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OUR REF: MD/carbon-tax-act-update-summary	YOUR REF:	27 May 2019
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SPECIAL LEGAL UPDATE REPORT

CARBON TAX ACT, 2019

After many years this Act was now finally passed by Parliament on 23 May 2019. It entered into force on 1 June 2019. It is a highly technical Act and a full discussion of its scope is certainly the scope of this update report.

A tax of R 120.00 is applicable per tonne carbon dioxide equivalent of the greenhouse gas emissions. The calculation of the tax payable is based on a slightly elaborate formula which is too complicated to repeat and explain in this update.

Various tax allowances are provided for meaning that the actual amount per tonne will be less than R 120.00. Allowances provided for include:

- Fossil fuel combustion
- Industrial process emissions
- Fugitive emissions
- Trade exposure
- Performance allowance
- Carbon budget allowance
- Offset allowance

The total allowances may not, however, exceed 95 % of the total greenhouse gas emissions in respect of a tax period as determined in terms of the column "Maximum total allowances %" in Schedule 2 of the Act. The Act defines a tax period as:

- Commencing on 1 June 2019 and ending on 31 December 2019; and
- Subsequent periods as running from 1 January to 31 December.

Taxpayers will be required to submit yearly environmental levy accounts and payments as prescribed by rules in terms of the Customs and Excise Act, 1964, for every tax period.

The rate of tax will be increased by the amount of the consumer price inflation (CPI) plus 2 % for the preceding tax period as determined by Statistics South Africa per year until 31 December 2022.

Thereafter the rate of tax must be increased by the amount of the CPI for the preceding tax year as determined by Statistics South Africa.

This means, broadly, that for the first phase (ie. until 31 December 2022) that tax free emission allowances can range from 60 % to 95 %.

This includes a:

- basic tax-free allowance of 60 % for all activities
- 10 % process and fugitive emissions allowance
- maximum 10 % allowance for companies using carbon offsets to reduce their tax liability
- performance allowance of up to 5 % for companies reducing the emissions intensity of their activities
- 5 % carbon budget allowance for complying with the reporting requirements
- maximum 10 % allowance for trade exposed sectors.

Schedule 1 Table 1 deals with the following fuel combustion emission factors:

- stationary source categories
- non-stationary / mobile source category activities

Both contain a long list of different fuels and gases as well as their corresponding carbon dioxide, methane gas and nitrous oxide values and their default calorific value.

Schedule 1 Table 2 deals with fugitive emissions factors for various source category activities (eg. solid fuels, coal mining and handling, gas production - to name just some examples) and listing their IPCC (Intergovernmental Panel on Climate Change of the UN) Code. Corresponding values for carbon dioxide, methane gas and nitrous oxide are listed for each activity.

Table 3 covers industrial processes and product use (IPPU) emission factors and again various source category activities are listed. Tonne carbon dioxide/tonne product values are listed for most activities in this table. There are five more columns for tonne methane/tonne product, tonne nitrous oxide/tonne product, tonne hexafluoroethane/tonne product, tonne

tetrafluoromethane/tonne product, (also known as carbon tetrafluoride or R-14), and tonne sulfur [sic] hexafluoride/tonne product. Figures are only listed for a few of the latter five, and then mainly under the methane heading.

Schedule 2 contains a long list of activities/sectors (with their IPCC Code), and for some their threshold (ie. when they become applicable, eg. 10 MW (th)), as well as the different tax allowances (in %) mentioned above.

A copy of the Act can be downloaded from our website from the following link:

<http://www.dittke.com/Newsletter/Archive/130?ReturnUrl=%2fNewsletter%2fArchive>

This includes the Schedules and Tables for ease of reference.

Kind regards

MARK DITKE

Schedule 1**Table 1****Fuel Combustion Emission Factors****STATIONARY SOURCE CATEGORY**

FUEL TYPE	CO₂ (KG CO₂/TJ)	CH₄ (KG CH₄/TJ)	N₂O (KG N₂O/TJ)	DEFAULT CALORIFIC VALUE (TJ/TONNE)
ANTHRACITE	98 300	1	1.5	0.0267
AVIATION GASOLINE	70 000	3	0.6	0.0443
BIODIESEL	0	3	0.6	0.027
BIOGASOLINE	0	3	0.6	0.027
BITUMEN	80 700	3	0.6	0.0402
BLAST FURNACE GAS	260 000	1	0.1	0.00247
DIESEL	74 100	3	0.6	0.043
BROWN COAL BRI- QUETTES	97 500	1	1.5	0.0207
CHARCOAL	0	200	4	0.0295
COAL TAR	80 700	1	1.5	0.028
COKE OVEN COKE AND LIGNITE COKE	107 000	1	1.5	0.0282
COKE OVEN GAS	44 400	1	0.1	0.0387
COKING COAL	94 600	1	1.5	0.0282
CRUDE OIL	73 300	3	0.6	0.0438
DIESEL	74 100	3	0.6	0.0381
ETHANE	61 600	1	0.1	0.0464
GAS COKE	107 000	1	0.1	0.0173
GAS WORKS GAS	44 400	1	0.1	0.0387
INDUSTRIAL WASTES	143 000	30	4	N/A
JET GASOLINE	70 000	3	0.6	0.0443
JET KEROSENE	71 500	3	0.6	0.0441
LANDFILL GAS	0	1	0.1	0.0504
LIGNITE	101 000	1	1.5	0.0119
LIQUEFIED PETROLEUM GASES	63 100	1	0.1	0.0473
LUBRICANTS	73 300	3	0.6	0.0402
MUNICIPAL WASTES (BIOMASS FRACTION)	0	30	4	0.0116
MUNICIPAL WASTES (NON BIOMASS FRACTION)	91 700	30	4	0.01
NAPHTHA	73 700	3	0.6	0.0445
NATURAL GAS	56 100	1	0.1	0.048
NATURAL GAS LIQUIDS	64 200	3	0.6	0.041
OIL SHALE AND TAR SANDS	107 000	1	1.5	0.0089
ORIMULSION	77 000	3	0.6	0.0275

FUEL TYPE	CO ₂ (KGCO ₂ / TJ)	CH ₄ (KGCH ₄ / TJ)	N ₂ O (KGN ₂ O/ TJ)	DEFAULT CALORIFIC VALUE (TJ/TONNE)
OTHER BIOGAS	0	1	0.1	0.0504
OTHER BITUMINOUS COAL	94 600	1	1.5	0.0243
OTHER KEROSENE	71 900	3	0.6	0.037
OTHER LIQUID BIOFUELS	0	3	0.6	0.0274
OTHER PETROLEUM PRODUCTS	73 300	3	0.6	0.0402
OTHER PRIMARY SOLID BIOMASS	0	30	4	0.0116
OXYGEN STEEL FURNACE GAS	182 000	1	0.1	0.00706
PARAFFIN	71 900	3	0.6	0.0438
PARAFFIN WAXES	73 300	3	0.6	0.0402
PATENT FUEL	97 500	1	1.5	0.0207
PEAT	0	1	1.5	0.00976
PETROL	69 300	3	0.6	0.0443
PETROLEUM COKE	97 500	3	0.6	0.0325
REFINERY FEEDSTOCK	73 300	3	0.6	0.043
REFINERY GAS	57 600	1	0.1	0.0495
RESIDUAL FUEL OIL (HEAVY FUEL OIL)	77 400	3	0.6	0.0404
SHALE OIL	73 300	3	0.6	0.0381
SLUDGE GAS	0	1	0.1	0.0504
SUB-BITUMINOUS COAL	96 100	1	1.5	0.0192
SULPHITE LYES (BLACK LIQUOR)	95 300	3	2	0.0118
WASTE OILS	73 300	30	4	0.0402
WHITE SPIRIT AND SBP	73 300	3	0.6	0.0402
WOOD/WOOD WASTE	0	30	4	0.0156

