# THE CLIMATE CHANGE (MONITORING, REPORTING AND VERIFICATION) **REGULATIONS, 2021**

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#### THE CLIMATE CHANGE ACT

(No. 11 of 2016)

IN EXERCISE of the powers conferred by Sections 22 and 36 of the Climate Change Act, 2016, the Cabinet Secretary for the Environment and Forestry makes the following regulations-

THE CLIMATE CHANGE ACT (MONITORING, REPORTING AND VERIFICATION) REGULATIONS, 2021

## PART I – PRELIMINARY

#### 1. Citation

These Regulations may be cited as the Climate Change Act (Monitoring, Reporting and Verification) Regulations, 2021.

#### 2. **Interpretation**

In these Regulations, unless the context otherwise requires –

"accuracy" means the closeness of the agreement between the result of a measurement and the true value of the particular quantity or a reference value determined empirically using internationally accepted and traceable calibration materials and standard methods, taking into account both random and systematic factors;

"Act" means the Climate Change Act, 2016;

"activity data" means the data on the amount of materials consumed or produced or any other data from activities resulting in emissions by a process as relevant for the calculations or estimations, expressed in the appropriate units of measurement:

"adaptation actions" means tangible or intangible actions taken to alter institutions, policies, programs, build environments or mandates in response to experienced or predicted risks of climate change, and may include legislative change, development, public awareness and outreach, surveillance and monitoring, infrastructure and technology, program or policy evaluations, financial support, or any other interventions;

"calibration" means the set of operations, which establishes, under specified conditions, the relations between values indicated by a measuring instrument or measuring system, or values represented by a material measure or a reference material and the corresponding values of a quantity realised by a reference standard;

"climate change enablers" means support granted or received in the form of climate finance, technology and development transfer, or capacity building;

"emissions sources" means a separately identifiable part of an installation or a process within an installation, from which relevant greenhouse gases are emitted;

"mitigation actions" means activities that result in direct reduction of anthropogenic emissions or enhancement of carbon sinks that are necessary for limiting long-term climate damage;

"reportable facility" means any facility of a registered entity that attains the thresholds included within these Regulations for the purposes of reporting on greenhouse gases, mitigation actions, adaptation actions, or climate change enablers;

"reporting period" means one calendar year during which emissions, mitigation and adaptation actions, and enablers related to climate change, have to be monitored and reported;

"significant change" means any of the following:

- (a) a change in any process or activity that results in any such greenhouse gas emission that was not previously emitted from a source or stream being emitted, or any such new greenhouse gas emissions source or stream, from a reportable facility;
- (b) a change in any materials, including fuels and feedstock, consumed or produced in any process or activity of the taxable facility;
- (c) a change in any primary or alternative method, step or procedure mentioned that is set out in the monitoring plan; and,

"source stream" means any of the following:

- (a) a specific fuel type, raw material or product giving rise to emissions of relevant greenhouse gases at one or more emission sources as a result of its consumption or production;
- (b) a specific fuel type, raw material or product containing carbon and included in the calculation of greenhouse gas emissions using a mass balance methodology.

#### 3. **Application**

- These Regulations shall apply to the monitoring, reporting and verification of all of the following –
  - (a) greenhouse gas emissions;
  - (b) mitigation actions;

- (c) adaptation actions; and,
- (d) climate change enablers, including:
  - (i) climate finance;
  - (ii) technology development and transfer;
  - (iii) capacity building.
- The Cabinet Secretary may, by notice in the Gazette, determine any other classifications of monitoring, reporting and verification that would be subject to these regulations and to achieve the sustainable development goals of the nation.

### PART II – GENERAL PRINCIPLES

#### 4. **General principles**

- In overseeing monitoring, reporting and verification, the Cabinet Secretary shall enforce the following principles
  - the values and principles in Section 4 of the Act; (a)
  - accuracy of data provided that is neither systematically nor (b) knowingly inaccurate;
  - (c) completeness of all processes and activities;
  - consistency and comparability over time; (d)
  - utilisation of reliable methodologies and data sets; (e)
  - reliance and linkages with already existing monitoring and (f) reporting systems;
  - contextualisation of the process; (g)
  - (h) continuous improvement as a result of the recommendations arising from verification reports in consequent monitoring and reporting; and,
  - coordination by public and private entities. (i)
- Any additional principles and objectives in the National Climate Change Action Plan and Kenya's National Determined Contribution shall inform the interpretation of the principles in sub-section (1).

