and hot water supply	4,87%
3042	Manufacture of sugar, including golden syrup and castor sugar	10,00%

The maximum percentage that a taxpayer can receive for trade exposure is 10 %. Many of the sectors listed in Annexure A are indeed allocated 10 % for trade exposure, but some sectors are not. For instance, steam and hot water supply are allocated 4.87 %, dairy products are allocated 4.48 % and wood products are allocated 6.12 %.

In the event that a taxpayer isn't satisfied with the percentage that is allocated to their sector, i.e. sectors that aren't allocated the maximum of 10 %, the taxpayer can calculate their own percentage for the trade exposure allowance in accordance with regulation 4 of GN 690 using the equation below to determine the trade intensity. The taxpayer would have to sum the monetary value of products that were exported and raw materials that were imported during the tax period, and divide this by the total sales for the tax period. These values would have to be verified by an independent auditor.

Trade Intensity Formula

$$X = (E + I)/S \times Y$$

X is the percentage of trade intensity, E is the value of exports, I is the value of imports, S is the total sales and Y is 100

If a taxpayer calculates the trade intensity (X) to be less than 10 %, the taxpayer will not receive a trade exposure allowance. In this case the taxpayer would be better off using the trade exposure allowance in Schedule A above, which will be greater than zero. The taxpayer is permitted to use whichever method (Schedule A or the formula) yields the higher trade allowance.

If the trade intensity (X) is between 10 % and 30 %, a taxpayer will receive a trade allowance that is a third of the value of the trade intensity (X). A taxpayer will therefore receive the full 10 % if X is greater than 30 %.

For instance, if a taxpayer exports products worth R 10 million, imports raw materials worth R 50 million and turns over R 100 million of sales in the period, then the trade intensity would be:

(R 10 mil + R 50 mil) / R 100 mil = 60 %

which is greater than 30%, so the taxpayer would receive the full 10 % trade exposure allowance.

However, if a taxpayer exports product worth R 1.5 million, imports raw materials worth R 1 million and turns over R 10 million of sales in the period, then X would be 25 % and the taxpayer would only receive a trade exposure allowance of 8.25 % (i.e. 0.33 * 25 %).

The regulations also provide guidance for calculating the trade exposure allowance for taxpayers that export several different products, each of which falls under a different sector. However, it is intriguing to note that the average trade allowance for such a taxpayer is weighted according to each sector's national revenue and is not weighted according to the taxpayer's split of revenue from each sector within their business.

(Side note: Yellow Tree feels that the Trade Intensity Formula should be the absolute value of subtraction of imports from exports and not the sum of imports and exports. This is because companies that both import raw materials and export final products, have their risk hedged and their trade exposure reduced. What do you think? Please email us and share your thoughts.)

Performance Allowance Regulations

The performance allowance regulations were promulgated on the 19th of June 2020 and were published as Government Notice (GN) 691. The performance allowance only applies to the following industries because intensity benchmarks are only available for these industries:

Primary production of steel	Production of cement	Ilmenite industry – titanium slag
Production of ferrochrome	Production of pulp and paper	Production of quicklime
Production of silicomanganese	Refining of petroleum	Production of sugar
Mining of platinum, gold, coal	Production of clay bricks	Production of aluminium
	Production of nitric acid	Production of ceramic tiles

In order for a taxpayer who falls into one of these industries to determine if they qualify for the performance allowance, they would need to measure and verify their own emissions intensity and compare it to their industry benchmark. The ratio of the industry benchmark to their own emissions intensity would provide the performance allowance, according to the formula:

$$Z = (A/B - C) \times D$$

Z is the performance allowance, A is the industry intensity benchmark, B is the taxpayer's measured emissions intensity, C is the value 1, and D is 100

The regulations also provide equations for taxpayers whose activities span more than one of the industries that are listed above.

It is important to remember that a taxpayer can only receive a maximum of 5 % for the performance allowance. For instance, the intensity benchmark for primary steel production is 3.83 tonne CO_2e / tonne of crude steel. If a taxpayer's operation has an intensity of 3.63 tonnes CO_2e / tonne of crude steel, then the value of Z would be 5.5 %. However, the taxpayer would only be able to claim 5 % for the performance allowance.

