

REPUBLIC OF SOUTH AFRICA

DRAFT CARBON TAX BILL

*(As introduced in the National Assembly (proposed section 77))
(The English text is the official text of the Bill)*

(MINISTER OF FINANCE)

[B – 2017]

BILL

To provide for the imposition of a tax on the carbon dioxide (CO₂) equivalent of greenhouse gas emissions; and to provide for matters connected therewith.

PREAMBLE

SINCE the causality of the increasing of anthropogenic greenhouse gas emissions in the atmosphere and the global climate change has been scientifically confirmed;

AND SINCE it has consequently become necessary to manage the inevitable climate change impact through interventions that build and sustain South Africa's social, economic and environmental resilience and emergency response capacity;

AND SINCE it has also become necessary to make a contribution to the global effort to stabilise greenhouse gas concentrations in the atmosphere at a level that avoids dangerous anthropogenic interference with the climate system within a timeframe that enables economic, social and environmental development to proceed in a sustainable manner;

AND SINCE the costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimising

further pollution, environmental damage or adverse health effects must be paid for by those responsible for harming the environment (the polluter pays principle);

AND SINCE government is desirous to utilise a package of measures in an effort to address the challenges posed by climate change;

AND SINCE this package of measures will be achieved by the deployment of a range of measures to support the system of desired emissions reduction outcomes, including the appropriate pricing of carbon and economic incentives, as well as the use of emissions offsets;

AND SINCE government is of the view that imposing a tax on greenhouse gas emissions and concomitant measures such as providing tax incentives for rewarding the efficient use of energy will provide appropriate price signals to help nudge the economy towards a more sustainable growth path.

BE IT THEREFORE ENACTED by the Parliament of the Republic of South Africa, as follows:—

ARRANGEMENT OF SECTIONS

Sections

PART I

Definitions and general provisions relating to imposition of carbon tax

1. Definitions
2. Imposition of carbon tax
3. Persons subject to tax
4. Tax base
5. Rate of tax
6. Calculation of amount of tax payable

Part II

Allowances

7. Allowance for fossil fuel combustion
8. Allowance for industrial process emissions
9. Allowance in respect of fugitive emissions
10. Trade exposure allowance
11. Performance allowance
12. Carbon budget allowance
13. Offset allowance

Part III

Limitation of allowances

- 14. Limitation of sum of allowances

Part IV

Administration, tax period and payment of tax

- 15. Administration
- 16. Tax period
- 17. Payment of tax

Part V

Miscellaneous

- 18. Reporting
- 19. Regulations
- 20. Amendment of laws
- 21. Short title and commencement

SCHEDULE 1

SCHEDULE 2

SCHEDULE 3

Part I**Definitions and general provisions relating to imposition of carbon tax****Definitions**

1. In this Act, unless the context otherwise indicates—

"allowance" means any amount allowed to be taken into account in terms of Part II, subject to section 14, for the purposes of determining the amount of carbon tax payable;

"carbon budget" means a limit on total Greenhouse Gas emissions from a specific company, within a specific period of time;

"carbon tax" means a tax on the carbon dioxide (CO₂) equivalent of greenhouse gas emissions imposed in terms of section 2;

"carbon dioxide (CO₂) equivalent" means the concentration of carbon dioxide that would cause the same amount of radiative forcing (the difference of sunlight absorbed by the Earth and energy radiated back to space) as a given mixture of carbon dioxide and other greenhouse gases;

"combustion" means the exothermic reaction of a fuel with oxygen;

"Commissioner" means the Commissioner for the South African Revenue Service;

"emissions" means—

- (a) the release of greenhouse gases or their precursors; or
- (b) the release of greenhouse gases and their precursors into the atmosphere, over a specified area and period of time;

"emission factor" means the average emission rate of a given greenhouse gas for a given source, relative to the activity data of a source stream assuming complete oxidation for combustion and complete conversion for all other chemical reactions;

"emissions intensity" means an indicator of the result of the measurement of the quantity of greenhouse gas emissions in relation to an activity;

"emissions intensity benchmark" means the result of the measurement in respect of an activity that creates greenhouse gas emissions—

- (a) expressed as a predetermined value of the quantity of specified greenhouse gas emissions;
- (b) in relation to an activity that is differentiated from other activities by means of a *product*, a type of fuel or a technology; and
- (c) compared against the quantity of greenhouse gas emissions, in relation to an identical activity undertaken by another person;

"fugitive emissions" means emissions that occur from the release of greenhouse gases during the extraction, processing and delivery of fossil fuels including leaks from industrial plant and pipelines;

"greenhouse gas" means gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and re-emit infrared radiation, and includes carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆);

"industrial process" means a manufacturing process that chemically or physically transforms materials;

"IPCC" means the Intergovernmental Panel on Climate Change established for the purposes of providing internationally co-ordinated scientific assessments of the magnitude, timing and potential environmental and socio-economic impact of climate change by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) and endorsed by the United Nations by General Assembly Resolution 43/53 made at the 70th plenary meeting on 6 December 1988;

"IPCC code" means the source code in respect of an activity resulting in the emission of a greenhouse gas as stipulated in the "Guidelines for National Greenhouse Gas Inventories" (2006) issued by the IPCC;

"Minister" means the Minister of Finance;

"person" includes a partnership and a trust;

"process emissions" means greenhouse gas emissions other than combustion emissions occurring as a result of intentional or unintentional reactions between substances or their transformation, including the chemical or electrolytic reduction of metal ores, the thermal decomposition of substances, and the formation of substances for use as product or feedstock;

"Republic" means the Republic of South Africa;

"taxpayer" means a person liable for the carbon tax in terms of section 3;

"tax period" means a period in respect of which tax is payable as prescribed under section 16.

Imposition of carbon tax

2. There must be levied and collected for the benefit of the National Revenue Fund, a tax to be known as the carbon tax.

Persons subject to tax

3. A person is—

- (a) a taxpayer for the purposes of this Act; and
- (b) liable to pay an amount of carbon tax calculated as contemplated in section 6 in respect of a tax period as specified in section 16,

if that person conducts an activity resulting in greenhouse gas emissions above the threshold determined by matching the activity listed in the column "Activity/ Sector" in Schedule 2 with the number in the corresponding line of the column "Threshold" of that table.

Tax base

4. (1) The carbon tax must be levied in respect of the sum of the greenhouse gas emissions of a taxpayer in respect of a tax period expressed as the carbon dioxide equivalent of those greenhouse gas emissions resulting from fuel combustion and industrial processes, and fugitive emissions in accordance with the emissions factors determined in accordance with a reporting methodology approved by the Department of Environmental Affairs.