NON-STATIONARY / MOBILE SOURCE CATEGORY ACTIVITY

FUEL TYPE	CO ₂ (KGCO ₂ / TJ)	CH ₄ (KGCH ₄ / TJ)	N ₂ O (KGN ₂ O/ TJ)	DEFAULT CALORIFIC VALUE (TJ/TONNE)
AVIATION GASOLINE	70 000	0.5	2	0.0443
COMPRESSED NATURAL GAS	56 100	92	3	N/A
DIESEL	74 100	4.15	28.6	0.0381
DIESEL — (OCEAN-GOING SHIPS)	74 100	7	2	0.0381
DIESEL-RAIL	74 100	4.5	28.6	0.0381
JET KEROSENE	71 500	0.5	2	0.0441
KEROSENE	71 900	3	0.6	0.037
LIQUEFIED NATURAL GASES	56 100	92	3	N/A
LIQUEFIED PETROLEUM GASES	63 100	62	0.2	0.0473
LUBRICANTS	73 300	3	0.6	0.0402
NATURAL GAS	56 100	92	3	0.048
(PARAFFIN) OTHER KEROSENE	71 900	3	0.6	0.0438
OTHER PETROLEUM PRODUCTS	73 300	3	0.6	0.0402
PARAFFIN WAXES	73 300	3	0.6	0.0402
PETROL	69 300	3.5	5.7	0.0443
REFINERY GAS	57 600	1	0.1	0.0495
RESIDUAL FUEL OIL — (HEAVY FUEL OIL)	77 400	7	2	0.0404
SUB-BITUMINOUS COAL — RAIL	96 100	2	1.5	0.0192
WHITE SPIRIT & SBP	73 300	3	0.6	0.0402

Schedule 1

Table 2

Fugitive Emission Factors

IPCC Code	SOURCE CATEGORY ACTIVITY	CO ₂	CH ₄	N ₂ O
1B1	SOLID FUELS (M³ / TONNE)			
1B1a	COAL MINING AND HANDLING			
1B1ai	UNDERGROUND COAL MINING	0.077	0.77	
	UNDERGROUND POST-MINING (HANDLING & TRANSPORT)	0.018	0.18	
1B1aii	SURFACE COAL MINING	N/A	0	
	SURFACE POST-MINING (STORAGE AND TRANSPORT)	N/A	0	
1B1c2	Charcoal production (Fuel wood input) (kgCH ₄ /TJ)	N/A	300	
	Charcoal production (Charcoal produced) (kgCH ₄ /TJ)	N/A	1000	
1B2	OIL AND NATURAL GAS (Gg/ 10³M³ TOTAL OIL PRODUCTION)			
1B2b	NATURAL GAS			
1B2b	FLARING AND VENTING			
1.B.2.b.ii	WELL DRILLING	0.0001	0.000033	ND
1.B.2.b.ii	WELL TESTING	0.009	0.000051	0.000000068
1.B.2.b.ii	WELL SERVICING	0.0000019	0.00011	ND
1B2b	GAS PRODUCTION (Gg/ 10⁶M³ TOTAL OIL PRODUCTION)			
1.B.2.b.iii.2	FUGITIVES	1.40E-05 to 8.20E-05	3.80E-04 to 2.30E-03	N/A
1.B.2.b.ii	FLARING	0.0012	0.00000076	0.000000021
	GAS PROCESSING (Gg/ 10⁶M³ RAW GAS FEED)			
1.B.2.b.iii.3	SWEET GAS PLANTS—FUGITIVES	1.50E-04 to 3.20E-04	4.80E-04 to 1.03E-03	N/A
1.B.2.b.ii	SWEET GAS PLANTS—FLARING	0.0018	0.0000012	0.000000025
1.B.2.b.iii.3	SOUR GAS PLANTS—FUGITIVES	0.0000079	0.000097	N/A
1.B.2.b.ii	SOUR GAS PLANTS—FLARING	0.0036	0.0000024	0.000000054
1.B.2.b.i	SOUR GAS PLANTS —RAW CO ₂ VENTING	0.063	N/A	N/A
1.B.2.b.iii.3	DEEP CUT EXTRACTION—FUGITIVES	0.0000016	0.000011	N/A
1.B.2.b.ii	DEEP CUT EXTRACTION—FLARING	0.00011	0.000000072	0.000000012
1.B.2.b.iii.3	DEFAULT—FUGITIVES	1.20E-05 to 3.20E-04	1.50E-04 to 1.03E-03	N/A
1.B.2.b.ii	DEFAULT—FLARING	0.003	0.000002	0.000000033
1.B.2.b.i	DEFAULT—RAW CO ₂ VENTING	0.04	N/A	N/A
1B2b	GAS TRANSMISSION & STORAGE (Gg-CO₂/year/km)			
1.B.2.b.iii.4	TRANSMISSION—FUGITIVES	0.000016	0.0025	N/A
1.B.2.b.i	TRANSMISSION—VENTING	0.0000085	0.0010	N/A
1.B.2.b.iii.4	STORAGE (Gg-CO ₂ /year/M ³)		2.32E-09	ND
1B2b	GAS DISTRIBUTION (Gg/ 10⁶M³ OF UTILITY SALES)			

