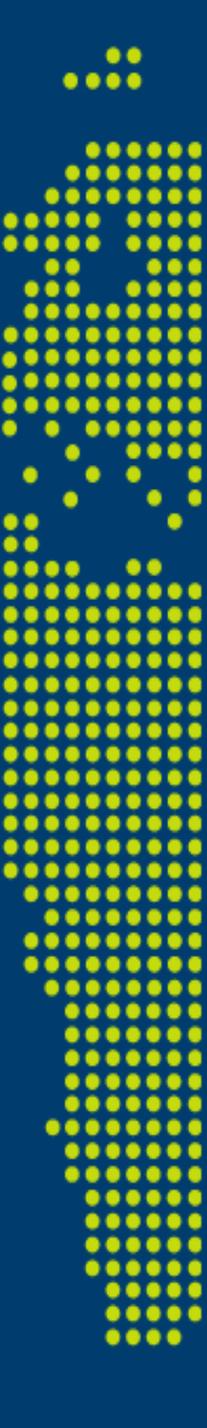


# Carbon Tax Offset Regulations

*'Carbon Tax Offset Potential Supply and Demand Scenarios'*

**By:** Henk Sa and Lodewijk Nell  
**Date:** 25<sup>th</sup> of November 2016  
**Location:** 40 Church Square, National Treasury, Pretoria



## Agenda

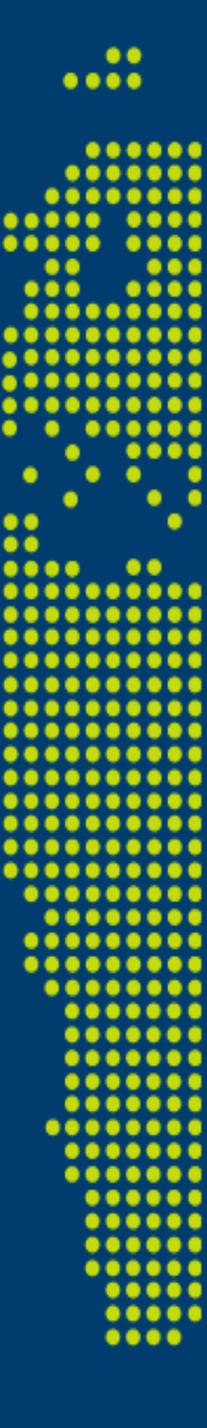
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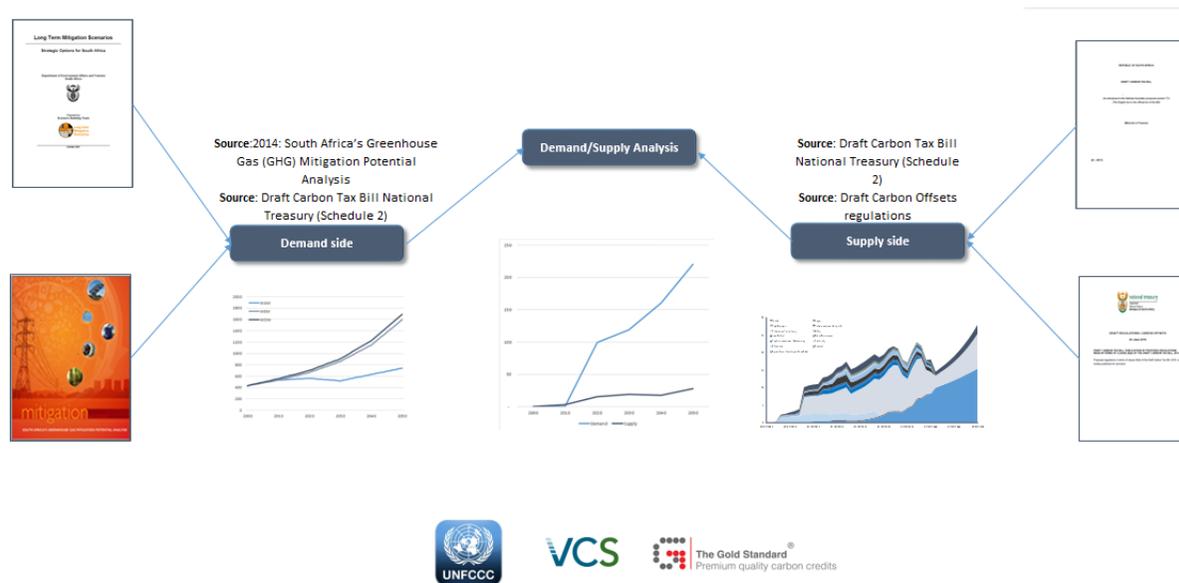