(2) If a reporting methodology approved by the Department of Environmental Affairs for the purposes of determining emission factors does not exist in respect of the calculation of greenhouse gas emissions resulting from fuel combustion, and industrial processes, and fugitive emissions the carbon tax must be levied in respect of the sum of the greenhouse gas emissions of a taxpayer in respect of a tax period expressed as the carbon dioxide equivalent of those greenhouse gas emissions resulting from—

(a) fuel combustion in respect of that tax period that is a number constituted by the sum of the respective numbers determined for each type of fuel in respect of which a greenhouse gas is emitted in respect of that tax period which respective numbers must be determined in accordance with the formula:

$$E = (A \times B)$$

in which formula—

- (i) "E" represents the number to be determined;
- (ii) "A" represents the mass of any one type of the fuel expressed in tonne that is the source of the greenhouse gas emission, other than any fuel utilised for the purposes of international aviation and maritime transport;
- (iii) "B" represents the greenhouse gas emission factor in carbon dioxide equivalent per tonne that must be determined in accordance with the formula:

$$X = \{(C \times 1) + (M \times 23) + (N \times 296)\} \times D$$

in which formula—

- (aa) "X" represents the number to be determined;

- (bb) "**C**" represents the carbon dioxide of a fuel type determined by matching the fuel type listed in the column "fuel type" in Table 1 of Schedule 1 with the number in the corresponding line of the column " CO_2 (KG CO_2 /TJ)" of that table;
- (cc) "**M**" represents the methane of a fuel type determined by matching the fuel type listed in the column "fuel type" in Table 1 of Schedule 1 with the number in the corresponding line of the column " CH_4 (KG CH_4 /TJ)" of that table;
- (dd) "**N**" represents the Nitrous Oxide of a fuel type determined by matching the fuel type listed in the column "fuel type" in Table 1 of Schedule 1 with the number in the corresponding line of the column " N_2O (KGN $_2\text{O}$ /TJ)" of that table; and
- (ee) "**D**" represents the default calorific value (Terra Joule per tonne) of a fuel type determined by matching the fuel type listed in the column "fuel type" in Table 1 of Schedule 1 with the number in the corresponding line of the column "DEFAULT CALORIFIC VALUE (TJ/TONNE)" of that table; and
- (b) fugitive emissions in respect of commodity, fuel or technology that is a number constituted by the sum of the respective numbers determined for each type of commodity, fuel or technology in respect of which the greenhouse gas is emitted in respect of a tax period which respective numbers must be determined in accordance with the formula:

$$F = (N \times Q)$$

in which formula—

- (i) "**F**" represents the number to be determined;

- (ii) "**N**" represents the mass expressed in tonne in the case of solid fuels or the volume of each type of fuel expressed in cubic metres in the case of fuels other than solid fuels, in respect of the greenhouse gas emission; and
- (iii) "**Q**" represents the greenhouse gas emission factor in carbon dioxide equivalent per tonne or cubic metres that must be determined in accordance with formula—

$$X = (C \times 1) + (M \times 23) + (N \times 296)$$

- (aa) "**X**" represents the number to be determined;
- (bb) "**C**" represents the carbon dioxide of a fuel type determined by matching the fuel type listed in the column "fuel type" in Table 2 of Schedule 1 with the number in the corresponding line of the column "CO₂" of that table;
- (cc) "**M**" represents the methane of a fuel type determined by matching the fuel type listed in the column "fuel type" in Table 2 of Schedule 1 with the number in the corresponding line of the column "CH₄" of that table';
- (dd) "**N**" represents the Nitrous Oxide of a fuel type determined by matching the fuel type listed in the column "fuel type" in Table 2 of Schedule 1 with the number in the corresponding line of the column "N₂O" of that table; and
- (c) industrial process in respect of a tax period that is a number constituted by the sum of the respective numbers determined for each type of commodity, fuel or technology in respect of which the greenhouse gas is emitted in respect of

that tax period which respective numbers must be determined in accordance with the formula:

$$P = (G \times H)$$

in which formula—

- (i) "P" represents the amount to be determined that must not be less than zero;
- (ii) "G" represents the mass of each raw material used or product produced expressed in tonne in respect of which the greenhouse gas is emitted in respect of that tax period; and
- (iii) "H" represents the greenhouse gas emission factor in carbon dioxide emissions equivalent per tonne for each raw material used or product produced that must be determined in accordance with the formula—

$$X = (C \times 1) + (M \times 23) + (N \times 296) + (H \times 11\,900) + (T \times 5\,700) + (S \times 22\,200)$$

in which formula—

- (aa) "X" represents the number to be determined;
- (bb) "C" represents the carbon dioxide of a raw material or product determined by matching the fuel type listed in the column "SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT" in Table 3 of Schedule 1 with the number in the corresponding line of the column "**CO₂/tonne product**" of that table;
- (cc) "M" represents the methane of a raw material or product determined by matching the fuel type listed in the column "SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT" in Table 3 of Schedule 1 with the number in the corresponding line of the column "**CH₄/tonne product**" of that table;

- (dd) **"N"** represents the Nitrous Oxide of a raw material or product determined by matching the fuel type listed in the column "SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT" in Table 3 of Schedule 1 with the number in the corresponding line of the column **"N₂O/ tonne product"** of that table;
- (ee) **"H"** represents the Hexafluoroethane (C₂F₆) of a raw material or product determined by matching the fuel type listed in the column "SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT" in Table 3 of Schedule 1 with the number in the corresponding line of the column "C₂F₆/tonne product" of that table;
- (ff) **"T"** represents the carbon tetrafluoride (CF₄) of a raw material or product determined by matching the fuel type listed in the column "SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT" in Table 3 of Schedule 1 with the number in the corresponding line of the column "CF₄/tonne product" of that table; and
- (gg) **"S"** represents the Sulphur hexafluoride (SF₆) of a raw material or product determined by matching the fuel type listed in the column "SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT" in Table 3 of Schedule 1 with the number in the corresponding line of the column "SF₆/tonne product" of that table.

Rate of tax

5. (1) The rate of the carbon tax on greenhouse gas emissions must be an amount of R120 per ton carbon dioxide equivalent of the greenhouse gas emissions of a taxpayer.

(2) The rate of tax specified in subsection (1) must be increased by the amount of the consumer price inflation plus 2 per cent for the preceding tax year as determined by Statistics South Africa per year until 31 December 2022.

(3) The rate of tax must be increased after 31 December 2022 by the amount of the consumer price inflation for the preceding tax year as determined by Statistics South Africa.

