



DRAFT REGULATIONS:

**GREENHOUSE GAS EMISSIONS INTENSITY BENCHMARKS
PRESCRIBED FOR THE PURPOSE OF SECTION 11 OF THE
CARBON TAX ACT, 2019**

December 2019

**CARBON TAX, 2019: PUBLICATION OF PROPOSED REGULATIONS MADE IN
TERMS OF SECTION 19(a).**

Proposed regulations made in terms of section 19(a) of the Carbon Tax Act, 2019, are hereby published for comment.

SCHEDULE

Definitions

1. In these regulations, unless the context otherwise indicates, any word or expression to which a meaning has been assigned in the Carbon Tax Act, 2019, bears the meaning so assigned.

Greenhouse gas emissions intensity benchmark

2. A taxpayer must determine the emissions intensity benchmark for the purposes of determining the sector or subsector greenhouse gas emissions intensity benchmark for the purposes of symbol "A" in section 11(1) of the Carbon Tax Act, by matching the sector/subsector in respect of that taxpayer contained in the column "Sector/Subsector" with a number calculated according to the benchmark value contained in the same line as that sector or subsector in the column "Benchmark Value" in the table in Annexure A.

Greenhouse gas emissions intensity determination

3. A taxpayer must determine the measured and verified emissions intensity of that taxpayer for the purposes of symbol "B" in the formula prescribed by section 11(1) of the Carbon Tax Act, 2019, for the sectors or subsectors of—

- (a) (i) iron and steel;
- (ii) ferroalloys in respect of ferrochrome and silicomanganese;
- (iii) clay brick manufacturing in respect of saleable brick;
- (iv) the cement sector, in respect of clinker;
- (v) chemicals in respect of nitric acid;
- (vi) ilmenite industry in respect of titanium slag, or
- (vii) sugar industry in respect of raw or white sugar in relation to the product produced;

- (b) the mining sector in respect of platinum, gold and coal, in relation to the emissions intensity of ore mined;
- (e) the pulp and paper sector in respect of tonne CO_{2e} / per tonne wood, pulp and paper;
- (f) coal to liquid and gas to liquid petroleum, in relation to a fuel input intensity metric of million tonne CO_{2e} / energy input into the coal to liquid and gas to liquid process measured in Peta Joules in the applicable tax period; and
- (g) petroleum refining, greenhouse gas emissions in respect of a tax period.

Short title and commencement

4. These regulations are called the Regulations on the greenhouse gas emissions intensity benchmark prescribed for the purpose of section 11 of Carbon Tax Act, 2019 under section 19 of that Act and come into operation on 1 June 2019.

ANNEXURE A

Sector / Sub-sector	SA Industry benchmark value	
Iron and Steel	4.02 tonne CO ₂ e / tonne crude steel	
Ferroalloys	Ferrochrome - 6.48 tonne CO ₂ e / tonne ferrochrome	
	Silicomanganese – 7.43 tonne CO ₂ e / tonne silicomanganese	
Mining Sector – Platinum	Depth of platinum mine in metres	Intensity range in tonneCO ₂ e / tonne ore mined
	Shallow: 0-300 m	0.004
	Medium: 300-1200 m	0.062
	Deep: 1200-2000 m	0.13
	Concentrators	0.0525 tonne CO ₂ e / tonne ore milled
	Smelters and refineries	0.416 tonneCO ₂ e / ounce of metal
Mining Sector – Gold	Depth of gold mine in metres	Intensity range in tonne CO ₂ e / tonne rock mined
	Shallow: 0-1000 m	0.01
	Medium: 1000-2500 m	0.25
	Deep: 2500-4000 m	0.44
Mining Sector – Coal	0.108 tonne CO ₂ e / tonne ore mined	
Cement	1 tonne CO ₂ e / tonne clinker.	
Pulp and paper	Mill A	2.542 tonne CO ₂ e per tonne wood, pulp and paper
	Mill B	1.086 tonne CO ₂ e per tonne wood, pulp and paper
	Mill C	1.44 tonne CO ₂ e per tonne wood, pulp and paper
	Mill D	1.164 tonne CO ₂ e per tonne wood, pulp and paper
	Mill E	1.023 tonne CO ₂ e per tonne wood, pulp and paper
	Mill F	3.282 tonne CO ₂ e per tonne wood, pulp and paper
	Mill G	0.6 tonne CO ₂ e per tonne wood, pulp and paper
	Mill H	2.529 tonne CO ₂ e per tonne wood, pulp and paper

Sector / Sub-sector	SA Industry benchmark value	
	Mill I	2.11 tonne CO _{2e} per tonne wood, pulp and paper
	Mill J	1.69 tonne CO _{2e} per tonne wood, pulp and paper
	Mill K	0.259 tonne CO _{2e} per tonne wood, pulp and paper
Petroleum refining	53.2 kgCO _{2e} / SA - CWT	
Petroleum (CTL/ GTL)	0.067 Mt CO _{2e} / PJ energy input	
Clay brick manufacturing	0.28 tonne CO _{2e} / tonne saleable bricks	
Chemicals – Nitric Acid	0.68 t CO _{2e} / tonne 100% nitric acid	
Ilmenite industry – Titanium slag	3.9 tonne CO _{2e} / tonne titanium slag	
Sugar	Raw sugar – 0.217 tonne CO _{2e} / tonne raw sugar	
	White – 0.601 tonne CO _{2e} / tonne white sugar	
	Raw and white sugar – 0.217 to 0.601 tonne CO _{2e} / tonne white sugar and raw sugar	