## *Modelling Demand and Supply*

# Demand and Supply Analysis

## Carbon Tax Offsets demand supply data sources and structure

The demand and supply model uses a combination of publically available datasets from domestic and international sources



1. The application of the datasets is closely linked to the understanding and interpretation of the Carbon Tax and the Carbon Tax Offsetting mechanism
2. The model is designed to be dynamic and allows for different interpretations of the Carbon Tax and the Carbon Tax Offsetting mechanism

## Demand and Supply Analysis

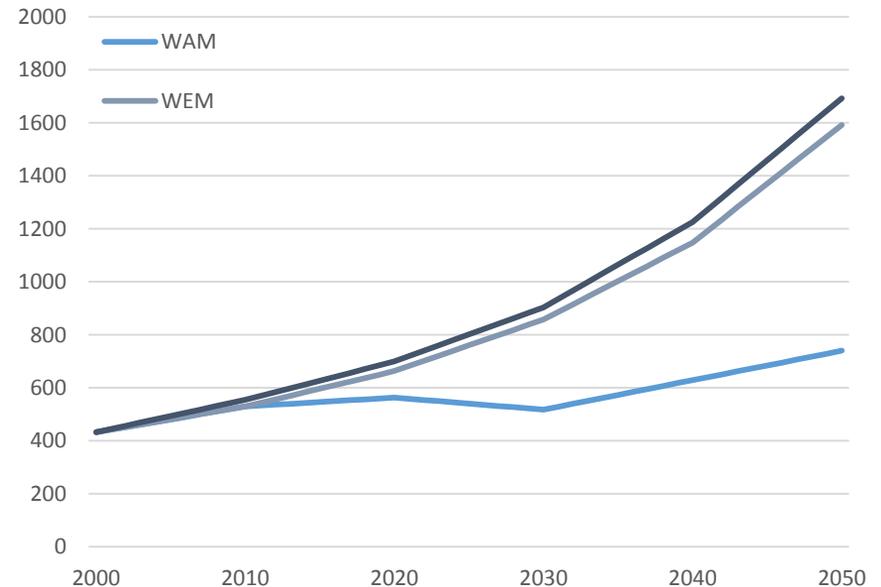
### Demand size scenarios

The demand side of the model uses a combination of the data provided within the Long Term Mitigation Scenarios (LTMS) and South Africa’s Greenhouse Gas (GHG) Mitigation Potential Analysis

The demand side forecast is corrected for:

- General uptake over time
- Uptake of the sequestration component under the tax (“S”)
- The renewable energy premium (“B”)

South Africa Emission scenarios (Million tCO<sub>2e</sub>)



Scenario (tCO <sub>2e</sub> )	2000	2010	2020	2030	2040	2050
Without measures scenario ( <b>WOM</b> )	432,467,000	555,152,000	699,307,000	903,700,000	1,225,692,000	1,692,472,000
With existing measures scenario ( <b>WEM</b> )	432,467,000	529,672,000	663,270,000	857,745,000	1,147,834,000	1,592,605,000
With additional measures scenario ( <b>WAM</b> )	432,467,000	529,672,000	563,127,000	517,734,000	628,897,500	740,061,000