Calculation of amount of tax payable

6. (1) Subject to subsection (2), the amount of tax payable by a taxpayer in respect of a tax period must be calculated in accordance with the formula:

$$X = \{(E - D - S) \times (1 - C) \times R\} + \{P \times (1 - J) \times R\} + \{F \times (1 - K) \times R\}$$

in which formula—

- (a) "X" represents the amount to be determined that must not be less than zero;
- (b) "E" represents the number in respect of the total fuel combustion related greenhouse gas emissions of the taxpayer in respect of that tax period expressed as a carbon dioxide equivalent determined in terms of section 4(1)(a);
- (c) "D" represents the number in respect of the petrol and diesel related

greenhouse gas emissions of that taxpayer in respect of that tax period expressed as a carbon dioxide equivalent, determined in terms of section 4(1)(a);

- (d) **"S"** represents the number in respect of greenhouse gas emissions, expressed in terms of carbon dioxide equivalent that were sequestered in respect of that tax period as verified and certified by the Department of Environmental Affairs;
- (e) **"C"** represents the sum of percentages of allowances determined in terms of sections 7, 10, 11, 12, and 13 in respect of that tax period subject to section 14;
- (f) **"R"** represents the rate of tax prescribed under section 5;
- (g) **"P"** represents the number in respect of the total industrial process related greenhouse gas emissions of the taxpayer in respect of that tax period expressed as a carbon dioxide equivalent determined in terms of section 4(1)(c);
- (h) **"J"** represents the sum of the percentages of the allowances determined in terms of sections 8, 10, 11, 12 and 13 in respect of that tax period, subject to section 14;
- (i) **"F"** represents the number in respect of the total fugitive greenhouse gas emissions of the taxpayer in respect of that tax period expressed as a carbon dioxide equivalent determined in terms of section 4(1)(b); and
- (j) **"K"** represents the sum of the percentages of the allowances determined in terms of sections 7, 9, 10, 11, 12 and 13 in respect of that tax period, subject to section 14:

Provided that where the number in respect of the determination of the expression "**(E**

– **D - S)**" in the formula is less than zero, that number must be deemed to be zero.

(2) The amount of tax payable by a taxpayer in respect of the generation of electricity from fossil fuels in respect of a tax period must be calculated in accordance with the formula:

$$X = A - B - C$$

in which formula—

- (a) "**X**" represents the amount to be determined that must not be less than zero;
- (b) "**A**" represents the amount of tax payable in respect of a tax period determined in terms of subsection (1);
- (c) "**B**" represents the renewable energy premium in respect of a tax period, until 31 December 2022, constituted by an amount expressed in Rand determined by the Minister by notice in the *Gazette*; and
- (d) "**C**" represents an amount equal to the environmental levy contemplated in respect of electricity generated in the Republic in Section B of Part 3 of Schedule 1 to the Customs and Excise Act, 1964 (Act No. 91 of 1964), paid in respect of a tax year, until 31 December 2022.

(3) For the purposes of this section "**sequesterate**" means the process of storing a greenhouse gas or increasing the carbon content of a carbon reservoir other than the atmosphere.

Part II***Allowances*****Basic allowance for fuel combustion emissions**

7. (1) A taxpayer that conducts an activity in respect of fuel combustion emissions that is listed in Schedule 2 in the column "Activity/ Sector" may receive an allowance in respect of those emissions, determined in terms of subsection (2).

(2) The percentage of the allowance referred to in subsection (1) must be calculated by matching the line in which the activity is contained in the column " Activity/ Sector " with the corresponding line in the column "Basic tax-free allowance for fossil fuel combustion emissions %" in Schedule 2 of the total percentage of greenhouse gas emissions in respect of a tax period in respect of that activity.

Allowance for industrial process emissions

8. (1) A taxpayer that conducts an activity in respect of industrial process emissions that is listed in Schedule 2 in the column "Activity/ Sector" may receive an allowance in respect of those emissions, determined in terms of subsection (2).

(2) The percentage of the allowance referred to in subsection (1) must be calculated by matching the line in which the activity is contained in the column " Activity/ Sector " with the corresponding line in the column "Basic tax-free

allowance for process emissions %" in Schedule 2 of the total percentage of greenhouse gas emissions in respect of a tax period in respect of that activity.

Allowance in respect of fugitive emissions

9. (1) A taxpayer that conducts an activity that is listed in Schedule 2 in the column "Activity/ Sector" may receive an allowance in respect of fugitive emissions in a percentage determined in terms of subsection (2).

(2) The allowance referred to in subsection (1) must be determined by matching the line in which the activity is contained in the column "Activity/ Sector" with the corresponding line in the column "Fugitive emissions allowance %" in Schedule 2 in respect of the total percentage of greenhouse gas emissions in respect of the tax period in respect of that activity.

Trade exposure allowance

10. A taxpayer that is liable for the carbon tax in respect of greenhouse gas emissions must receive an allowance up to a maximum of ten per cent in respect of trade exposure as measured by value of exports plus imports divided by the total production by sector or subsector that must be determined in a manner prescribed by the Minister by Regulation.

Performance allowance

11. (1) A taxpayer that has implemented additional measures to reduce

the greenhouse gas emissions of that taxpayer in respect of a tax period must receive an allowance in respect of that tax period not exceeding five per cent of the total greenhouse gas emissions of that taxpayer during that tax period determined in accordance with the formula:

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

in which formula—

- (a) "Z" represents the percentage to be determined that must not be less than zero;
- (b) "A" represents—
 - (i) the sector or sub-sector greenhouse gas emissions intensity benchmark as prescribed by the Minister; or
 - (ii) where no value is prescribed as required by subparagraph (i), the number zero;
- (c) "B" represents the measured and verified greenhouse gas emissions intensity of a taxpayer in respect of a tax period;
- (d) "C" represents the number one; and
- (e) "D" represents the number 100.

(2) For the purposes of this section "**additional measures**" include voluntary action taken to reduce greenhouse gas emissions in respect of a tax period.

Carbon budget allowance

12. (1) Subject to subsection (2), a taxpayer that conducts an activity that is listed in Schedule 2 in the column "Activity/ Sector", and participates in

the carbon budget system during or before the tax period, must receive an additional allowance of 5 per cent of the total greenhouse gas emissions in respect of a tax period.

(2) A taxpayer must only receive the allowance as contemplated in subsection (1) if the Department of Environmental Affairs confirms in writing that that taxpayer is participating in the carbon budget system as referred to in subsection (1).

Offset allowance

13. (1) Subject to subsection (2), a taxpayer must reduce the amount in respect of the carbon tax for which the taxpayer is liable in respect of a tax period by utilising carbon offsets as prescribed by the Minister.