IPCC Code	SOURCE CATEGORY ACTIVITY	CO ₂	CH ₄	N ₂ O
1.B.2.b.iii.5	ALL	0.000051	0.0011	ND
1B2b	NATURAL GAS LIQUIDS TRANSPORT (Gg/ 10³M³ CONDENSATE AND PENTANES PLUS)			
1.B.2.a.iii.3	CONDENSATE	0.0000072	0.00011	
1.B.2.a.iii.3	LIQUEFIED PETROLEUM GAS (Gg/ 10 ³ M ³ LPG)	0.00043	N/A	2.2 0E-09
1.B.2.a.iii.3	LIQUEFIED NATURAL GAS (Gg/ 10 ⁶ M ³ MARKETABLE GAS)	ND	ND	ND
1B2a	OIL			
1B2a	OIL PRODUCTION (Gg/ 10³M³ CONVENTIONAL OIL PRODUCTION)			
1.B.2.a.iii.2	CONVENTIONAL OIL—FUGITIVES (ONSHORE)	1.10E-07 to 2.60E-04	1.50E-06 to 3.60E-03	N/A
1.B.2.a.iii.2	CONVENTIONAL OIL—FUGITIVES (OFFSHORE)	0.000000043	0.00000059	N/A
1.B.2.a.i	CONVENTIONAL OIL—VENTING	0.000095	0.00072	N/A
1.B.2.a.ii	CONVENTIONAL OIL—FLARING	0.041	0.000025	0.00000064
1B2a	OIL PRODUCTION (Gg/ 10³M³ HEAVY OIL PRODUCTION)			
1.B.2.a.iii.2	HEAVY OIL/COLD BITUMEN—FUGITIVES	0.00054	0.0079	N/A
1.B.2.a.i	HEAVY OIL/COLD BITUMEN—VENTING	0.0053	0.017	N/A
1.B.2.a.ii	HEAVY OIL/COLD BITUMEN—FLARING	0.022	0.00014	0.00000046
1B2a	OIL PRODUCTION (Gg/ 10³M³ THERMAL BITUMEN PRODUCTION)			
1.B.2.a.iii.2	THERMAL OIL PRODUCTION—FUGITIVES	0.000029	0.00018	N/A
1.B.2.a.i	THERMAL OIL PRODUCTION—VENTING	0.00022	0.0035	N/A
1.B.2.a.ii	THERMAL OIL PRODUCTION—FLARING	0.027	0.000016	0.00000024
1B2a	OIL PRODUCTION (Gg/ 10³M³ SYNTHETIC CRUDE PRODUCTION FROM OILSANDS)			
1.B.2.a.iii.2	SYNTHETIC CRUDE (FROM OILSANDS)	ND	0.0023	ND
1.B.2.a.iii.2	SYNTHETIC CRUDE (OIL SHALE)	ND	ND	ND
1B2a	OIL PRODUCTION (Gg/ 10³M³ TOTAL OIL PRODUCTION)			
1.B.2.a.iii.2	DEFAULT TOTAL—FUGITIVES	0.00028	0.0022	N/A
1.B.2.a.i	DEFAULT TOTAL—VENTING	0.0018	0.0087	N/A
1.B.2.a.ii	DEFAULT TOTAL—FLARING	0.034	0.000021	0.00000054
1B2a	OIL UPGRADING (Gg/ 10³M³ OIL UPGRADED)			
1.B.2.a.iii.2	ALL	ND	ND	ND
1B2a	OIL TRANSPORT (Gg/ 10³M³ OIL TRANSPORTED BY PIPELINE)			
1.B.2.a.iii.3	PIPELINES	0.00000049	0.0000054	N/A
1B2a	OIL TRANSPORT (Gg/ 10³M³ OIL TRANSPORTED BY TANKER TRUCK)			

IPCC Code	SOURCE CATEGORY ACTIVITY	CO ₂	CH ₄	N ₂ O
1.B.2.a.i	TANKER TRUCKS AND RAIL CARS— VENTING	0.0000023	0.000025	N/A
	<i>OIL TRANSPORT (Gg/ 10³M³ OIL TRANSPORTED BY TANKER SHIPS)</i>			
1.B.2.a.i	LOADING OFF-SHORE PRODUCTION ON TANKER SHIPS—VENTING	ND	ND	ND
1B2a	<i>OIL REFINING (Gg/ 10³M³ OIL REFINED)</i>			
1.B.2.a.iii.4	ALL		2.60E-06 to 4.10E-05	ND

Table 3

INDUSTRIAL PROCESSES AND PRODUCT USE (IPPU) Emission Factors

IPCC Code	SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT	TONNE CO ₂ / tonne product	TONNE CH ₄ / tonne product	TONNE N ₂ O/ tonne product	TONNE C ₂ F ₆ / tonne product	TONNE CF ₄ / tonne product	TONNE SF ₆ / tonne product
2A1	CEMENT PRODUCTION (PER TONNE OF CLINKER)						
	CEMENT	0.52					
2A2	LIME PRODUCTION (PER TONNE OF LIME)						
	QUICKLIME/HIGH CALCIUM LIME	0.75					
	DOLOMITIC LIME	0.77					
	HYDRATED LIME	0.59					
2A3	GLASS PRODUCTION (PER TONNE GLASS)						
	GLASS PRODUCTION	0.2					
2A4	Other Process Uses of Carbonates						
2A4a	CERAMICS (PER TONNE CARBONATE)						
	CALCITE/ARAGONITE (CaCO ₃)	0.43971					
	MAGNESITE (MgCO ₃)	0.52197					
	DOLOMITE (CaMg(CO ₃) ₂)	0.47732					
	SIDERITE (FeCO ₃)	0.37987					
	ANKERITE (Ca(Fe,Mg,Mn)(CO ₃) ₂)	0.40822 to 0.47572					
	RHODOCHROSITE (MnCO ₃)	0.38286					
	SODIUM CARBONATE/SODA ASH (Na ₂ CO ₃)	0.41492					
2A4b	OTHER USES OF SODA ASH (PER TONNE CARBONATE)						
	CALCITE/ARAGONITE (CaCO ₃)	0.43971					
	MAGNESITE (MgCO ₃)	0.52197					
	DOLOMITE (CaMg(CO ₃) ₂)	0.47732					
	SIDERITE (FeCO ₃)	0.37987					
	ANKERITE (Ca(Fe,Mg,Mn)(CO ₃) ₂)	0.40822 to 0.47572					
	RHODOCHROSITE (MnCO ₃)	0.38286					
SODIUM CARBONATE/SODA ASH (Na ₂ CO ₃)	0.41492						
2A4c	NON METALLURGICAL MAGNESIA PRODUCTION (PER TONNE CARBONATE)						
	CALCITE/ARAGONITE (CaCO ₃)	0.43971					
	MAGNESITE (MgCO ₃)	0.52197					
	DOLOMITE (CaMg(CO ₃) ₂)	0.47732					
	SIDERITE (FeCO ₃)	0.37987					
	ANKERITE (Ca(Fe,Mg,Mn)(CO ₃) ₂)	0.40822 to 0.47572					

