

GHG Reporting Requirements

Draft National GHG Emission Reporting Regulations



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Outline

- Context
- Legal framework
- Application of the Regulations
- Reporting Requirements
- How reporting will be done
- Use of the Reported Data



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Strategic Purpose & Context

- Accelerated UNFCCC Reporting Requirements for Developing Countries
- Update and maintain a National Greenhouse Gas Inventory;
- To introduce a single national reporting system for the transparent reporting of greenhouse gas emissions
- Policy formulation and implementation.
- Support implementation of Carbon Tax and its administration



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Legal Framework

- National Environmental Management: **Air Quality act**, 2004 (Act no. 39 of 2004);
- National Greenhouse Gas Emission Reporting **Regulations** are developed in terms of the above legislation;
- **Current Status:** Completed a second round of public consultation;



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Legal Framework

GOVERNMENT NOTICE

DEPARTMENT OF ENVIRONMENTAL AFFAIRS

NO.

2016

NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT, 2004
(ACT NO. 39 OF 2004)

DRAFT NATIONAL GREENHOUSE GAS EMISSION REPORTING REGULATIONS

- Regulations provide the “*What*” information should be reported

Technical Guidelines for Monitoring, Reporting and Verification of Greenhouse Gas Emissions by Industry

A companion to the South African National GHG Emission Reporting Regulations

Version No: TG-2016.1

June 2016

- Technical Guidelines provide the “*How*” with detailed methodological guidance on how emissions may be calculated in line with IPCC 2006 Guidelines.



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Application of the Regulations

- **Data Providers** – The Reporting Regulations identify 2 types of data providers (Category A) and (Category B).

Category A

Any person in control of or conducting an activity marked in the Category A column above the capacity given in the threshold

Category B

Any organ of state, research institution or academic institution, which holds GHG or relevant activity data

However, if these institutions conduct listed activities, then they are classified as Category A data providers



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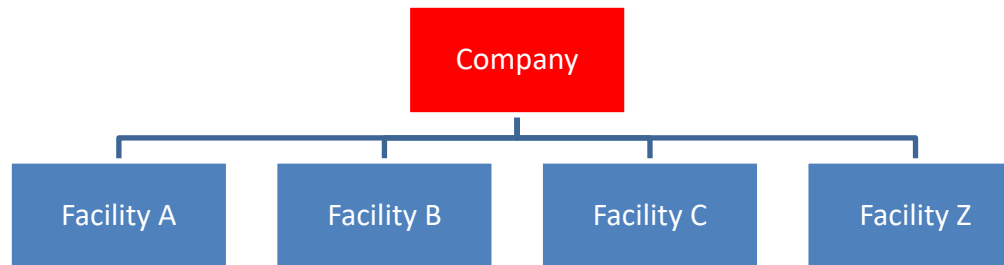
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Application of the Regulations

- **Registration:**

- Company or corporation or legal entity
- Declare all facilities over which it has operational control and relevant IPCC codes applicable

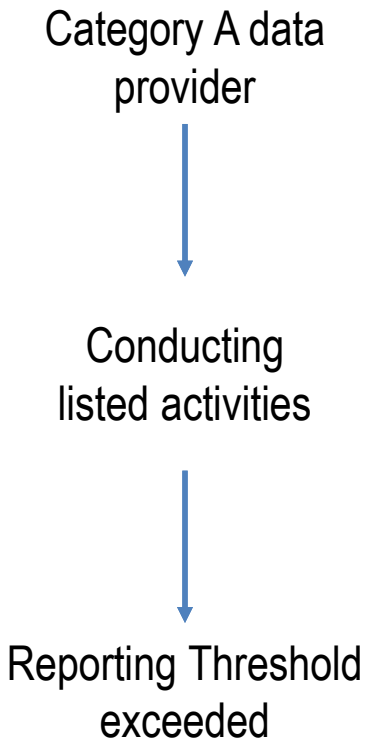


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Application of the Regs.



- **Energy –**
 - Stationary combustion of fuels;
 - Domestic Aviation Industry;
 - Water-borne navigation;
 - Railway transport;
 - Fugitive emissions from coal mining;
 - Fugitive emission from Oil and gas operations.
- **Industrial Processes and Product Use:**
 - Mineral Industry;
 - Chemical Industry;
 - Metal Industry.
- **Waste**
 - Solid waste disposal;
 - Wastewater treatment;
 - Waste incineration.