Nothing in these Regulations shall prevent the Cabinet Secretary from developing further standards or guidelines on monitoring, reporting and verification.

## PART III - GREENHOUSE GAS EMISSIONS AND INVENTORY

#### 5. **Scope**

- (1) This Part shall apply to the monitoring, reporting and verification of greenhouse gas emissions by registered entities as specified in relation to the activities listed in the First Schedule.
- (2) It shall apply to emissions and activity data occurring from 1 January of the year following the commencement of these Regulations.
- Despite sub-paragraph (3), any entity reporting on greenhouse gas emissions shall be permitted to use historical data for purposes of recalculations of emissions.
- The National Environmental Management Authority shall regulate, enforce and monitor compliance on the levels of greenhouse gas emissions as set by the Council under this Part of the Regulations.
- (5) The Cabinet Secretary shall –
  - determine the method for estimating greenhouse gas emissions; (a)
  - ensure consistency with the best national and international (b) practices; and,
  - when necessary, recommend that Kenya adopts a different tier (c) and methodology for reporting on greenhouse gas emissions.

#### 6. **Monitoring plan**

- Each registered entity shall monitor greenhouse gas emissions based on a (1) monitoring plan approved by the Directorate, taking into account the nature and functioning of the activity to which it applies.
- A registered entity must submit every monitoring plan for its activities and its (2) supporting documents to the Directorate –
  - (a) through a system or such manner as the Directorate may allow in any particular case; and,
  - no later than 31 December of the year before the monitoring (b) period.

The Directorate shall develop templates based on best international standards for monitoring plans based on the provisions of these Regulations and any guidelines published by the Cabinet Secretary.

#### 7. Content of the monitoring plan

- (1) A monitoring plan for a registered entity performing activities that are subject to the monitoring, reporting and verification of greenhouse gases shall –
  - be in the form specified by the Directorate; (a)
  - set out all greenhouse gas emissions source streams from the (b) registered entity;
  - (c) set out every primary or alternative method, step or procedure used or to be used to compute the total greenhouse gas emissions from the registered entity;
  - (d) set out a quality management framework to ensure the integrity of the process of and computation of greenhouse gas emissions;
  - include all relevant supporting documents. (e)
- (2) Every method, step and procedure mentioned in sub-paragraph (1)(c) must –
  - be appropriate for the registered entity; (a)
  - enable the total greenhouse gas emissions from all relevant (b) facilities by the registered entity to be accurately computed; and,
  - be based on technical or scientific considerations that establish (c) the appropriateness, accuracy and completeness of the method, step and procedure for the registered entity.
- (3) The quality management framework mentioned in sub-paragraph (1)(d) shall include procedures to ensure all of the following:
  - (a) that all greenhouse gas emissions source streams from the registered entity are reported and computed;
  - that every method, step and procedure mentioned in sub-(b) paragraph (1)(c) is appropriate and periodically reviewed to ensure its continued appropriateness;
  - (c) that all data is accurately collected and checked;
  - (d) that every measurement system, equipment, tool or device used by the registered entity to compute the total greenhouse gas emissions from the taxable facility is properly maintained and calibrated;

- (e) that a proper record is kept of any change to any method, step or procedure for the collection of data and the computation of total greenhouse gas emissions from the registered entity.
- (4) The monitoring plan and its supporting documents must be endorsed by a director or an equivalent of the registered entity.