IPCC Code	SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT	TONNE CO ₂ / tonne product	TONNE CH ₄ / tonne product	TONNE N ₂ O/ tonne product	TONNE C ₂ F ₆ / tonne product	TONNE CF ₄ / tonne product	TONNE SF ₆ / tonne product
	RHODOCHROSITE (MnCO ₃)	0.38286					
	SODIUM CARBONATE/SODA ASH (Na ₂ CO ₃)	0.41492					
2A5	OTHER (PER TONNE CARBONATE)						
	CALCITE/ARAGONITE (CaCO ₃)	0.43971					
	MAGNESITE (MgCO ₃)	0.52197					
	DOLOMITE (CaMg(CO ₃) ₂)	0.47732					
	SIDERITE (FeCO ₃)	0.37987					
	ANKERITE (Ca(Fe,Mg,Mn)(CO ₃) ₂)	0.40822 to 0.47572					
	RHODOCHROSITE (MnCO ₃)	0.38286					
	SODIUM CARBONATE/SODA ASH (Na ₂ CO ₃)	0.41492					
2B1	AMMONIA PRODUCTION (PER TONNE NH₃)						
	MODERN PLANTS-CONVEN- TIONAL REFORMING (NATURAL GAS)	1.694					
	EXCESS AIR REFORMING (NATURAL GAS)	1.666					
	AUTOTHERMAL REFORM- ING (NATURAL GAS)	1.694					
	PARTIAL OXIDATION	2.772					
	AVERAGE VALUE NATURAL GAS (MIXTURE OF MODERN & OLD)	2.104					
	AVERAGE VALUE (PARTIAL OXIDATION)	3.273					
2B2	NITRIC ACID PRODUCTION (PER TONNE NITRIC ACID)						
	PLANTS WITH NSCR (ALL PROCESSES)			0.002			
	PLANTS WITH PROCESS (INTEGRATED OR TAIL GAS NO ₂ DESTRUCTION)			0.0025			
	ATMOSPHERIC PRESSURE PLANTS (LOW PRESSURE PLANTS)			0.005			
	MEDIUM PRESSURE COM- BUSTION PLANTS (MEDIUM PRESSURE)			0.007			
	HIGH PRESSURE PLANTS (HIGH PRESSURE)			0.009			
2B3	ADIPIC ACID PRODUCTION (PER TONNE ADIPIC ACID UNCONTROLLED)						
	NITRIC ACID OXIDATION (ADIPIC ACID)			0.3			
2B4	CAPROLACTAM, GLYOXAL AND GLYOXYLIC ACID PRODUCTION (PER TONNE PRODUCED)						
	CAPROLACTAM PRODUC- TION (RASCHIG)			0.009			

IPCC Code	SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT	TONNE CO ₂ / tonne product	TONNE CH ₄ / tonne product	TONNE N ₂ O/ tonne product	TONNE C ₂ F ₆ / tonne product	TONNE CF ₄ / tonne product	TONNE SF ₆ / tonne product
	GLYOXAL PRODUCTION			0.1			
	GLYOXYLIC ACID PRODUCTION			0.02			
2B5	<i>CARBIDE PRODUCTION (PER TONNE RAW MATERIAL USED)</i>						
	SILICON CARBIDE PRODUCTION	2.3	0.0102				
	PETROLEUM COKE USE	1.7					
2B5	<i>CARBIDE PRODUCTION (PER TONNE CARBIDE PRODUCED)</i>						
	SILICON CARBIDE PRODUCTION (CARBIDE PRODUCED)	2.62	0.0116				
	PETROLEUM COKE USE	1.09					
	USE OF PRODUCT	1.1					
2B6	<i>TITANIUM DIOXIDE PRODUCTION (PER TONNE PRODUCT)</i>						
	TITANIUM SLAG	NOT AVAILABLE					
	SYNTHETIC RUTILE	1.43					
	RUTILE TITANIUM DIOXIDE (CHLORIDE ROUTE)	1.34					
2B7	<i>SODA ASH PRODUCTION (PER TONNE OF SODA ASH OR TRONA)</i>						
	NATURAL SODA ASH OUTPUT	0.138					
	NATURAL SODA ASH (TRONA USED)	0.097					
2B8	PETROCHEMICAL AND CARBON BLACK PRODUCTION						
2B8a	<i>METHANOL PRODUCTION (PER TONNE METHANOL PRODUCED)</i>						
	CONVENTIONAL STEAM REFORMING WITHOUT PRIMARY REFORMER (NATURAL GAS FEEDSTOCK)	0.67	0.0023				
	CONVENTIONAL STEAM REFORMING WITH PRIMARY REFORMER (NATURAL GAS FEEDSTOCK)	0.497	0.0023				
	CONVENTIONAL STEAM REFORMING LURGI CONVENTIONAL PROCESS (NATURAL GAS FEEDSTOCK)	0.385	0.0023				
	CONVENTIONAL STEAM REFORMING LURGI CONVENTIONAL PROCESS (NATURAL GAS+CO ₂ FEEDSTOCK)	0.267	0.0023				

IPCC Code	SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT	TONNE CO ₂ / tonne product	TONNE CH ₄ / tonne product	TONNE N ₂ O / tonne product	TONNE C ₂ F ₆ / tonne product	TONNE CF ₄ / tonne product	TONNE SF ₆ / tonne product
	CONVENTIONAL STEAM REFORMING LURGI LOW PRESSURE PROCESS (NATURAL GAS FEEDSTOCK)	0.267	0.0023				
	CONVENTIONAL STEAM REFORMING LURGI COMBINED PROCESS (NATURAL GAS FEEDSTOCK)	0.396	0.0023				
	CONVENTIONAL STEAM REFORMING LURGI MEGA METHANOL PROCESS (NATURAL GAS FEEDSTOCK)	0.31	0.0023				
	PARTIAL OXIDATION PROCESS (OIL FEEDSTOCK)	1.376	0.0023				
	PARTIAL OXIDATION PROCESS (COAL FEEDSTOCK)	5.285	0.0023				
	PARTIAL OXIDATION PROCESS (LIGNITE FEEDSTOCK)	5.02	0.0023				
	CONVENTIONAL STEAM REFORMING WITH INTEGRATED AMMONIA PRODUCTION (NATURAL GAS FEEDSTOCK)	1.02	0.0023				
2B8b	STEAM CRACKING ETHYLENE PRODUCTION (PER TONNE ETHYLENE PRODUCED)						
	ETHYLENE (TOTAL PROCESS & ENERGY FEEDSTOCK USE)—NAPHTHA	1.73	0.003				
	ETHYLENE (TOTAL PROCESS & ENERGY FEEDSTOCK USE)—GAS OIL	2.29	0.003				
	ETHYLENE (TOTAL PROCESS & ENERGY FEEDSTOCK USE)—ETHANE	0.95	0.006				
	ETHYLENE (TOTAL PROCESS & ENERGY FEEDSTOCK USE)—PROPANE	1.04	0.003				
	ETHYLENE (TOTAL PROCESS & ENERGY FEEDSTOCK USE)—BUTANE	1.07	0.003				
	ETHYLENE (TOTAL PROCESS & ENERGY FEEDSTOCK USE)—OTHER	1.73	0.003				
	ETHYLENE (PROCESS FEEDSTOCK USE)—NAPHTHA	1.73	0.003				
	ETHYLENE (PROCESS FEEDSTOCK USE)—GAS OIL	2.17	0.003				
	ETHYLENE (PROCESS FEEDSTOCK USE)—ETHANE	0.76	0.006				
	ETHYLENE (PROCESS FEEDSTOCK USE)—PROPANE	1.04	0.003				
	ETHYLENE (PROCESS FEEDSTOCK USE)—BUTANE	1.07	0.003				
	ETHYLENE (PROCESS FEEDSTOCK USE)—OTHER	1.73	0.003				