(2) The reduction of the liability for the carbon tax allowed in terms of subsection (1) must not exceed so much of the percentage of the total greenhouse gas emissions of a taxpayer in respect of a tax period as is determined by matching the line in the column "Activity/ Sector" with the percentage in the corresponding line of the column "Offsets allowance %" in Schedule 2.

Part III

Limitation of allowances

Limitation of sum of allowances

14. A taxpayer must only receive the sum of the allowances contemplated in Part II in respect of a tax period to the extent that the sum of those allowances

does not exceed 95 per cent of the total greenhouse gas emissions of that taxpayer in respect of that tax period as determined in terms of the column "Maximum total allowances %" in Schedule 2.

Part IV

Administration, tax period and payment of tax

Administration

15. (1) The Commissioner must administer the provisions of this Act as if the carbon tax were an environmental levy as contemplated in section 54A of the Customs and Excise Act, 1964 (Act No. 91 of 1964), that must be collected and paid in terms of the provisions of that Act.

(2) For the purposes of subsection (1), administrative actions, requirements and procedures for purposes of submission and verification of accounts, collection and payment of the carbon tax as an environmental levy or the performance of any duty, power or obligation or the exercise of any right in terms of this Act are, to the extent not regulated in this Act, regulated by the Customs and Excise Act, 1964.

Tax period

16. (1) A taxpayer must pay the carbon tax for every tax period.

(2) A tax period in relation to a taxpayer is—

- (a) From a date determined by the Minister in the *Gazette* ending on 31 December of the year in which that date is determined; and
- (b) subsequent to the period contemplated in paragraph (a), the period commencing on 1 January of each year and ending on 31 December of that year.

Payment of tax

17. (1) A taxpayer must submit six-monthly environmental levy accounts and payments as prescribed by rule in terms of the Customs and Excise Act, 1964 (Act No. 91 of 1964), for every tax period commencing on 1 January and ending on 30 June and the period commencing on 1 July and ending on 31 December of that year.

(2) A taxpayer must effect any required adjustments to environmental levy accounts and payments for a tax period in the subsequent environmental levy account and payment of the period commencing on 1 January and ending on 30 June in the following tax period.

Part V**Miscellaneous****Reporting**

18. The Commissioner must annually submit to the Minister a report, in the form and manner that the Minister may prescribe, within six months from the end of every tax period, advising the Minister of—

- (a) the greenhouse gas emissions reported in respect of which a taxpayer is liable for the carbon tax; and
 - (b) the amount of carbon tax collected,
- in respect of that tax period.

Regulations

19. The Minister must make regulations in respect of—

- (a) the sector or sub-sector greenhouse gas emissions intensity benchmark for the purposes of symbol "**A**" in section 11(1); and
- (b) the manner of determining the amount of the trade exposure allowance contemplated in section 10;
- (c) carbon offsets contemplated in section 13 regarding—
 - (i) the projects or activities in respect of which an offset is generated;
 - (ii) the limitation on the carbon offset allowance;
 - (iii) offset duration periods;
 - (iv) the institution, board or body that must administer the offset allowance;

- (v) the powers and responsibilities of the institution, board or body contemplated in subparagraph (iv);
- (iv) the procedure that must be followed in claiming the offset allowance;
- (vi) the records that must be kept in respect of administering the offset allowance; and
- (vii) any other matter necessary for the regulation of the utilisation of the carbon offsets.

Amendment of laws

20. The Customs and Excise Act, 1964 (Act No. 91 of 1964), is hereby amended to the extent set out in Schedule 3.

Short title and commencement

21. This Act is called the Carbon Tax Act, 2017, and comes into operation on a date determined by the Minister by notice in the *Gazette*.

SCHEDULE 1

Table 1

Energy Combustion Emission Factors

STATIONARY SOURCE CATEGORY

FUEL TYPE ¹	<u>CO₂</u> <u>(KGCO₂/T</u> <u>J)</u>	<u>CH₄</u> <u>(KGCH₄</u> <u>/TJ)</u>	<u>N₂O</u> <u>(KGN₂O/</u> <u>TJ)</u>	DEFAULT CALORIFIC VALUE (TJ/TONNE)
ANTHRACITE	<u>98 300</u>	<u>1</u>	<u>1.5</u>	0.0267
AVIATION GASOLINE	<u>70 000</u>	<u>3</u>	<u>0.6</u>	0.0443
BIODIESEL	<u>0</u>	<u>3</u>	<u>0.6</u>	0.027
BIOGASOLINE	<u>0</u>	<u>3</u>	<u>0.6</u>	0.027
BITUMEN	<u>80 700</u>	<u>3</u>	<u>0.6</u>	0.0402
BLAST FURNACE GAS	<u>260 000</u>	<u>1</u>	<u>0.1</u>	0.00247
DIESEL	<u>74 100</u>	<u>3</u>	<u>0.6</u>	0.043
BROWN COAL BRIQUETTES	<u>97 500</u>	<u>1</u>	<u>1.5</u>	0.0207
CHARCOAL	<u>0</u>	<u>200</u>	<u>4</u>	0.0295
COAL TAR	<u>80 700</u>	<u>1</u>	<u>1.5</u>	0.028
COKE OVEN COKE AND LIGNITE COKE	<u>107 000</u>	<u>1</u>	<u>1.5</u>	0.0282
COKE OVEN GAS	<u>44 400</u>	<u>1</u>	<u>0.1</u>	0.0387
COKING COAL	<u>94 600</u>	<u>1</u>	<u>1.5</u>	0.0282
CRUDE OIL	<u>73 300</u>	<u>3</u>	<u>0.6</u>	0.0438
DIESEL	<u>74 100</u>	<u>3</u>	<u>0.6</u>	0.0381
ETHANE	<u>61 600</u>	<u>1</u>	<u>0.1</u>	0.0464
GAS COKE	<u>107 000</u>	<u>1</u>	<u>0.1</u>	0.0173
GAS WORKS GAS	<u>44 400</u>	<u>1</u>	<u>0.1</u>	0.0387
INDUSTRIAL WASTES	<u>143 000</u>	<u>30</u>	<u>4</u>	N/A
JET GASOLINE	<u>70 000</u>	<u>3</u>	<u>0.6</u>	0.0443
JET KEROSENE	<u>71 500</u>	<u>3</u>	<u>0.6</u>	0.0441
LANDFILL GAS	<u>0</u>	<u>1</u>	<u>0.1</u>	0.0504
LIGNITE	<u>101 000</u>	<u>1</u>	<u>1.5</u>	0.0119
LIQUEFIED PETROLEUM GASES	<u>63 100</u>	<u>1</u>	<u>0.1</u>	0.0473
LUBRICANTS	<u>73 300</u>	<u>3</u>	<u>0.6</u>	0.0402
MUNICIPAL WASTES (BIOMASS FRACTION)	<u>0</u>	<u>30</u>	<u>4</u>	0.0116
MUNICIPAL WASTES (NON BIOMASS FRACTION)	<u>91 700</u>	<u>30</u>	<u>4</u>	0.01