#### 8. Revision and modification of a monitoring plan

- (1) A registered entity must revise its monitoring plan or any supporting document for a monitoring plan, or both, if there is any change in any of the matters set out in the monitoring plan or enablers document as outlined in sub-paragraph (3).
- (2) Where the change mentioned in sub-paragraph (1) is a significant change, the revised monitoring plan must be endorsed by a director or an equivalent person of the registered entity.
- (3) A registered entity shall revise and modify the monitoring plan in any of the following situations:
  - a. new emissions occur due to new activities carried out or due to the use of new materials not yet included in the monitoring plan;
  - b. the change of availability of data due to the use of new measuring instrument types, sampling or analysis methods, or for other reasons, leads to higher accuracy in the determination of emissions:
  - c. data resulting from the previously applied monitoring methodology has been found incorrect;
  - d. changing the monitoring plan improves the accuracy of the reported data, unless this is technically not feasible or incurs unreasonable costs:
  - e. the monitoring plan is not in conformity with the requirements of this Regulation and the Directorate requests the registered entity to modify it;
  - f. it is necessary to respond to the suggestions for improvement of the monitoring plan contained in a verification report.
- (4) The registered entity shall notify in writing any proposals for modification of the monitoring plan to the Directorate within thirty days of making the modification.
- (5) Significant changes to the monitoring plan shall include any of the following:
  - a. changes to emissions sources;

- b. introduction of new source streams;
- c. the introduction of new procedures related to sampling, analysis or calibration, where these changes of those procedures have a direct impact on the accuracy of emissions data.
- (6) Any revision and modification with significant changes shall be subject to approval by the Directorate.

#### 9. **Determination of activity data**

- The registered entity shall determine the activity data of a source stream in (1)one of the following ways
  - based on continual estimation or measurement of the process (a) which causes the emissions;
  - based on aggregation of metering of quantities separately (b) delivered taking into account relevant stock changes.
- (2) Where it is technically not feasible or would incur unreasonable costs to determine quantities in stock by direct measurement, the registered entity may estimate those quantities based on any of the following -
  - (a) using data from previous years and correlated with output for the reporting period;
  - (b) combining or splicing different methods of data sets;
  - documented procedures and respective data in audited financial (c) statements for the reporting period.

# 10. Submissions of emissions reports

A registered entity must submit every emissions report for a facility that is a reportable facility of the registered entity, and its supporting documents, to the Directorate in the following manner –

- through a system or such manner as the Directorate may allow in (a) any particular case; and,
- (b) no later than 31 March of the year immediately following the reporting period to which the emissions report relates.

## 11. Contents of the report

(1) An emissions report for a registered entity with a reportable facility for a reporting period must -

- (a) be in the format provided for in Form MRV 1 of these Regulations;
- set out all activity data for the registered entity; (b)
- (c) set out the estimated greenhouse gas emissions from source streams from reportable facilities;
- specify the estimated total greenhouse gas emissions from the (d) reportable facility;
- comply with any other requirements specified by the Directorate; (e) and,
- (f) include any supporting documents.
- (2) The emissions report must further be based on the approved monitoring plan, and specify, whether the computation for each greenhouse gas source stream from the facility is based on a primary or an alternative method, step or procedure as mentioned in the approved monitoring plan.

# 12. National greenhouse gas inventory

- There shall be a national greenhouse gas inventory responsible for estimating anthropogenic emissions by sources and removals of sinks of greenhouse gasses.
- It shall be the responsibility of the Directorate to ensure the timeliness, transparency, accuracy, consistency, comparability and completeness of information in the inventory.
- (3) The Directorate shall administer, maintain and seek to continuously improve the national greenhouse gas inventory, which shall include -
  - (a) a quality assurance and quality control programme;
  - (b) a procedure to determine any data missing from the inventory;
  - reviews of submitted emission data. (c)

### **PART IV – MITIGATION ACTIONS**

## 13. Scope

This Part shall apply to the monitoring, reporting and verification of climate change mitigation actions listed in the Second Schedule of these Regulations and conducted by public and private entities.

- Sub-paragraph (1) shall only apply to private entities that are directly involved in a climate mitigation actions with an investment amounting to more than KES 5,000,000 over a reporting period.
- (3) Nothing shall prevent the Cabinet Secretary from amending, through the Gazette, the list of activities in the Second Schedule to remove existing or include additional mitigation actions subject to these Regulations.
- The monitoring, reporting and verification of mitigation actions shall include any of the following:
  - (a) assessing greenhouse gas emissions;
  - assessing the impact on the sustainable development goals; (b)
  - (c) analysing the effects of policies, projects and actions;
  - monitoring the implementation of policies, projects and actions; (d)
  - (e) assessing progress towards Kenya's mitigation goals as outlined in the Nationally Determined Contribution currently in force;
  - (f) assessing the co-benefits between any of the above.