# Demand and Supply Analysis

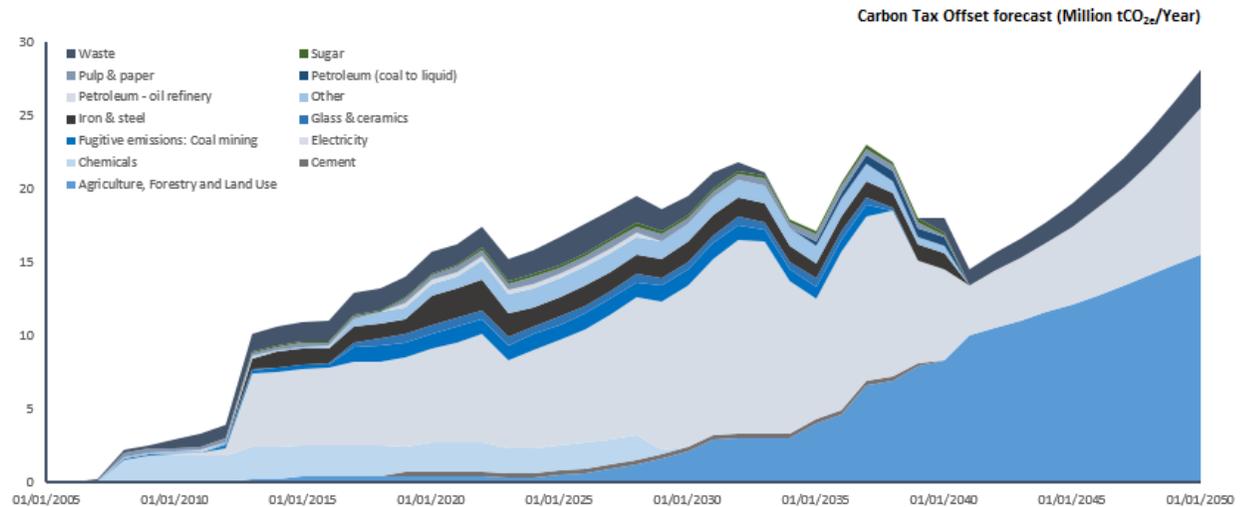
## Supply side scenarios

The supply side of the model uses a combination of the data from the different international standards and South Africa's Greenhouse Gas (GHG) Mitigation Potential Analysis.

### Supply Status

### Carbon Standards

### Sectors



### Offset Eligibility criteria

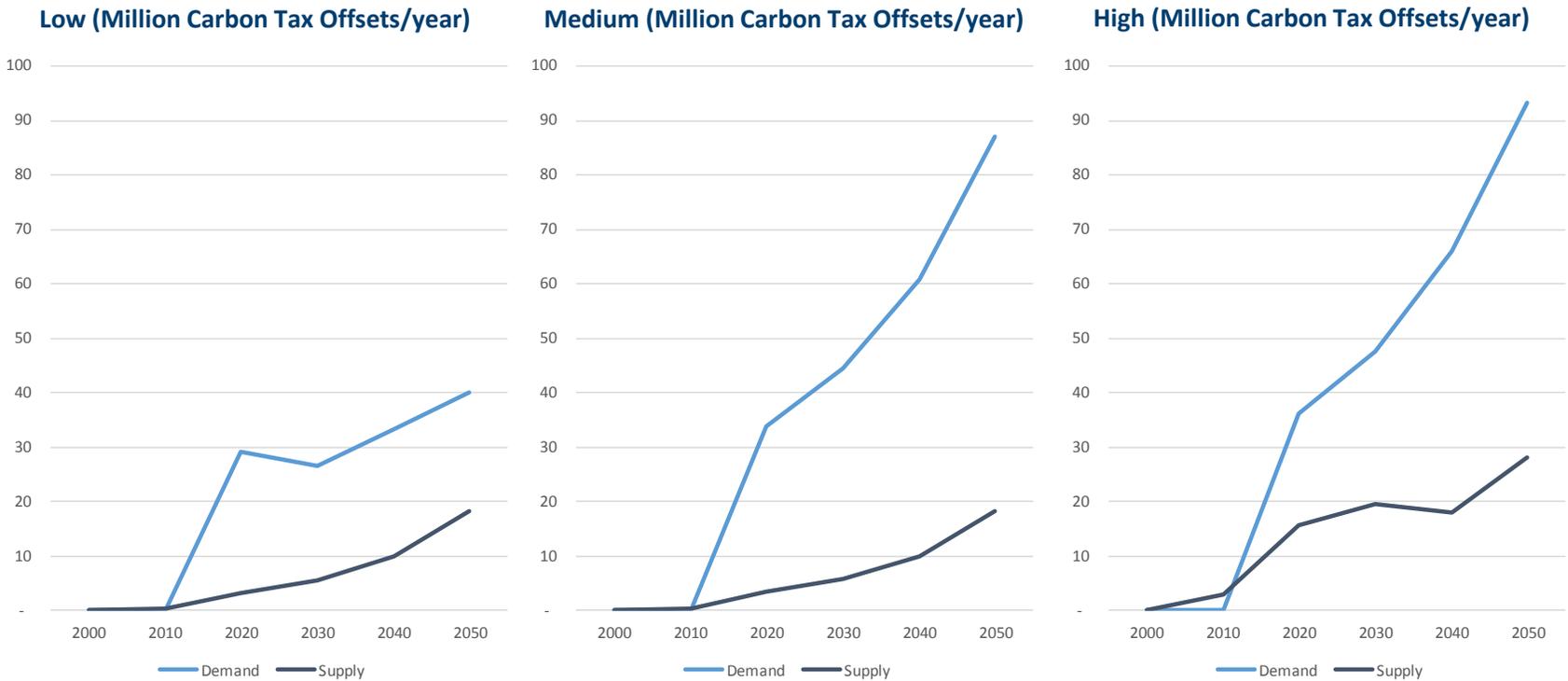
The supply side is corrected for:

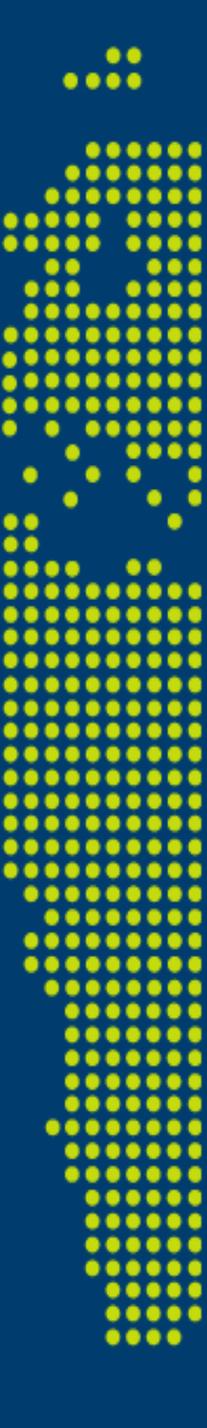
- The scope of taxed activities as outlined in the draft Carbon Tax Bill
- The different eligibility criteria set out in the Carbon Tax Offset regulations

# Demand and Supply Analysis

## Demand/supply balance

Under the low, medium and high end scenarios the Carbon Tax Offset demand/supply analysis show that the demand for Carbon Tax Offsets will outstrip the supply from the start date of the Carbon Tax. This is even the case of Carbon Credits generated before the start of the Tax are made eligible as Carbon Tax Offsets.





## *Findings & Recommendations*

## Findings & Recommendations

### Carbon Tax Offsets demand supply findings

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#### Demand side:

1. The IPP renewable energy compensation will materially reduce demand for Carbon Tax Offsets
2. Schedule 2 of the draft Carbon Tax bill need a detailed review and clarification on taxed and non taxed activities (zero rated?)

#### Supply side:

1. Government incentives under the WAM scenario will drastically reduce the potential supply of Carbon Tax Offsets
2. International standards have finite crediting periods resulting in a natural reduction of Carbon Tax Offset over time

#### Demand/supply balance:

1. For 2030 minimum demand: 17 million tCO<sub>2e</sub>, maximum supply: 5.6 million tCO<sub>2e</sub>
2. Carbon Tax Offset supply won't outstrip demand even in the most progressive demand and supply scenario

## Findings & Recommendations

### Recommendation 1 – Define a Carbon Credit to Carbon Tax Offset conversion process

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#### **Allowance of offset in respect of an approved project against carbon tax liability**

2. (1) An offset, for the purposes of section 20, [subparagraph \(b\)](#), of the Draft Carbon Tax Bill, 2015, must be allowed to a taxpayer in respect of any certified emission reduction derived from the furtherance of an approved project—

(a) that is carried on, on or after 1 January 2017 if that project is wholly undertaken in the Republic;

(b) in respect of an activity that is not subject to the carbon tax [after 1 January 2017](#), subject to subregulations (2) and (3).

(2) An approved project in respect of which an offset is in existence prior to 1 January 2017 may only be **utilised** for the purposes of these Regulations until 31 December 2017.