FUEL TYPE ¹	CO ₂ (KGCO ₂ /T J)	CH ₄ (KGCH ₄ /TJ)	N ₂ O (KGN ₂ O/ TJ)	DEFAULT CALORIFIC VALUE (TJ/TONNE)
NAPHTHA	<u>73 700</u>	<u>3</u>	<u>0.6</u>	0.0445
NATURAL GAS	<u>56 100</u>	<u>1</u>	<u>0.1</u>	0.048
NATURAL GAS LIQUIDS	<u>64 200</u>	<u>3</u>	<u>0.6</u>	0.041
OIL SHALE AND TAR SANDS	<u>107 000</u>	<u>1</u>	<u>1.5</u>	0.0089
ORIMULSION	<u>77 000</u>	<u>3</u>	<u>0.6</u>	0.0275
OTHER BIOGAS	<u>0</u>	<u>1</u>	<u>0.1</u>	0.0504
OTHER BITUMINOUS COAL	<u>94 600</u>	<u>1</u>	<u>1.5</u>	0.0192
OTHER KEROSENE	<u>71 900</u>	<u>3</u>	<u>0.6</u>	0.037
OTHER LIQUID BIOFUELS	<u>0</u>	<u>3</u>	<u>0.6</u>	0.0274
OTHER PETROLEUM PRODUCTS	<u>73 300</u>	<u>3</u>	<u>0.6</u>	0.0402
OTHER PRIMARY SOLID BIOMASS	<u>0</u>	<u>30</u>	<u>4</u>	0.0116
OXYGEN STEEL FURNACE GAS	<u>182 000</u>	<u>1</u>	<u>0.1</u>	0.00706
PARAFFIN	<u>71 900</u>	<u>3</u>	<u>0.6</u>	0.0438
PARAFFIN WAXES	<u>73 300</u>	<u>3</u>	<u>0.6</u>	0.0402
PATENT FUEL	<u>97 500</u>	<u>1</u>	<u>1.5</u>	0.0207
PEAT	<u>0</u>	<u>1</u>	<u>1.5</u>	0.00976
PETROL	<u>69 300</u>	<u>3</u>	<u>0.6</u>	0.0443
PETROLEUM COKE	<u>97 500</u>	<u>3</u>	<u>0.6</u>	0.0325
REFINERY FEEDSTOCK	<u>73 300</u>	<u>3</u>	<u>0.6</u>	0.043
REFINERY GAS	<u>57 600</u>	<u>1</u>	<u>0.1</u>	0.0495
RESIDUAL FUEL OIL (HEAVY FUEL OIL)	<u>77 400</u>	<u>3</u>	<u>0.6</u>	0.0404
SHALE OIL	<u>73 300</u>	<u>3</u>	<u>0.6</u>	0.0381
SLUDGE GAS	<u>0</u>	<u>1</u>	<u>0.1</u>	0.0504
SUB-BITUMINOUS COAL	<u>96 100</u>	<u>1</u>	<u>1.5</u>	0.0192
SULPHITE LYES (BLACK LIQUOR)	<u>95 300</u>	<u>3</u>	<u>2</u>	0.0118
WASTE OILS	<u>73 300</u>	<u>30</u>	<u>4</u>	0.0402
WHITE SPIRIT AND SBP	<u>73 300</u>	<u>3</u>	<u>0.6</u>	0.0402
WOOD/WOOD WASTE	<u>0</u>	<u>30</u>	<u>4</u>	0.0156

NON-STATIONARY / MOBILE SOURCE CATEGORY ACTIVITY

FUEL TYPE ¹	<u>CO₂</u> (<u>KGCO₂/TJ</u>)	<u>CH₄</u> (<u>KGCH₄/TJ</u>)	<u>N₂O</u> (<u>KGN₂O/TJ</u>)	DEFAULT CALORIFIC VALUE (TJ/TONNE)
AVIATION GASOLINE	<u>70 000</u>	<u>0.5</u>	<u>2</u>	0.0443
COMPRESSED NATURAL GAS	<u>56 100</u>	<u>92</u>	<u>3</u>	N/A
DIESEL	<u>74 100</u>	<u>4.15</u>	<u>28.6</u>	0.0381
DIESEL –(OCEAN- GOING SHIPS)	<u>74 100</u>	<u>7</u>	<u>2</u>	0.0381
DIESEL-RAIL	<u>74 100</u>	<u>4.5</u>	<u>28.6</u>	0.0381
JET KEROSENE	<u>71 500</u>	<u>0.5</u>	<u>2</u>	0.0441
KEROSENE	<u>71 900</u>	<u>3</u>	<u>0.6</u>	0.037
LIQUEFIED NATURAL GASES	<u>56 100</u>	<u>92</u>	<u>3</u>	N/A
LIQUEFIED PETROLEUM GASES	<u>63 100</u>	<u>62</u>	<u>0.2</u>	0.0473
LUBRICANTS	<u>73 300</u>	<u>3</u>	<u>0.6</u>	0.0402
NATURAL GAS	<u>56 100</u>	<u>92</u>	<u>3</u>	0.048
(PARAFFIN) OTHER KEROSENE	<u>71 900</u>	<u>3</u>	<u>0.6</u>	0.0438
OTHER PETROLEUM PRODUCTS	<u>73 300</u>	<u>3</u>	<u>0.6</u>	0.0402
PARAFFIN WAXES	<u>73 300</u>	<u>3</u>	<u>0.6</u>	0.0402
PETROL	<u>69 300</u>	<u>3.5</u>	<u>5.7</u>	0.0443
REFINERY GAS	<u>57 600</u>	<u>1</u>	<u>0.1</u>	0.0495
RESIDUAL FUEL OIL – (HEAVY FUEL OIL)	<u>77 400</u>	<u>7</u>	<u>2</u>	0.0404
SUB-BITUMINOUS COAL - RAIL	<u>96 100</u>	<u>2</u>	<u>1.5</u>	0.0192
WHITE SPIRIT & SBP	<u>73 300</u>	<u>3</u>	<u>0.6</u>	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	0.0000 33	ND
1.B.2. b.ii	WELL TESTING	0.009	0.0000 51	0.0000 00068
1.B.2. b.ii	WELL SERVICING	0.0000 019	0.0001 1	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	0.0000 0076	0.0000 00021
	GAS PROCESSING (Gg/ 10⁶M³ RAW GAS FEED)			
1.B.2. b.iii.3	SWEET GAS PLANTS-FUGITIVES	1.50E- 04 to	4.80E- 04 to	N/A