# 14. Mitigation goals, policies and projects

- The primary mitigation goal shall be as set out in the Nationally Determined (1) Contribution currently in force.
- (2) Every public or private entity performing an activity in a high emission sector falling within the actions listed in Second Schedule shall continuously commit to reduce, limit the increase of, or enhance the removal or reduce the intensity of greenhouse gases by a specified quantity and to be achieved by a specified date.
- Any public entity performing activities listed in the Second Schedule shall integrate mitigation action interventions to reduce greenhouse gas emissions when it develops or implements any of the following-
  - (a) laws;
  - (b) regulations;
  - (c) subsidies and incentives.
- Public and private entities shall, when performing activities listed in the Second Schedule, integrate mitigation action interventions to reduce greenhouse gas emissions when developing or implementing any of the following-

- (a) standards;
- (b) programs or projects;
- (c) information instruments;
- (d) commercial or voluntary agreements;
- (e) new technologies, processes or practices;
- (f) financing and investment.

### 15. Assessment of effects

- (1) The monitoring, reporting and verification of mitigation actions shall assess effects on any of the following-
  - (a) greenhouse gas emissions;
  - (b) sustainable development;
  - the co-benefits of the effects of greenhouse gases and (c) sustainable development.
- The effects of greenhouse gas shall refer to actual or projected changes in (2) the emission or removal of greenhouse gases as a result of mitigation actions.
- The effects of sustainable development shall refer to changes in (3) environmental, social, economic conditions as a result of mitigation actions.

## 16. Submission of the mitigation actions report

Reporting on mitigation actions shall be carried out annually by any public or private entity conducting activities in the Second Schedule -

- be in the format provided for in Form MRV 2 of these (a) Regulations; and,
- (b) no later than 31 March of the year immediately following the reporting period to which the mitigation actions relate.

# 17. Contents of the mitigation actions report

A mitigation actions report by an entity performing any Second Schedule activities must -

- provide the name and description of the mitigation action or (a) actions, including information on the nature of the action, sectors it applies to, quantitative goals and indicators;
- (b) outline its general methodologies and any assumptions;

- (c) identify the objectives of the action and steps taken or envisaged to achieve that action;
- provide information on the progress of implementation of the (d) mitigation actions and the underlying steps taken or envisaged, and the results achieved, including the estimated outcomes;
- (e) include any information on international market mechanisms;
- (f) comply with any other requirements specified by the Directorate; and,
- (g) include any supporting documents.

## PART V – ADAPTATION ACTIONS

# 18. Scope

This Part shall apply to the monitoring, reporting and verification of climate change adaptation actions by private and public entities.

# 19. Guiding principles

The monitoring, reporting and verification of climate change adaptation actions shall be guided by the following principles-

- adaptive capacity and climate change resilience shall be (a) enhanced across all sectors of the economy and at both levels of government;
- all public entities shall have their adaptation actions informed by (b) the National Adaptation Plan and the adaptation goals and priorities in the Nationally Determined Contribution;
- all private entities shall ensure that adaptation actions are (c) mainstreamed in their operations and activities; and,
- (d) that adaptation is an incremental and continuous process, taking into account the mode of development and form of adaptation.