IPCC Code	SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT	TONNE CO ₂ / tonne product	TONNE CH ₄ / tonne product	TONNE N ₂ O/ tonne product	TONNE C ₂ F ₆ / tonne product	TONNE CF ₄ / tonne product	TONNE SF ₆ / tonne product
	ETHYLENE (SUPPLEMENTAL FUEL-ENERGY FEED-STOCK) USE—GAS OIL	0.12	0.003				
	ETHYLENE (SUPPLEMENTAL FUEL-ENERGY FEED-STOCK) USE—ETHANE	0.19	0.006				
2B8c	ETHYLENE DICHLORIDE AND VINYL CHLORIDE MONOMER (PER TONNE EDC PRODUCED OR TONNE VCM PRODUCT PRODUCED)						
	DIRECT CHORINATION PROCESS (EDC)	0.191	0.0000226				
	OXYCHLORINATION PROCESS (EDC)	0.202	0.0000226				
	BALANCED PROCESS (DEFAULT)—EDC	0.196	0.0000226				
2B8c	ETHYLENE DICHLORIDE AND VINYL CHLORIDE MONOMER (PER TONNE VCM PRODUCED OR TONNE VCM PRODUCT PRODUCED)						
	DIRECT CHLORINATION—PROCESS (VCM)	0.286	0.0000226				
	OXYCHLORINATION PROCESS (VCM)	0.302	0.0000226				
	BALANCED PROCESS (DEFAULT) -VCM	0.294	0.0000226				
2B8d	ETHYLENE OXIDE (PER TONNE ETHYLENE OXIDE PRODUCED)						
	AIR PROCESS (DEFAULT)—CATALYST DEFAULT (70)	0.863	0.00179				
	AIR PROCESS (DEFAULT)—CATALYST (75)	0.663	0.00179				
	AIR PROCESS (DEFAULT)—CATALYST (80)	0.5	0.00179				
	OXYGEN PROCESS (DEFAULT)—CATALYST DEFAULT (75)	0.663	0.00179				
	OXYGEN PROCESS—CATALYST (80)	0.5	0.00179				
	OXYGEN PROCESS—CATALYST (85)	0.35	0.00179				
	ALL ETHYLENE OXIDE PROCESSES—THERMAL TREATMENT	N/A	0.00079				
2B8e	ACRYLONITRILE (PER TONNE ACRYLONITRILE PRODUCED)						
	DIRECT AMMOXIDATION WITH SECONDARY PRODUCTS BURNED FOR ENERGY RECOVERY OR FLARED (DEFAULT)	1	0.00018				
	DIRECT AMMOXIDATION WITH ACETONITRILE BURNED FOR ENERGY RECOVERY OR FLARED	0.83	0.00018				

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	DIRECT AMMOXIDATION WITH ACETONITRILE & HYDROGEN CYANIDE RECOVERED AS PRODUCT	0.79	0.00018				
2B8f	CARBON BLACK PRODUCTION (PER TONNE CARBON BLACK PRODUCED)						
	FURNACE BLACK PROCESS (DEFAULT)—Primary Feedstock	1.96	0.00006				
	THERMAL BLACK PROCESS—PRIMARY FEEDSTOCK	4.59	0.00006				
	ACETYLENE BLACK PROCESS—PRIMARY FEEDSTOCK	0.12	0.00006				
	FURNACE BLACK PROCESS (DEFAULT)—SECONDARY FEEDSTOCK	0.66	0.00006				
	THERMAL BLACK PROCESS—SECONDARY FEEDSTOCK	0.66	0.00006				
	ACETYLENE BLACK PROCESS—SECONDARY FEEDSTOCK	0.66	0.00006				
	FURNACE BLACK PROCESS (DEFAULT)—TOTAL FEEDSTOCK	2.62	0.00006				
	THERMAL BLACK PROCESS—TOTAL FEEDSTOCK	5.25	0.00 006				
	ACETYLENE BLACK PROCESS—TOTAL FEEDSTOCK	0.78	0.00006				
	ALL CARBON BLACK PROCESSES (NO THERMAL TREATMENT)	N/A	0.0287				
2C1	IRON AND STEEL PRODUCTION (PER TONNE PRODUCT PRODUCED)						
	SINTER PRODUCTION	0.2	0.00007				
	COKE OVEN	0.56	0.0000001				
	PIG IRON PRODUCTION	1.35					
	DIRECT REDUCED IRON (DRI) PRODUCTION	0.7	0.001/TJ (NG)				
	PELLET PRODUCTION	0.03					
	BASIC OXYGEN FURNACE	1.46					
	ELECTRIC ARC FURNACE	0.08					
	OPEN HEARTH FURNACE	1.72					
	GLOBAL AVERAGE	1.06					
2C2	FERROALLOYS PRODUCTION (PER TONNE PRODUCTION)						
	FERROSILICON (45%) SI	2.5					
	FERROSILICON (65%) SI	3.6	0.001				
	FERROSILICON (75%) SI	4	0.001				
	FERROSILICON (90%) SI	4.8	0.0011				
	FERROMANGANESE (7% C)	1.3					

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	FERROMANGANESE (1% C)	1.5					
	SILICOMANGANESE	1.4					
	SILICON METAL	5	0.0012				
	FERROCHROMIUM (STAND ALONE)	1.3					
	FERROCHROMIUM (WITH SINTER PLANT)	1.6					
2C3	ALUMINIUM PRODUCTION (PER TONNE ALUMINIUM PRODUCED)						
	PREBAKE	1.6					
	SODERBERG	1.7					
	CWPB				0.00004	0.0004	
	SWPB				0.0004	0.0016	
	VSS				0.00004	0.0008	
	HSS				0.00003	0.0004	
2C4	MAGNESIUM PRODUCTION (PER TONNE MAGNESIUM PRODUCED)						
	DOLOMITE	5.13					0.001
	MAGNESITE	2.83					0.001
2C5	LEAD PRODUCTION (PER TONNE PRODUCT)						
	IMPERIAL SMELT FURNACE (ISF) PRODUCTION	0.59					
	DIRECT SMELTING PRODUCTION	0.25					
	TREATMENT OF SECONDARY RAW MATERIALS	0.2					
	DEFAULT EF	0.52					
2C6	ZINC PRODUCTION (PER TONNE PRODUCT)						
	WAEZ KILN	3.66					
	PYROMETALLURGICAL	0.43					
	DEFAULT EF	1.72					