IPCC Code	SOURCE CATEGORY ACTIVITY			
		CO ₂	CH ₄	N ₂ O
		3.20E-04	1.03E-03	
1.B.2. b.ii	SWEET GAS PLANTS-FLARING	0.0018	0.0000 012	0.0000 00025
1.B.2. b.iii.3	SOUR GAS PLANTS-FUGITIVES	0.0000 079	0.0000 97	N/A
1.B.2. b.ii	SOUR GAS PLANTS-FLARING	0.0036	0.0000 024	0.0000 00054
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	0.0000 016	0.0000 11	N/A
1.B.2. b.ii	DEEP CUT EXTRACTION-FLARING	0.0001 1	0.0000 00072	0.0000 00012
1.B.2. b.iii.3	DEFAULT-FUGITIVES	1.20E-05	1.50E-04	N/A
		to 3.20E-04	to 1.03E-03	
1.B.2. b.ii	DEFAULT-FLARING	0.003	0.0000 02	0.0000 00033
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	0.0000 16	0.0025	N/A
1.B.2. b.i	TRANSMISSION - VENTING	0.0000 085	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)			
1.B.2. b.iii.5	ALL	0.0000 51	0.0011	ND
1B2b	NATURAL GAS LIQUIDS TRANSPORT (Gg/ 10³M³ CONDENSATE AND PENTANES PLUS)			
1.B.2. a.iii.3	CONDENSATE	0.0000 072	0.0001 1	
1.B.2. a.iii.3	LIQUEFIED PETROLEUM GAS (Gg/ 10 ³ M ³ LPG)	0.0004 3	N/A	2.20E-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			

IPCC Code	SOURCE CATEGORY ACTIVITY			
		CO ₂	CH ₄	N ₂ O
	OIL PRODUCTION)			
1.B.2. a.iii.2	CONVENTIONAL OIL-FUGITIVES (ONSHORE)	1.10E-07	1.50E-06	N/A
		2.60E-04	3.60E-03	
1.B.2. a.iii.2	CONVENTIONAL OIL-FUGITIVES(OFFSHORE)	0.0000 00043	0.0000 0059	N/A
1.B.2. a.i	CONVENTIONAL OIL-VENTING	0.0000 95	0.0007 2	N/A
1.B.2. a.ii	CONVENTIONAL OIL-FLARING	0.041	0.0000 25	0.0000 0064
1B2a	<i>OIL PRODUCTION (Gg/ 10³M³ HEAVY OIL PRODUCTION)</i>			
1.B.2. a.iii.2	HEAVY OIL/COLD BITUMEN - FUGITIVES	0.0005 4	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	0.0001 4	0.0000 0046
1B2a	<i>OIL PRODUCTION (Gg/ 10³M³ THERMAL BITUMEN PRODUCTION)</i>			
1.B.2. a.iii.2	THERMAL OIL PRODUCTION - FUGITIVES	0.0000 29	0.0001 8	N/A
1.B.2. a.i	THERMAL OIL PRODUCTION - VENTING	0.0002 2	0.0035	N/A
1.B.2. a.ii	THERMAL OIL PRODUCTION - FLARING	0.027	0.0000 16	0.0000 0024
1B2a	<i>OIL PRODUCTION (Gg/ 10³M³ SYNTHETIC CRUDE PRODUCTION FROM OILSANDS)</i>			
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	<i>OIL PRODUCTION (Gg/ 10³M³ TOTAL OIL PRODUCTION)</i>			
1.B.2. a.iii.2	DEFAULT TOTAL - FUGITIVES	0.0002 8	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	0.0000 21	0.0000 0054
1B2a	<i>OIL UPGRADING (Gg/ 10³M³ OIL UPGRADED)</i>			
1.B.2. a.iii.2	ALL	ND	ND	ND
1B2a	<i>OIL TRANSPORT (Gg/ 10³M³ OIL TRANSPORTED BY PIPELINE)</i>			
1.B.2. a.iii.3	PIPELINES	0.0000 0049	0.0000 054	N/A
1B2a	<i>OIL TRANSPORT (Gg/ 10³M³ OIL TRANSPORTED</i>			

IPCC Code	SOURCE CATEGORY ACTIVITY			
		CO ₂	CH ₄	N ₂ O
	BY TANKER TRUCK)			
1.B.2.a.i	TANKER TRUCKS AND RAIL CARS - VENTING	0.0000 023	0.0000 25	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

SCHEDULE 1

Table 3

INDUSTRIAL PROCESSES AND PRODUCT USE (IPPU) Emission Factors

IPC C Code	SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT	TONNE CO ₂ /ton ne product	TONNE CH ₄ /ton ne product	TONNE N ₂ O/ tonne product	TONNE C ₂ F ₆ /ton ne product	TONNE CF ₄ /ton ne product	TONNE SF ₆ /ton ne 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						
2A4 a	CERAMICS (PER TONNE CARBONATE)						
	CALCITE/ARAGONIT E (CaCO ₃)	0.43971					
	MAGNESITE (MgCO ₃)	0.52197					
	DOLOMITE (CaMg(CO ₃) ₂)	0.47732					
	SIDERITE (FeCO ₃)	0.37987					
	ANKERITE	0.40822					

IPC C Code	SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT	TONNE CO ₂ /ton ne product	TONNE CH ₄ /ton ne product	TONNE E N ₂ O/ tonne produ ct	TONNE C ₂ F ₆ /ton ne product	TONNE CF ₄ /ton ne produc t	TONNE SF ₆ /ton ne produc t
	(Ca(Fe,Mg,Mn)(CO ₃) ₂)	to					
)	0.47572					
	RHODOCHROSITE (MnCO ₃)	0.38286					
	SODIUM CARBONATE/SODA ASH (Na ₂ CO ₃)	0.41492					
2A4 b	OTHER USES OF SODA ASH (PER TONNE CARBONATE)						
	CALCITE/ARAGONIT E (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					
2A4 c	NON METALLURGICAL MAGNESIA PRODUCTION (PER TONNE CARBONATE)						
	CALCITE/ARAGONIT E (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	0.41492					