## 20. Adaptation goals, policies and projects

- (1) The primary adaptation goal shall be as set out in the Nationally Determined Contribution currently in force.
- Any public entity in performing its activities shall integrate adaptation action interventions to increase resilience to climate change when it develops or implements any of the following-

- (a) laws;
- (b) regulations;
- (c) subsidies and incentives.
- (3) Public and private entities shall, when performing their activities, integrate adaptation action interventions to increase resilience to climate change when developing or implementing any of the following-
  - (a) standards;
  - (b) programs or projects;
  - (c) information instruments;
  - (d) commercial or voluntary agreements;
  - (e) new technologies, processes or practices;
  - financing and investment. (f)

# 21. Reporting on adaptation actions

- Public and private entities shall report on the progress of the implementation of the prioritised adaptation actions and provide information on any other actions being taken to enhance climate change resilience, including both target and baseline data relying on clear and measurable indicators and outcomes.
- Sub-paragraph (1) shall only apply to private entities that are directly involved in a climate adaptation project or activities implemented for more than 2 years and whose investment is not less than KES 5,000,000 over that twoyear period.
- Reporting on adaptation actions shall be carried out annually by a private and public entity identified in sub-paragraph (2)
  - in the format provided for in Form MRV 3 of these Regulations; (a) and,
  - (b) no later than 31 March of the year immediately following the reporting period to which the adaptation actions relate.
- The Directorate shall receive, analyse and submit the information on implementation of adaptation actions as part of its report to Parliament under Section 15(9) of the Act.

## 22. Contents of adaptation actions report

An adaptation actions report by an entity under these Regulations must –

- provide the name and description of the adaptation action or (a) actions, including information on the nature of the action, sectors it applies to, baseline and target data, quantitative goals and indicators;
- outline its general methodologies and any assumptions; (b)
- (c) identify the objectives of the action and steps taken or envisaged to achieve that action;
- provide information on the progress of implementation of the (d) adaptation actions and the underlying steps taken or envisaged, and the results achieved, including the estimated outcomes;
- comply with any other requirements specified by the Directorate; (e) and,
- (f) include any supporting documents.

#### PART VI – CLIMATE CHANGE ENABLERS

# 23. Scope

- This Part shall apply to the monitoring, reporting and verification of climate change enablers.
- (2) The following climate change enablers shall be subject to monitoring, reporting and verification -
  - (a) climate finance;
  - (b) technology development and transfer;
  - capacity building. (c)
- (3) The Cabinet Secretary may, through the Gazette, include other additional climate change enablers that would be subject to these Regulations.

#### 24. Climate finance

Public and private entities shall monitor, track and report on the flow of funds (1) from both foreign and domestic sources using the finance mechanisms in subparagraph (3) which are directed toward activities that reduce greenhouse gas emissions or build climate change resilience.

- (2) The Council shall consult with the National Treasury and be informed by any relevant public and private finance laws when enforcing the provisions of the Regulations that relate to climate finance.
- Climate finance shall comprise of public and private sources of funds, (3) including -
  - (a) public sources which shall include but not be limited to funds from-
    - (i) governments;
    - (ii) the intergovernmental organisations;
    - (iii) foreign direct investment;
    - (iv) international or national climate change funds;
    - (v) multi-lateral and bilateral partners.
  - (b) private sources which shall include but not be limited to funds from-
    - (i) for-profit organisations;
    - (ii) non-governmental organisations;
    - (iii) philanthropists and donors;
    - (iv) public and individual charities.
- For the purposes of this section, climate finance shall include any of the following financial mechanisms
  - blended public-private finance; (a)
  - (b) carbon trading;
  - clean development mechanism-public-private partnerships; (c)
  - (d) climate trust funds;
  - (e) feed-in tariffs and subsidies;
  - (f) grants;
  - (g) green bonds;
  - (h) green investment banks;
  - (i) guarantees;

- (j) insurance;
- (k) loans;
- (l) removing fossil fuel subsidies;
- (m) tax credits and incentives.
- (5) Any reports on climate finance submitted to the Directorate shall be consolidated by the Directorate and forwarded to the National Treasury annually.

# 25. Technology development and transfer

- Public and private entities shall monitor, track and report on the development and transfer of technologies toward activities that reduce greenhouse gas emissions or build climate change resilience.
- The Cabinet Secretary shall develop guidelines on the monitoring, tracking and reporting on technology development and transfer of technology.