(3) An approved project in respect of which an offset—

(a) is not in existence prior to 1 January 2017; and

(b) of which registration has commenced before 1 January 2017,

may only be utilised ~~as an offset~~ for the purposes of these Regulations for a period of 6 months after that [approved project offset](#) has come into existence.

## Findings & Recommendations

### Recommendation 2 – Align Offset duration period with International Practice

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#### Offset duration period

3. (1) An offset may, ~~after that offset is generated~~, only be utilised for—
- (a) in the case of a CDM project—
- (i) 7 years which period may be extended with two periods of seven years respectively on application; or
  - (ii) 10 years which period may not be extended;

.....

Periods referenced known as “crediting period”, periods during which carbon credits can be generated (click [cdm rulebook](#))

The above suggested amendment together with new definitions of “Offset Period” and “Utilise” can establish alignment with international practice.

## Findings & Recommendations

### Recommendation 3 – Use only a clearly defined negative list

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Positive List	Negative List
<p><b>Energy Sector</b></p> <ul style="list-style-type: none"> <li>- Energy efficiency not claiming the 12L tax incentive:               <ul style="list-style-type: none"> <li>- in the residential and commercial sector</li> <li>- in buildings</li> </ul> </li> <li>- community-based and municipal energy efficiency and renewable energy               <ul style="list-style-type: none"> <li>- Fuel-switching projects</li> </ul> </li> <li>- Electricity transmission and distribution efficiency (Note: Part II, Table 1)</li> </ul>	<p>A taxpayer conducting an activity in respect of the REIPPP. (Regulations: Part III, 4.1)</p> <p>A taxpayer conducting an activity in respect of which any allowance may be received in terms of the 12L Energy Efficiency Tax Allowance. (Regulations: Part III, 4.2)</p> <p>A taxpayer conducting an activity in respect of the destruction of industrial gasses HFC-23 and N<sub>2</sub>O from adipic acid production. (Regulations: Part III, 4.2)</p>
<p><b>Transport Sector</b></p> <ul style="list-style-type: none"> <li>- Public transport</li> <li>- Transport energy efficiency (Note: Part II, Table 1)</li> </ul>	<p>Energy efficiency projects implemented on activities owned or controlled by companies that are covered by the carbon tax. (Note: Part III)</p>
<p><b>Agriculture, forestry and other land use (AFOLU):</b></p> <ul style="list-style-type: none"> <li>- Restoration: sub-tropical thicket, forests, woodlands;               <ul style="list-style-type: none"> <li>- Restoration and management of grassland;                   <ul style="list-style-type: none"> <li>- Small scale afforestation;</li> <li>- Biomass energy;</li> </ul> </li> </ul> </li> <li>- Anaerobic biogas digesters; and               <ul style="list-style-type: none"> <li>- Reduced tillage. (Note: Part II, Table 1)</li> </ul> </li> </ul>	<p>Cogeneration of renewable energy projects implemented on activities owned or controlled by companies that are covered by the carbon tax; (Note: Part III)</p> <p>Fuel-switch projects implemented on activities owned or controlled by companies that are covered by the carbon tax; (Note: Part III)</p>
<p><b>Waste Sector:</b></p> <ul style="list-style-type: none"> <li>- Municipal waste projects (Note: Part II, Table 1)</li> </ul>	

# Contact Details



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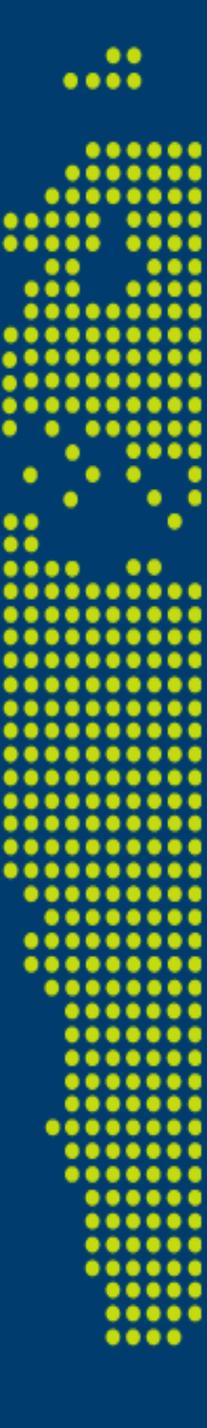
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