IPC C Code	SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT	TONNE CO ₂ /ton ne product	TONNE CH ₄ /ton ne product	TONNE N ₂ O/ tonne product	TONNE C ₂ F ₆ /ton ne product	TONNE CF ₄ /ton ne product	TONNE SF ₆ /ton ne product
	CARBONATE/SODA ASH (Na ₂ CO ₃)						
2A5	OTHER (PER TONNE CARBONATE)						
	CALCITE/ARAGONIT E (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- CONVENTIONAL REFORMING (NATURAL GAS)	1.694					
	EXCESS AIR REFORMING (NATURAL GAS)	1.666					
	AUTOTHERMAL REFORMING (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)						

IPC C Code	SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT	TONNE CO ₂ /ton ne product	TONNE CH ₄ /ton ne product	TONNE E N ₂ O/ tonne produ ct	TONNE C ₂ F ₆ /ton ne product	TONNE CF ₄ /ton ne produc t	TONNE SF ₆ /ton ne produc t
	PLANTS WITH NSCR (ALL PROCESSES)			0.002			
	PLANTS WITH PROCESS (INTEGRATED OR TAILGAS NO ₂ DESTRUCTION)			0.002 5			
	ATMOSPHERIC PRESSURE PLANTS (LOW PRESSURE PLANTS)			0.005			
	MEDIUM PRESSURE COMBUSTION 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, GL YOXAL AND GLYOXYLIC ACID PRODUCTION (PER TONNE PRODUCED)						
	CAPROLACTAM PRODUCTION (RASCHIG)			0.009			
	GLYOXAL PRODUCTION			0.1			
	GLYOXYLIC ACID PRODUCTION			0.02			
2B5	CARBIDE PRODUCTION (PER TONNE RAW MATERIAL USED)						
	SILICON CARBIDE PRODUCTION	2.3	0.0102				
	PETROLEUM COKE	1.7					

IPC C Code	SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT	TONNE CO ₂ /ton ne product	TONNE CH ₄ /ton ne product	TONNE E N ₂ O/ tonne produ ct	TONNE C ₂ F ₆ /ton ne product	TONNE CF ₄ /ton ne produc t	TONNE SF ₆ /ton ne produc t
	USE						
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 AVAILAB LE					
	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	<i>PETROCHEMICAL AND CARBON BLACK PRODUCTION</i>						
2B8 a	<i>METHANOL PRODUCTION (PER TONNE METHANOL PRODUCED)</i>						
	CONVENTIONAL STEAM REFORMING WITHOUT PRIMARY REFORMER (NATURAL GAS	0.67	0.0023				

IPC C Code	SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT	TONNE CO ₂ /ton ne product	TONNE CH ₄ /ton ne product	TONNE E N ₂ O/ tonne produ ct	TONNE C ₂ F ₆ /ton ne product	TONNE CF ₄ /ton ne produc t	TONNE SF ₆ /ton ne produc t
	FEEDSTOCK)						
	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				
	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				

IPC C Code	SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT	TONNE CO ₂ /ton ne product	TONNE CH ₄ /ton ne product	TONNE E N ₂ O/ tonne produ ct	TONNE C ₂ F ₆ /ton ne product	TONNE CF ₄ /ton ne produc t	TONNE SF ₆ /ton ne produc t
	PARTIAL OXIDATION PROCESS (LIGNITE FEEDSTOCK)	5.02	0.0023				
	CONVENTIONAL STEAM REFORMING WITH INTEGRATED AMMONIA PRODUCTION (NATURAL GAS FEEDSTOCK)	1.02	0.0023				
2B8 b	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	1.73	0.003				

IPC C Code	SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT	TONNE CO ₂ /ton ne product	TONNE CH ₄ /ton ne product	TONNE N ₂ O/ tonne product	TONNE C ₂ F ₆ /ton ne product	TONNE CF ₄ /ton ne product	TONNE SF ₆ /ton ne product
	FEEDSTOCK USE) - NAPHTHA						
	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				
	ETHYLENE (SUPPLEMENTAL FUEL-ENERGY FEEDSTOCK) USE - GAS OIL	0.12	0.003				
	ETHYLENE (SUPPLEMENTAL FUEL-ENERGY FEEDSTOCK) USE - ETHANE	0.19	0.006				
2B8 c	<i>ETHYLENE DICHLORIDE AND VINYL CHLORIDE MONOMER (PER TONNE EDC PRODUCED OR TONNE VCM PRODUCT PRODUCED)</i>						
	DIRECT CHORINATION PROCESS (EDC)	0.191	0.00002 26				
	OXYCHLORINATION PROCESS (EDC)	0.202	0.00002 26				
	BALANCED	0.196	0.00002				

IPC C Code	SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT	TONNE CO ₂ /ton ne product	TONNE CH ₄ /ton ne product	TONNE E N ₂ O/ tonne produ ct	TONNE C ₂ F ₆ /ton ne product	TONNE CF ₄ /ton ne produc t	TONNE SF ₆ /ton ne produc t
	PROCESS (DEFAULT) - EDC		26				
2B8 c	ETHYLENE DICHLORIDE AND VINYL CHLORIDE MONOMER (PER TONNE VCM PRODUCED OR TONNE VCM PRODUCT PRODUCED)						
	DIRECT CHORINATION- PROCESS (VCM)	0.286	0.00002 26				
	OXYCHLORINATION PROCESS (VCM)	0.302	0.00002 26				
	BALANCED PROCESS (DEFAULT) -VCM	0.294	0.00002 26				
2B8 d	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				

IPC C Code	SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT	TONNE CO ₂ /ton ne product	TONNE CH ₄ /ton ne product	TONNE N ₂ O/ tonne product	TONNE C ₂ F ₆ /ton ne product	TONNE CF ₄ /ton ne product	TONNE SF ₆ /ton ne product
2B8 e	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				
	DIRECT AMMOXIDATION WITH ACETONITRILE & HYDROGEN CYANIDE RECOVERED AS PRODUCT	0.79	0.00018				
2B8 f	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) -	0.66	0.00006				

IPC C Code	SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT	TONNE CO ₂ /ton ne product	TONNE CH ₄ /ton ne product	TONNE E N ₂ O/ tonne produ ct	TONNE C ₂ F ₆ /ton ne product	TONNE CF ₄ /ton ne produc t	TONNE SF ₆ /ton ne produc t
	SECONDARY FEEDSTOCK						
	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	0.00006				
	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	0.00000 01				
	PIG IRON PRODUCTION	1.35					
	DIRECT REDUCED IRON (DRI) PRODUCTION	0.7	0.001/T J (NG)				
	PELLET PRODUCTION	0.03					
	BASIC OXYGEN FURNACE	1.46					
	ELECTRIC ARC FURNACE	0.08					
	OPEN HEARTH FURNACE	1.72					