Offset Allowance Regulations

The offset allowance regulations were promulgated on the 29th of November 2019 and were published as Government Notice (GN) 1556. The purpose of this allowance is to permit a taxpayer to invest in a project that does not reduce the taxpayer's CO_2e emissions, but which instead reduces someone else's CO_2e emissions.

There are two occasions when it may be desirable to do this. The first occasion is when it is cheaper to reduce someone else's CO_2e emissions than one's own.

The second occasion is when it is not possible to reduce one's own emissions, because carbon tax is levied on the tonnes of product produced (as under Tables 2 and 3 of Schedule 1 in the Carbon Tax Act). For example, a glass manufacturer (IPCC code 2A3 of Schedule 2 of the Carbon Tax Act) would calculate their CO_2e emissions by multiplying their tonnes of glass product by the IPPU emissions factor (0.2 tonnes CO_2e / tonne of glass produced). When the only way to reduce carbon tax would be to reduce factory output, offset allowances provide a way of investing in someone else's project to reduce tax instead.

Bear in mind that many taxpayers are taxed on the fuel that they consume in their process, under IPCC code 1. Fuel is an input to the business, and as such the taxpayer has control over this. The taxpayer could install more efficient equipment that consumes less fuel. The taxpayer could change to a fuel that is more efficient in combustion (e.g. from coal to LPG) and use less fuel. The taxpayer could change to a fuel that incurs less carbon tax (e.g. biomass). But conversely, a taxpayer who is taxed on the output of their business has no way of reducing carbon tax, but for offset allowances.

Offset allowances can only be claimed for approved projects that are registered as Clean Development Mechanism (CDM), Verified Carbon Standard (VCS), or Gold Standard projects. Projects that comply with other standards that are approved by the Minister of Energy may also be eligible.

In order to qualify as offset projects, these approved projects have to be executed in South Africa, on or after the 1st of June 2019, and must not themselves benefit from a reduction in carbon tax, or benefit from another tax incentive.

The regulations also specify activities that are not eligible for the offset allowance. For instance, any activities that have already received an allowance in terms of section 12 L of the Income Tax Act

(Energy Efficiency) will not be eligible to receive an offset allowance. The offset regulations give a list of all of the activities/projects that are not eligible as well as a set of conditions that make a project eligible.

Carbon Budget Allowance

A taxpayer who participates in the carbon budget system during or before the tax period, receives an allowance of 5 %, provided that the Department of Environmental Affairs confirms the taxpayer's participation in writing.

Renewable Energy Allowance Regulations (for Taxpayers who Generate Electricity from Fossil Fuels)

Section 6(2) of the Carbon Tax Act includes one more allowance that has not been mentioned thus far. This Renewable Energy allowance applies only to taxpayers who are generating electricity using fossil fuels, and it is intended to incentivise these taxpayers to install renewable energy capacity and in so doing to reduce their carbon tax liability from fossil fuel firing. This allowance can be applied without having to register a carbon project and without claiming an offset allowance. The renewable energy allowance is therefore a much easier mechanism than the offset allowance. The formula is simple:

$$X = A - B - C$$

X is the final carbon tax liability, A is the carbon tax calculated from section 6(1), B is the Renewable Energy Premium multiplied by the kWh, C is the Environmental Levy on Electricity of 3.5c/kWh multiplied by the kWh.

GN 692 was passed on the 19th of June 2020 and provides the renewable energy premiums that taxpayers should use to reduce their tax liability if they produce electricity from renewable sources in addition to fossil fuel sources:

Renewable Energy	Premium (R/kWh)
Biomass	R2.09
Concentrating Solar Power	R4.11
Landfill Gas	R1.35
Onshore Wind	R1.23
Solar Photovoltaic	R2.27
Hydro < 15 MW	R1.61
Hydro > 15 MW	R0.84

The environmental levy on electricity of R 0.035 /kWh should also be deducted from the carbon tax.

Concluding Remarks

It is important that taxpayers remember that they have to register and license their facilities as manufacturing warehouses with their nearest Customs Branch. Additionally, taxpayers that are eligible for carbon tax are automatically eligible for greenhouse gas reporting and hence would also have to register with the Department of Environment, Forestry & Fisheries.

Please contact us if you have any questions or if you would like us to assist you in determining your carbon tax liability. We love serving our clients, and welcome the opportunity to help you!