# 26. Capacity building

- Public and private entities shall monitor, track and report any climate change capacity building received or provided in relation towards activities that reduce greenhouse gas emissions or build climate change resilience.
- Capacity building for the purposes of climate change shall— (2)
  - be country-driven and factor our unique circumstances as a (a) nation;
  - (b) priorities within the Nationally Contribution, the National Climate Change Action Plan, and any other policies, plans and strategies;
  - involve learning by doing; (c)
  - (d) use an approach that is continuous, progressive, effective, efficient, integrated and programmatic;
  - (e) rely on and mobilise existing national and county government institutions, as well as the private sector, to build on existing processes and capitalise on traditional and indigenous knowledge.

# 27. Receipt of support from enablers

The Directorate shall collate and analyse any mitigation-related or adaptation-related receipt of support from climate change enablers and submit it as part of its report to Parliament under Section 15(9) of the Act.

# 28. Results and impact of support from enablers

Public and private entities shall provide data and information on the results and impact of the support received or provided towards reducing greenhouse gas emissions or building climate change resilience as part of the reporting on climate change enablers.

# 29. Reporting on climate change enablers

Public and private entities shall report on climate change enablers received or provided which shall be carried out annually—

- (a) in the format provided in Form MRV 4 of these Regulations;
- (b) no later than 31 March of the year immediately following the reporting period to which the climate change enablers relate.

## **PART VII – VERIFICATION**

# 30. Scope

This Part shall apply to the verification of greenhouse gas emissions, mitigation actions, adaptation actions, and climate change enablers from the first occurrence of 1 January following the date of commencement of these Regulations.

# **31.** Verification by the Directorate

- (1) The Directorate shall be responsible for all verification activities under these Regulations and shall determine how the verification process shall be conducted.
- (2) The Directorate shall be required to have sufficient systems in place
  - to ensure independence and objectivity when performing (a) verification;
  - to assess, maintain and record competences of all staff involved (b) in verification activities, including recruitment, technical training and ongoing performance and evaluation of members of the verification teams; and,
  - (c) to keep and maintain records for each verification engagement to ensure confidentiality of the records, subject to the laws in place on access to information.
- (3) The Directorate may, as it deems necessary, appoint experts in specific sectors to which the verification relates to assist it with the verification activities.

- To be appointed as an expert on greenhouse gas emissions, an individual must have all of the following
  - knowledge and experience of greenhouse gas related processes (a) and measurement within which the registered entity operates and the potential greenhouse gas emission sources;
  - (b) knowledge of the computation methodologies of emission sources and greenhouse gases specified in relevant international standards or guidelines;
  - (c) knowledge of the regulatory requirement and national practices relating to greenhouse gas measurement, reporting and verification.
- To be appointed as an expert on mitigation actions, an individual must have (5) knowledge and experience in the achievement of emission reductions as well as other impact and co-benefits associated with climate change mitigation and low carbon development.
- (6) To be appointed as an expert on adaptation actions, an individual must have knowledge and experience of adaptation actions as well as any other approaches and mechanisms to enhance climate change resilience.
- To be appointed as an expert on climate change enablers, an individual must have knowledge and experience of -
  - (a) climate finance;
  - (b) technology development and transfer related to climate change; or,
  - capacity building in relation to climate change; (c)

depending on the category of climate change enablers being verified.

## 32. Notice of verification

The Directorate shall, within 30 days after the receipt of reports requiring verification under these Regulations, submit a notice of verification to the person requesting the verification, in a form and manner to be prescribed by the Directorate.

## 33. Reliability of verification

- (1) A verified report developed under these Regulations shall be reliable for users and shall faithfully represent that which it either purports to represent or may reasonably be expected to represent.
- (2) The process of verifying reports shall be effective and reliable, subject to quality assurance and quality control procedures, providing information which

the person requesting the verification can act to improve performance in monitoring and reporting.

#### 34. Verification team

The Directorate shall, if deemed necessary, assemble a verification team capable of performing the verification activities in these Regulations, where each team member shall-

- have a clear understanding of their individual role in the (a) verification process;
- be able to communicate effectively in the language necessary to (b) perform their tasks;
- possess the technical competence and understanding required to (c) assess the specific technical monitoring and reporting aspects relating to either greenhouse gas emissions, mitigation actions, adaptation actions or climate change enablers.