Schedule 2

IPCC Code	Activity/Sector	Threshold	Basic tax-free allowance for fossil fuel combustion emissions %	Basic tax-free allowance for process emissions %	Fugitive emissions allowance %	Trade exposure allowance %	Performance allowance %	Carbon budget allowance %	Offsets allowance %	Maximum total allowances %
1	Energy									
1A	Fuel Combustion Activities									
1A1	Energy Industries (including heat and electricity recovery from Waste)									
1A1a	Main Activity Electricity and Heat Production (including Combined Heat and Power Plants)	10 MW(th)	60	0	0	10	5	5	10	90
1A1b	Petroleum Refining	10 MW(th)	60	0	0	10	5	5	10	90
1A1c	Manufacture of Solid Fuels and Other Energy Industries	10 MW(th)	60	0	0	10	5	5	10	90
1A2	Manufacturing Industries and Construction (including heat and electricity recovery from Waste)		60	0	0	10	5	5	10	90
1A2a	Iron and Steel	10 MW(th)	60	0	0	10	5	5	10	90
1A2b	Non-Ferrous Metals	10 MW(th)	60	0	0	10	5	5	10	90
1A2c	Chemicals	10 MW(th)	60	0	0	10	5	5	10	90
1A2d	Pulp, Paper and Print	10 MW(th)	60	0	0	10	5	5	10	90
1A2e	Food Processing, Beverages and Tobacco	10 MW(th)	60	0	0	10	5	5	10	90
1A2f	Non-Metallic Minerals	10 MW(th)	60	0	0	10	5	5	10	90
1A2g	Transport Equipment	10 MW(th)	60	0	0	10	5	5	10	90
1A2h	Machinery	10 MW(th)	60	0	0	10	5	5	10	90
1A2i	Mining and Quarrying	10 MW(th)	60	0	0	10	5	5	10	90
1A2j	Wood and Wood Products	10 MW(th)	60	0	0	10	5	5	10	90
1A2k	Construction	10 MW(th)	60	0	0	10	5	5	10	90
1A2l	Textile and Leather	10 MW(th)	60	0	0	10	5	5	10	90
1A2m	Brick manufacturing:	4 million bricks a month	60	0	0	10	5	5	10	90
1A3	Transport									
1A3a	Domestic Aviation	100 000 litres/year	75	0	0	0	5	5	10	95
1A3b	Road Transportation	N/A	75	0	0	0	0	5	10	90
1A3c	Railways	100 000 litres/year	75	0	0	0	0	5	10	90
1A3d	Water-borne Navigation	100 000 litres/year	75	0	0	0	0	5	10	90
1A3e	Other Transportation	N/A	75	0	0	0	0	5	10	90
1A4	Other Sectors (including heat and electricity recovery from Waste)									

IPCC Code	Activity/Sector	Threshold	Basic tax-free allowance for fossil fuel combustion emissions %	Basic tax-free allowance for process emissions %	Fugitive emissions allowance %	Trade exposure allowance %	Performance allowance %	Carbon budget allowance %	Offsets allowance %	Maximum total allowances %
1A4a	Commercial/Institutional	10 MW(th)	60	0	0	10	5	5	10	90
1A4b	Residential	10 MW(th)	100	0	0	0	0	0	0	100
1A4c	Agriculture/Forestry/Fishing/Fish Farms	10 MW(th)	60	0	0	10	5	5	10	90
1A5	Non-Specified (including heat and electricity recovery from Waste)									
1A5a	Stationary	10 MW(th)	60	0	0	10	5	5	10	90
1A5b	Mobile	N/A	60	0	0	10	5	5	10	90
1A5c	Multilateral Operations	N/A	60	0	0	10	5	5	10	90
1B	Fugitive Emissions from Fuels									
1B1	Solid Fuels									
1B1a	Coal Mining and Handling	None	60	0	10	10	5	5	5	95
1B1ai	Underground mines including flaring of drained methane (excluding abandoned mines)	none	60	0	10	10	5	5	5	95
1B1aii	Surface mines	none	60	0	10	10	5	5	5	95
1B1b	Uncontrolled Combustion, and Burning Coal Dumps	N/A	100	0	0	0	0	0	0	100
1B1c	Solid Fuel Transformation									
1B1c1	Coke production processes	none	60	0	10	10	5	5	5	95
1B1c2	Charcoal production processes	none	60	0	10	10	5	5	5	95
1B1c3	Any other solid fuel transformation involving fossil and organic carbon based fuels (e.g. biofuel productions)	none	60	0	10	10	5	5	5	95
1B2	Oil and Natural Gas									
1B2a	Oil	none	60	0	10	10	5	5	5	95
1B2ai	Venting	none	60	0	10	10	5	5	5	95
1B2aii	Flaring	none	60	0	10	10	5	5	5	95
1B2aiii	All other	none	60	0	10	10	5	5	5	95
1B2b	Natural Gas	none	60	0	10	10	5	5	5	95
1B2bi	Venting	none	60	0	10	10	5	5	5	95
1B2bii	Flaring	none	60	0	10	10	5	5	5	95
1B2biii	All other	none	60	0	10	10	5	5	5	95
1B3	Other Emissions from Energy Production									
1B3a	Coal-to-liquids processes	none	60	0	10	10	5	5	5	95
1B3b	Gas-to-liquids processes	none	60	0	10	10	5	5	5	95

IPCC Code	Activity/Sector	Threshold	Basic tax-free allowance for fossil fuel combustion emissions %	Basic tax-free allowance for process emissions %	Fugitive emissions allowance %	Trade exposure allowance %	Performance allowance %	Carbon budget allowance %	Offsets allowance %	Maximum total allowances %
1B3c	Gas-to-chemicals processes	none	60	0	10	10	5	5	5	95
1C	Carbon Dioxide Transport and Storage									
1C1	Transport of CO₂	none	60	0	10	10	5	5	5	95
1C1a	Pipelines	10 000 tons CO ₂ /year	60	0	10	10	5	5	5	95
1C1b	Ships	10 000 tons CO ₂ /year	60	0	10	10	5	5	5	95
1C1c	Other (please specify)	10 000 tons CO ₂ /year	60	0	10	10	5	5	5	95
1C2	Injection and Storage									
1C2a	Injection	10 000 tons CO ₂ /year	60	0	10	10	5	5	5	95
1C2b	Storage	10 000 tons CO ₂ /year	60	0	10	10	5	5	5	95
1C3	Other	N/A	60	0	10	10	5	5	5	95
2	INDUSTRIAL PROCESSES AND PRODUCT USE									
2A	Mineral Industry									
2A1	Cement Production	none	0	70	0	10	5	5	5	95
2A2	Lime Production	none	0	70	0	10	5	5	5	95
2A3	Glass Production	none	0	70	0	10	5	5	5	95
2A4	Other Process Uses of Carbonates		0	70	0	10	5	5	5	95
2A4a	Ceramics	N/A	0	70	0	10	5	5	5	95
2A4b	Other Uses of Soda Ash	N/A	0	70	0	10	5	5	5	95
2A4c	Non Metallurgical Magnesia Production	none	0	70	0	10	5	5	5	95
2A4d	Other (please specify)	N/A	0	70	0	10	5	5	5	95
2A5	Other (please specify)	N/A	60	0	0	10	5	5	10	90
2B	Chemical Industry									
2B1	Ammonia Production	none	0	70	0	10	5	5	5	95
2B2	Nitric Acid Production	none	0	70	0	10	5	5	5	95
2B3	Adipic Acid Production	none	0	70	0	10	5	5	5	95
2B4	Caprolactam, Glyoxal and Glyoxylic Acid Production	none	0	70	0	10	5	5	5	95
2B5	Carbide Production	none	0	70	0	10	5	5	5	95
2B6	Titanium Dioxide Production	none	0	70	0	10	5	5	5	95
2B7	Soda Ash Production	none	0	70	0	10	5	5	5	95
2B8	Petrochemical and Carbon Black Production									
2B8a	Methanol	none	0	70	0	10	5	5	5	95
2B8b	Ethylene	none	0	70	0	10	5	5	5	95