IPC C Code	SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT	TONNE CO ₂ /ton ne product	TONNE CH ₄ /ton ne product	TONNE N ₂ O/ tonne product	TONNE C ₂ F ₆ /ton ne product	TONNE CF ₄ /ton ne product	TONNE SF ₆ /ton ne product
	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					
	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						

IPC C Code	SOURCE CATEGORY ACTIVITY / RAW MATERIAL / PRODUCT	TONNE CO ₂ /ton ne product	TONNE CH ₄ /ton ne product	TONNE N ₂ O/ tonne produ ct	TONNE C ₂ F ₆ /ton ne product	TONNE CF ₄ /ton ne produc t	TONNE SF ₆ /ton ne produc t
	(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					
	PYROMETALLURGIC AL	0.43					
	DEFAULT EF	1.72					

SCHEDULE 2

IPC C Code	Activity/ Sector	Thresh old ¹	Basic tax- free allowa nce for fossil fuel comb stion emissi ons %	Basi c tax- free allowa nce for proc ess emi ssio ns %	Fugitive emissio ns allowan ce %	Trad e exp osur e allo wan ce %	Perfo man ce allow ance %	Carb on budg et allow ance %	Off set s allow an ce %	Maxi mu m total allo wan ces %
1	ENERGY									
1A	Fuel Combustion Activities									
1A1	Energy Industries (including heat and electricity recovery from Waste)									
1A1 a	Main Activity Electricity and Heat Production (including Combined Heat and Power Plants)	10 MW(th)	60	0	0	10	5	5	10	90
1A1 b	Petroleum Refining	10 MW(th)	60	0	0	10	5	5	10	90
1A1 c	Manufacture of Solid Fuels and Other Energy Industries	10 MW(th)	60	0	0	10	5	5	10	90
1A2	Manufacturi ng Industries and		60	0	0	10	5	5	10	90

IPC Code	Activity/Sector	Threshold ¹	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 %
	Construction (including heat and electricity recovery from Waste)									
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	Civil Aviation	100 000	60	0	0	10	5	5	10	90

IPC Code	Activity/Sector	Threshold ¹	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 %
		litres/year								
1A3b	Road Transportation	NA ²	60	0	0	10	5	5	10	90
1A3c	Railways	100 000 litres/year	60	0	0	10	5	5	10	90
1A3d	Water-borne Navigation	100 000 litres/year	60	0	0	10	5	5	10	90
1A3e	Other Transportation	NA	60	0	0	10	5	5	10	90
1A4	Other Sectors (including heat and electricity recovery from Waste)									
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
1A5	Mobile	N/A	60	0	0	10	5	5	10	90

IPC Code	Activity/Sector	Threshold ¹	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 %
b										
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 ³	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	NA	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	none	60	0	10	10	5	5	5	95

IPC Code	Activity/Sector	Threshold ¹	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 %
	fuels (e.g. biofuel productions)									
1B2	Oil and Natural Gas									
1B2 a	Oil	none	60	0	10	10	5	5	5	95
1B2 ai	Venting	none	60	0	10	10	5	5	5	95
1B2 aii	Flaring	none	60	0	10	10	5	5	5	95
1B2 aiii	All other	none	60	0	10	10	5	5	5	95
1B2 b	Natural Gas	none	60	0	10	10	5	5	5	95
1B2 bi	Venting	none	60	0	10	10	5	5	5	95
1B2 bii	Flaring	none	60	0	10	10	5	5	5	95
1B2 biii	All other	none	60	0	10	10	5	5	5	95
1B3	Other Emissions from Energy Production									
1B3 a	Coal-to-liquids processes	none	60	0	10	10	5	5	5	95
1B3 b	Gas-to-liquids processes	none	60	0	10	10	5	5	5	95
1B3 c	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

IPC Code	Activity/Sector	Threshold ¹	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 %
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	none	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		60	0	0	10	5	5	10	90

IPC Code	Activity/Sector	Threshold ¹	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 %
	Production									
2B8a	Methanol	none	0	70	0	10	5	5	5	95
2B8b	Ethylene	none	0	70	0	10	5	5	5	95
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)	NA	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	60	0	10	5	5	10	90
2C4	Magnesium Production	none	0	60	0	10	5	5	10	90

IPC Code	Activity/Sector	Threshold ¹	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 %
2F1a	Refrigeration and Stationary Air Conditioning	NA	0	60	0	10	5	5	10	90
2F1b	Mobile Air Conditioning	NA	0	60	0	10	5	5	10	90
2F2	Foam Blowing Agents	NA	0	60	0	10	5	5	10	90
2F3	Fire Protection	NA	0	60	0	10	5	5	10	90
2F4	Aerosols	NA	0	60	0	10	5	5	10	90
2F5	Solvents	NA	0	60	0	10	5	5	10	90
2F6	Other Applications (please specify)	NA	0	60	0	10	5	5	10	90
2G	Other Product Manufacture and Use									
2G1	Electrical Equipment									
2G1a	Manufacture of Electrical Equipment	NA	0	60	0	10	5	5	10	90
2G1b	Use of Electrical Equipment	NA	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	NA								
2G2a	Military Applications	NA	0	60	0	10	5	5	10	90

IPC Code	Activity/Sector	Threshold ¹	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)	NA								
5	OTHER									
5A	Indirect N ₂ O Emissions from the Atmospheric Deposition of Nitrogen in NO _x and NH ₃	NA	60	0	0	10	5	5	10	90
5B	Other (please specify)	NA	60	0	0	10	5	5	10	90

SCHEDULE 3*(Section 21)***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.

BILL

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 Section 54A of the Customs and Excise Act, 1964:

"Imposition of environmental levy

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

- (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
(b) collected and paid in respect of carbon tax imposed in terms of the Carbon Tax Act."

Insertion of section 54AA in Act 91 of 1964

3. The following section is hereby inserted in the Customs and Excise Act, 1964, after section 54A:

"Provisions relating to carbon tax

54AA. For the purposes of the administration and collection of carbon tax revenues as contemplated in section 54A—

- (a) (i) any reference to the Carbon Tax Act in this Act must be regarded as including the Tables and Schedules to that Act and any regulation made in terms of that Act;
- (ii) in this Act, unless the context indicates otherwise, a word or term to which a meaning has been assigned in the Carbon Tax Act has the meaning so assigned;
- (b) the allowances and limitation of allowances prescribed in the Carbon Tax Act must be administered as rebates, refunds or drawbacks, as may be applicable, in terms of this Act; and
- (c) any administrative actions, requirements and procedures for purposes of submission and verification of accounts, collection and payment of carbon tax as an environmental levy or the performance of any duty, power or obligation or the exercise of any right must, to the extent not prescribed in the Carbon Tax Act, be prescribed by the Commissioner by rule."