# 35. Verification obligations of the Directorate

- The Directorate shall carry out the verification and all the activities associated (1)with it with the aim of providing a verification report that concludes with reasonable assurance that the greenhouse gas, mitigation actions, adaptation actions or climate change enablers reports are free from material misstatements.
- The Directorate shall carry out verification in the public interest and be independent in the exercise of its verification duties and responsibilities.
- The Directorate shall obtain a proper understanding of the person requesting the verification and assess how to undertake the verification and at a minimum
  - evaluate the risks involved to undertake the verification in (a) accordance with these Regulations;
  - (b) undertake a review of the information supplied to determine the scope of the verification;
  - assign the right staff members with the competence and ability to (c) deal with the relevant classification of monitoring and reporting;
  - (d) determine, for each verification assignment requested, the time allocation needed to properly carry out the verification.
- (4) During the verification, the Directorate shall assess whether:

- (a) the report being verified is complete and meets the requirements of these Regulations;
- where the verification relates to greenhouse gas emissions, the (b) person requesting verification acted in compliance with the requirements of the monitoring plan submitted to the Directorate;
- (c) the data in the report being verified is free from material misstatements or non-conformities;
- information can be provided by the person seeking the (d) verification in support of their activities to improve the performance of their monitoring and reporting.
- (5) If the Directorate discovers that a person seeking verification is not complying with these Regulations, that irregularity shall be included in the verification report even if the monitoring plan concerned, where applicable, has been approved by the Directorate.
- (6) When completing the verification and considering the information obtained during the verification, the Directorate shall:
  - check the final data, including data that may have been adjusted (a) based upon information obtained during the verification;
  - review the reasons by the person seeking verification for any (b) differences between the final data and data previously provided;
  - where the verification relates to greenhouse gas emissions, (c) review the outcome of the assessment to determine whether the monitoring plan approved by the Directorate includes the procedures described in that plan and whether it has been implemented correctly;
  - ensure that sufficient evidence has been gathered to be able to (d) give a verification opinion with reasonable assurance that the report is free from material misstatements;
  - ensure that the verification process is fully documented and that (e) a final judgement in the verification report can be given.

# **36.** Voluntary site visits

Nothing shall prevent the Directorate or the National Environmental Management Authority from, at one or more appropriate times during the verification process, conducting one or more voluntary site visits to assess the activities related to the monitoring and reporting of greenhouse gas emissions, mitigation actions, adaptation actions and climate change enablers.

# 37. Misstatements, non-conformity and non-compliance

- (1) If the Directorate identifies misstatements, non-conformities and noncompliance during the course of the verification process, it shall inform the person seeking the verification on a timely basis and request the necessary corrections.
- (2) seeking verification shall The person correct any communicated misstatements, non-compliance or non-conformities within a reasonable period.
- If the person seeking verification does not correct the misstatements or nonconformities communicated to them by the Directorate in accordance with sub-paragraph (1) before the Directorate issues the verification report, the Directorate shall request the person seeking the verification report to explain the main causes of the non-conformity in order to assess the impact of the non-conformities or misstatements on the reported data.

# 38. Verification report

- (1) The Directorate shall issue a verification report on the verification activities conducted by the verifier in the form specified in Form MRV 5;
- The verification report must include a verification opinion statement on the conclusions of the Director from the verification activities conducted, as follows-
  - (a) a positive verification opinion if the Directorate is able to state with a reasonable level of assurance that the report complies with the Regulations, does not contain any misstatements or nonconformities or contains an immaterial number of misstatements or non-conformities; or,
  - a negative verification opinion if the Directorate is unable to do (b) SO.
- The verification report shall be forwarded to the person seeking verification (3) within a reasonable time period.

## PART VII - GENERAL PROVISIONS

## 39. Access to information

Information or documents submitted to the Directorate by any person in connection with monitoring, reporting and verification together with the Directorate's decision and the reasons thereof shall be made available to the public, subject to the provisions of Section 24 of the Act, as prescribed in any other law, and on such terms and conditions as the Directorate may prescribe.