IPCC Code	Activity/Sector	Threshold	Basic tax-free allowance for fossil fuel combustion emissions %	Basic tax-free allowance for process emissions %	Fugitive emissions allowance %	Trade exposure allowance %	Performance allowance %	Carbon budget allowance %	Offsets allowance %	Maximum total allowances %
2B8c	Ethylene Dichloride and Vinyl Chloride Monomer	none	0	70	0	10	5	5	5	95
2B8d	Ethylene Oxide	none	0	70	0	10	5	5	5	95
2B8e	Acrylonitrile	none	0	70	0	10	5	5	5	95
2B8f	Carbon Black	none	0	70	0	10	5	5	5	95
2B8g	Hydrogen Production	none	0	70	0	10	5	5	5	95
2B9	Fluorochemical Production									
2B9a	By-product Emissions	none	0	70	0	10	5	5	5	95
2B9b	Fugitive Emissions	none	0	70	0	10	5	5	5	95
2B10	Other (Please specify)	N/A	0	70	0	10	5	5	5	95
2C	Metal Industry									
2C1	Iron and Steel Production	none	0	70	0	10	5	5	5	95
2C2	Ferroalloys Production	none	0	70	0	10	5	5	5	95
2C3	Aluminium Production	none	0	70	0	10	5	5	5	95
2C4	Magnesium Production	none	0	70	0	10	5	5	5	95
2C5	Lead Production	none	0	70	0	10	5	5	5	95
2C6	Zinc Production	none	0	70	0	10	5	5	5	95
2C7	Other (please specify)	N/A	0	60	0	10	5	5	10	90
2D	Non-Energy Products from Fuels and Solvent Use									
2D1	Lubricant Use	N/A	0	60	0	10	5	5	10	90
2D2	Paraffin Wax Use	N/A	0	60	0	10	5	5	10	90
2D3	Solvent Use	N/A	0	60	0	10	5	5	10	90
2D4	Other (please specify)	N/A	0	60	0	10	5	5	10	90
2E	Electronics Industry									
2E.1	Integrated Circuit or Semiconductor	N/A	0	60	0	10	5	5	10	90
2E.2	TFT Flat Panel Display	N/A	0	60	0	10	5	5	10	90
2E.3	Photovoltaics	N/A	0	60	0	10	5	5	10	90
2E.4	Heat Transfer Fluid	N/A	0	60	0	10	5	5	10	90
2E.5	Other (please specify)	N/A	0	60	0	10	5	5	10	90
2F	Product Uses as Substitutes for Ozone Depleting Substances									
2F1	Refrigeration and Air Conditioning									
2F1a	Refrigeration and Stationary Air Conditioning	N/A	0	60	0	10	5	5	10	90
2F1b	Mobile Air Conditioning	N/A	0	60	0	10	5	5	10	90
2F2	Foam Blowing Agents	N/A	0	60	0	10	5	5	10	90

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2F3	Fire Protection	N/A	0	60	0	10	5	5	10	90
2F4	Aerosols	N/A	0	60	0	10	5	5	10	90
2F5	Solvents	N/A	0	60	0	10	5	5	10	90
2F6	Other Applications (please specify)	N/A	0	60	0	10	5	5	10	90
2G	Other Product Manufacture and Use									
2G1	Electrical Equipment									
2G1a	Manufacture of Electrical Equipment	N/A	0	60	0	10	5	5	10	90
2G1b	Use of Electrical Equipment	N/A	0	60	0	10	5	5	10	90
2G1c	Disposal of Electrical Equipment		0	60	0	10	5	5	10	90
2G2	SF₆ and PFCs from Other Product Uses	N/A								
2G2a	Military Applications	N/A	0	60	0	10	5	5	10	90
2G2b	Accelerators	N/A	0	60	0	10	5	5	10	90
2G2c	Other (please specify)	N/A	0	60	0	10	5	5	10	90
2G3	N₂O from Product Uses	N/A								
2G3a	Medical Applications	N/A	0	60	0	10	5	5	10	90
2G3b	Propellant for Pressure and Aerosol Products	N/A	0	60	0	10	5	5	10	90
2G3c	Other (Please specify)	N/A	0	60	0	10	5	5	10	90
2G4	Other (Please specify)	N/A	0	60	0	10	5	5	10	90
2H	Other									
2H1	Pulp and Paper Industry	N/A	0	60	0	10	5	5	10	90
2H2	Food and Beverages Industry	N/A	0	60	0	10	5	5	10	90
2H3	Other (please specify)	N/A	0	60	0	10	5	5	10	90
3	AGRICULTURE, FORESTRY, AND OTHER LAND USE									
3A	Livestock									
3A1	Enteric Fermentation									
3A1a	Cattle	N/A	100	0	0	0	0	0	0	100
3A1b	Buffalo	N/A	100	0	0	0	0	0	0	100
3A1c	Sheep	N/A	100	0	0	0	0	0	0	100
3A1d	Goats	N/A	100	0	0	0	0	0	0	100
3A1e	Camels	N/A	100	0	0	0	0	0	0	100
3A1f	Horses	N/A	100	0	0	0	0	0	0	100
3A1g	Mules and Asses	N/A	100	0	0	0	0	0	0	100
3A1h	Swine	N/A	100	0	0	0	0	0	0	100
3A1j	Other (please specify)	N/A	100	0	0	0	0	0	0	100
3A2	Manure Management									
3A2a	Cattle	N/A	100	0	0	0	0	0	0	100