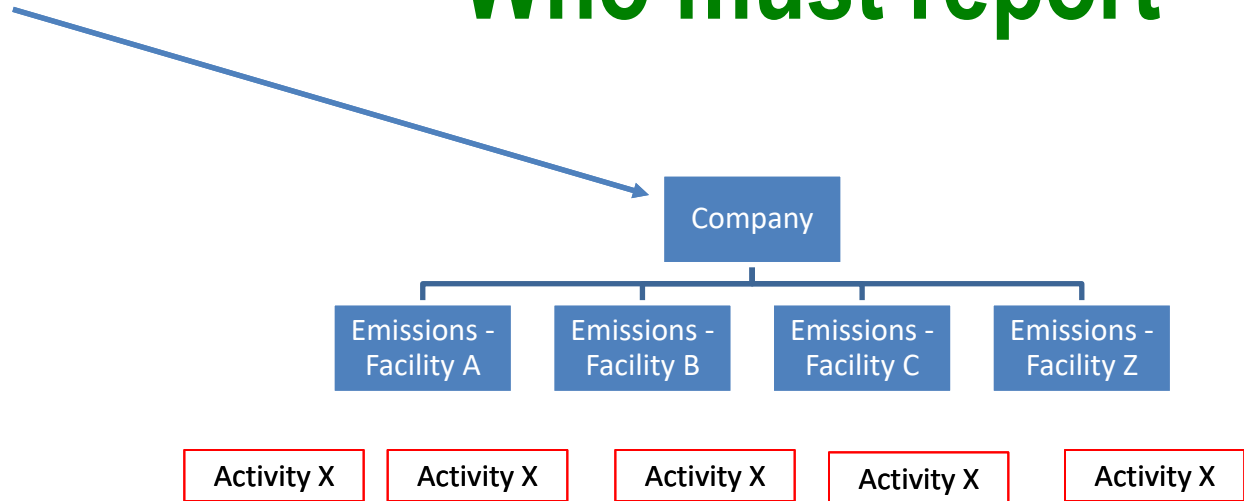
| Code | Name | Category A | | |
|------|--|--|-----------------------|--|
| | | shall report when their total installed capacity for this activity is over the threshold | Threshold | Transitional Arrangement Applicability (Regulation 15) |
| 1 | ENERGY | | | |
| 1A | Fuel Combustion Activities | | | |
| 1A1 | Energy Industries | | | |
| 1A1a | Main Activity Electricity and Heat Production | Tier 2 or 3 | 10 MW(th) | YES |
| 1A1b | Petroleum Refining | Tier 2 or 3 | none | YES |
| 1A1c | Manufacture of Solid Fuels and Other Energy Industries | Tier 2 or 3 | none | YES |
| 1A2 | Manufacturing Industries and Construction | | | |
| 1A2a | Iron and Steel | Tier 2 or 3 | 10 MW(th) | YES |
| 1A2b | Non-Ferrous Metals | Tier 2 or 3 | 10 MW(th) | YES |
| 1A2c | Chemicals | Tier 2 or 3 | 10 MW(th) | YES |
| 1A2d | Pulp, Paper and Print | Tier 2 or 3 | 10 MW(th) | YES |
| 1A2e | Food Processing, Beverages and Tobacco | Tier 2 or 3 | 10 MW(th) | NO |
| 1A2f | Non-Metallic Minerals | Tier 2 or 3 | 10 MW(th) | YES |
| 1A2g | Transport Equipment | Tier 2 or 3 | 10 MW(th) | NO |
| 1A2h | Machinery | Tier 2 or 3 | 10 MW(th) | NO |
| 1A2i | Mining and Quarrying | Tier 2 or 3 | 10 MW(th) | YES |
| 1A2j | Wood and Wood Products | Tier 2 or 3 | 10 MW(th) | NO |
| 1A2k | Construction | Tier 2 or 3 | 10 MW(th) | NO |
| 1A2l | Textile and Leather | Tier 2 or 3 | 10 MW(th) | NO |
| 1A2m | Brick manufacturing: | Tier 2 or 3 | 10 000 bricks a month | NO |
| 1A3 | Transport | | | |
| 1A3a | Civil Aviation | Tier 2 or 3 | 100 000 litres/year | Yes |

A company may have 1 or more facilities and the focus is on operational control

Reporting is done at this level (Company-level)

Emissions reported for each facility

Who must report



| Code | Name | shall report when their total installed capacity for this activity is over the threshold | Category A | |
|------|--|--|------------|--|
| | | | Threshold | Transitional Arrangement Applicability (Regulation 15) |
| 1 | ENERGY | | | |
| 1A | Fuel Combustion Activities | | | |
| 1A1 | Energy Industries | | | |
| 1A1a | Main Activity Electricity and Heat Production | Tier 2 or 3 | 110 MW(th) | YES |
| 1A1b | Petroleum Refining | Tier 2 or 3 | 10 MW(th) | YES |
| 1A1c | Manufacture of Solid Fuels and Other Energy Industries | Tier 2 or 3 | 10 MW(th) | YES |
| 1A2 | Manufacturing Industries and Construction | | | |
| 1A2a | Iron and Steel | Tier 2 or 3 | 10 MW(th) | YES |
| 1A2b | Non-Ferrous Metals | Tier 2 or 3 | 10 MW(th) | YES |



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Bottom-up Reporting approach



Reporting Requirements

- Guided by the 2006 IPCC Guidelines
- Activities/Emission sources are coded using IPCC codes:
 - i.e. 1A1a, 2A1 etc.



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Reporting Requirements Cont.