IPCC Code	Activity/Sector	Threshold	Basic tax-free allowance for fossil fuel combustion emissions %	Basic tax-free allowance for process emissions %	Fugitive emissions allowance %	Trade exposure allowance %	Performance allowance %	Carbon budget allowance %	Offsets allowance %	Maximum total allowances %
3A2b	Buffalo	N/A	100	0	0	0	0	0	0	100
3A2c	Sheep	N/A	100	0	0	0	0	0	0	100
3A2d	Goats	N/A	100	0	0	0	0	0	0	100
3A2e	Camels	N/A	100	0	0	0	0	0	0	100
3A2f	Horses	N/A	100	0	0	0	0	0	0	100
3A2g	Mules and Asses	N/A	100	0	0	0	0	0	0	100
3A2h	Swine	N/A	100	0	0	0	0	0	0	100
3A2i	Poultry	N/A	100	0	0	0	0	0	0	100
3A2j	Other (please specify)	N/A	100	0	0	0	0	0	0	100
3B	Land									
3B1	Forest Land									
3B1a	Forest land Remaining Forest Land	100 Hectares of Plantations or Natural forests	100	0	0	0	0	0	0	100
3B1b	Land Converted to Forest Land	100 Hectares of Plantations or Natural forests	100	0	0	0	0	0	0	100
3B2	Cropland									
3B2a	Cropland Remaining Cropland	N/A	100	0	0	0	0	0	0	100
3B2b	Land Converted to Cropland	N/A	100	0	0	0	0	0	0	100
3B3	Grassland									
3B3a	Grassland Remaining Grassland	N/A	100	0	0	0	0	0	0	100
3B3b	Land Converted to Grassland	N/A	100	0	0	0	0	0	0	100
3B4	Wetlands									
3B4a	Wetlands Remaining Wetlands	N/A	100	0	0	0	0	0	0	100
3B4b	Land Converted to Wetlands	N/A	100	0	0	0	0	0	0	100
3B5	Settlements									
3B5a	Settlements Remaining Settlements	N/A	100	0	0	0	0	0	0	100
3B5b	Land Converted to Settlements	N/A	100	0	0	0	0	0	0	100
3B6	Other Land									
3B6a	Other Land Remaining Other Land	N/A	100	0	0	0	0	0	0	100
3B6b	Land Converted to Other Land	N/A	100	0	0	0	0	0	0	100
3C	Aggregate Sources and Non-CO₂ Emissions Sources on Land									
3C1	Emissions from Biomass Burning									
3C1a	Biomass Burning in Forest Lands	N/A	100	0	0	0	0	0	0	100
3C1b	Biomass Burning in Croplands	N/A	100	0	0	0	0	0	0	100

IPCC Code	Activity/Sector	Threshold	Basic tax-free allowance for fossil fuel combustion emissions %	Basic tax-free allowance for process emissions %	Fugitive emissions allowance %	Trade exposure allowance %	Performance allowance %	Carbon budget allowance %	Offsets allowance %	Maximum total allowances %
3C1c	Biomass Burning in Grasslands	N/A	100	0	0	0	0	0	0	100
3C1d	Biomass Burning in All Other Land	N/A	100	0	0	0	0	0	0	100
3C2	Liming	N/A	100	0	0	0	0	0	0	100
3C3	Urea Application	N/A	100	0	0	0	0	0	0	100
3C4	Direct N ₂ O Emissions from Managed Soils	N/A	100	0	0	0	0	0	0	100
3C5	Indirect N ₂ O Emissions from Managed Soils	N/A	100	0	0	0	0	0	0	100
3C6	Indirect N ₂ O Emissions from Manure Management	N/A	100	0	0	0	0	0	0	100
3C7	Rice Cultivations	N/A	100	0	0	0	0	0	0	100
3C8	Other (please specify)	N/A	100	0	0	0	0	0	0	100
3D	Other									
3D1	Harvested Wood Products	N/A	100	0	0	0	0	0	0	100
3D2	Other (please specify)	N/A	100	0	0	0	0	0	0	100
4	WASTE									
4A	Solid Waste Disposal									
4A1	Managed Waste Disposal Sites	Receiving 5 tonnes per day or a total capacity of 25000 tonnes	100	0	0	0	0	0	0	100
4A2	Unmanaged Waste Disposal Sites	Receiving 5 tonnes per day or a total capacity of 25000 tonnes	100	0	0	0	0	0	0	100
4A3	Uncategorised Waste Disposal Sites	Receiving 5 tonnes per day or a total capacity of 25000 tonnes	100	0	0	0	0	0	0	100
4B	Biological Treatment of Solid Waste	N/A	100	0	0	0	0	0	0	100
4C	Incineration and Open Burning of Waste									
4C0	Waste — Pyrolysis	100 kg/hour	100	0	0	0	0	0	0	100
4C1	Waste Incineration	1 tonne per hour	60	0	0	10	5	5	10	90
4C2	Open Burning of Waste	N/A	100	0	0	0	0	0	0	100
4D	Wastewater Treatment and Discharge									
4D1	Domestic Wastewater Treatment and Discharge	2 Million litres/day	100	0	0	0	0	0	0	100

IPCC Code	Activity/Sector	Threshold	Basic tax-free allowance for fossil fuel combustion emissions %	Basic tax-free allowance for process emissions %	Fugitive emissions allowance %	Trade exposure allowance %	Performance allowance %	Carbon budget allowance %	Offsets allowance %	Maximum total allowances %
4D2	Industrial Wastewater Treatment and Discharge	1000 cubic metres per day	100	0	0	0	0	0	0	100
4E	Other (please specify)	N/A								
5	OTHER									
5A	Indirect N ₂ O Emissions from the Atmospheric Deposition of Nitrogen in NO _x and NH ₃	N/A	60	0	0	10	5	5	10	90
5B	Other (please specify)	N/A	60	0	0	10	5	5	10	90

Schedule 3

(Section 20)

GENERAL EXPLANATORY NOTE:

[] Words in bold type in square brackets indicate omissions from existing enactments.

 Words underlined with a solid line indicate insertions in existing enactments.

Amendment of section 1 of Act 91 of 1964, as amended by section 1 of Act 95 of 1965, section 1 of Act 57 of 1966, section 1 of Act 105 of 1969, section 1 of Act 98 of 1970, section 1 of Act 71 of 1975, section 1 of Act 112 of 1977, section 1 of Act 110 of 1979, sections 1 and 15 of Act 98 of 1980, section 1 of Act 89 of 1984, section 1 of Act 84 of 1987, section 32 of Act 60 of 1989, section 51 of Act 68 of 1989, section 1 of Act 59 of 1990, section 1 of Act 19 of 1994, section 34 of Act 34 of 1997, section 57 of Act 30 of 1998, section 46 of Act 53 of 1999, section 58 of Act 30 of 2000, section 60 of Act 59 of 2000, section 113 of Act 60 of 2001, section 131 of Act 45 of 2003, section 66 of Act 32 of 2004, section 85 of Act 31 of 2005, section 7 of Act 21 of 2006, section 10 of Act 9 of 2007, section 4 of Act 36 of 2007, section 22 of Act 61 of 2008 and section 1 of Act 32 of 2014

1. Section 1 of the Customs and Excise Act, 1964, is hereby amended by the insertion in subsection (1) after the definition of “bulk goods terminal operator” of the following definition:

“**‘Carbon Tax Act’** means an Act of Parliament that makes provision for a carbon tax;”.

Amendment of section 54A of Act 91 of 1964, as inserted by section 139 of Act 45 of 2003 and renumbered by section 32 of Act 16 of 2004

2. The following section is hereby substituted for section 54A of the Customs and Excise Act, 1964:

“Imposition of environmental levy

54A. A levy known as the environmental levy shall be—

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| <p>(a) leviable on such imported goods and goods manufactured in the Republic as may be specified in any item of Part 3 of Schedule No.1; and</p> <p>(b) collected and paid in respect of carbon tax imposed in terms of the <u>Carbon Tax Act, 2019.</u>”.</p> |
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