- Category A data provider must report:
 - All greenhouse gas emissions per facility; and
 - activity data as set out in Annexure 5



| IPCC Code | Name | Activity data required | Units |
|-----------|--|---|----------------|
| 1 | ENERGY | | |
| 1A | Fuel Combustion Activities | | |
| 1A1 | Energy Industries | amount of fuel combusted/Consumed (Energy Unit) | Terajoule (TJ) |
| 1A1a | Main Activity Electricity and Heat Production | amount of fuel combusted/Consumed (Energy Unit) | Terajoule (TJ) |
| 1A1b | Petroleum Refining | amount of fuel combusted/Consumed (Energy Unit) | Terajoule (TJ) |
| 1A1c | Manufacture of Solid Fuels and Other Energy Industries | amount of fuel combusted/Consumed (Energy Unit) | Terajoule (TJ) |



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Reporting Requirements

- Data providers that are air quality license holders in terms of section 21 of the AQA must follow these regulations to meet greenhouse gas emissions reporting requirements in terms of section **43 (I)** of the air quality act.



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Reporting Requirements

- Format: As outlined in Annexure 3

| Data Provider ID | | | | | | | | | | | | | | |
|---------------------|---|---------------|------|------------------------|------|--------|-------|------|-----|-------|------|-----|--|--|
| Date of Submission: | | | | | | | | | | | | | | |
| Year of data: | | | | | | | | | | | | | | |
| Comments: | | | | | | | | | | | | | | |
| IPCC Code | Sub category/fuel (if fuel, disaggregated by fuel/product type) | Activity data | Unit | Emission (tonnes/year) | | | | | | | | | | |
| | | | | GHG1 | | | GHG2 | | | GHG3 | | | | |
| | | | | Value | Tier | Ref(*) | Value | Tier | Ref | Value | Tier | Ref | | |
| | | | | | | | | | | | | | | |



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Reporting Requirements

- Gases: Carbon dioxide (CO₂) , Methane (CH₄), Nitrous oxide (N₂O)
- Using 100yr GWP values from IPCC TAR
- Technical Guidelines provided gases that must be reported per activity



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Methodological Guidance

- Detailed methodological Guidance is provided in the Technical Guidelines for MRV of Emission by Industry

| Sector | Relevant IPCC code/s | Definition | Relevant IPCC gases | Tier | Methodology reference | Transitional arrangements (regulation 15) |
|-------------------------------------|----------------------|---|------------------------------|-----------|-----------------------|---|
| Electricity generation ⁸ | 1A1ai | Comprises emissions from all fuel use for electricity generation from main activity producers except those from combined heat and power plants. | CO ₂ ⁹ | 2 or 3 | Section 12 | Yes |
| | | | CH ₄ | 1, 2 or 3 | Section 12 | No |
| | | | N ₂ O | 1, 2 or 3 | Section 12 | No |



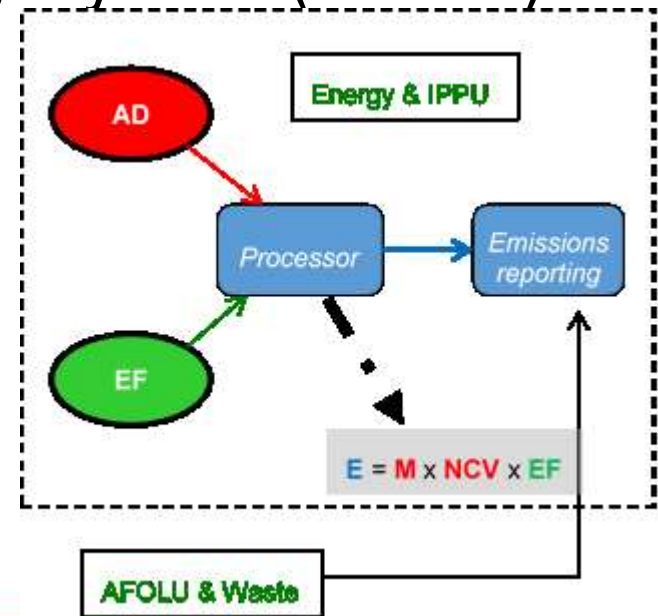
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How will reporting be done

- **Web-based reporting** – via the web-based National Atmospheric Emissions Inventory System (NAEIS).
- Registration
- Reporting
- Verification



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When does reporting start

- DEA is in the process of finalising the Regulations
- **30 days** after promulgation of the Regulations
 - ✓ Registration on the NAEIS is required.
 - ✓ after 30 days of commencing a listed activity
- 31 of March each year – reporting of previous year's emissions – E.g. in 2017 data providers will report 2016 emissions data.



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Use of Reported Data

- Inventory Compilation (primarily)
- Carbon Tax Imposition @ R120 per ton of CO₂e
 - Reported Emissions Data is verified by DEA; and
 - Submitted to Treasury and the Revenue Services for imposition of Carbon Tax



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Summary

- GHG Reporting Regulations are assisting DEA to respond to inventory compilation challenges;
- Supports UNFCCC and domestic reporting obligations;
- Policy formulation, review and strategy formulation;
- Supports implementation of key climate change mitigation response programmes.



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Questions



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