### 40. Records

- (1) Any person subject to these Regulations must keep and maintain complete and accurate records of any documents submitted to the Directorate as part of the monitoring, reporting and verification process under these regulations.
- The information and documents must be kept for at least 7 years after the date on which the information in guestion is received or the document in question is received or created, as the case may be.
- (3) The person may keep and maintain the information and documents mentioned in paragraph (1) in electronic form.

# 41. Offences and penalties

Any person who contravenes any of these Regulations commits an offence and shall be liable as provided under Sections 17(3) and 33 of the Act.

# 42. Fees

- The Council shall publish a schedule of fees that the Council may charge for any authorised activities under these Regulations, including any fees for monitoring, reporting and verification.
- The Council shall regularly update the fee schedule as necessary to comply (2) with the Regulations and to facilitate an effective regulatory system.

Dated the	of	, 2021

CABINET SECRETARY FOR THE ENVIRONMENT AND FORESTRY

# **FIRST SCHEDULE**

(r. 5(1))

# LIST OF REPORTABLE GREENHOUSE GAS EMISSIONS ACTIVITIES

# 1. Energy

This relates to all activities resulting in GHG emissions arising from combustion and fugitive releases of fuels.

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
1	FUEL COMBUSTION ACTIVITIES	Electricity Generation	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	Fuel combusted for electricity generation for supply to the public
2	FUEL COMBUSTION ACTIVITIES	Combined Heat and Power Generation	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	Fuel combusted for the production of both heat and electrical power from main activity producers for sale to the public, at a single combined heat and power facility.
3	FUEL COMBUSTION ACTIVITIES	Heat Plants	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	Fuel combusted for the production of heat from main activity producers for sale by pipe network
4	FUEL COMBUSTION ACTIVITIES	Petroleum Refining	Data on the amount of fuel	Tonnes/ Litres	Fuel combusted to support the refining of petroleum products including on-site combustion for the generation of electricity and

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
			combusted  Type of fuel used		heat for own use
5	FUEL COMBUSTION ACTIVITIES	Manufacturer of Solid Fuels e.g. coke, brown coal briquettes and patent fuel	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	Fuel combustion for the production of coke, brown coal briquettes and patent fuel.  This also includes fuel combustion for the generation of electricity and heat for own use in these industries.
6	FUEL COMBUSTION ACTIVITIES	Other Energy Industries	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	Fuel combustion from the energy-producing industries own (on-site) energy use not mentioned above Or  For which separate data is not available. This includes the own-energy use for the production of charcoal, bagasse, saw dust, cotton stalks and carbonizing of biofuels as well as fuel used for coal mining, oil and gas extraction and the processing and upgrading of natural gas.
7	FUEL COMBUSTION ACTIVITIES	Iron and Steel	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	<ul> <li>Combustion of fuels for the:         <ul> <li>Manufacture of basic iron and steel</li> <li>Casting of iron and steel</li> </ul> </li> <li>Detailed list of activities is provided in ISIC Group 271 and Class 2731</li> </ul>
8	FUEL COMBUSTION ACTIVITIES	Non Ferrous Metals	Data on the amount of fuel combusted	Tonnes/ Litres	Combustion of fuels for the:     Manufacture of basic precious and non-ferrous metals e.g. gold, silver, platinum, precious metal alloys, precious metal semi

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
			Type of fuel used		products, aluminium from alumina, aluminium from electrolytic refining of aluminium waste and scrap, aluminium alloys, zinc, tin, copper, chrome, manganese, nickel  Production of mattes of nickel  Manufacture of wire of these metals by drawing  Production of aluminium oxide (alumina)  Production of aluminium wrapping foil  Semi-manufacturing of aluminium  Semi-manufacturing of lead, zinc and tin  Semi-manufacturing of copper  Manufacture of fuse wire or strip  Casting of semi-finished products of aluminium, magnesium, titanium, zinc etc.  Casting of light metal castings  Casting of precious metal castings  Casting of precious metal castings  Die-casting of non-ferrous metal castings
9	FUEL COMBUSTION ACTIVITIES	Chemicals	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	<ul> <li>Manufacture of basic chemicals, except fertilizers and nitrogen compounds</li> <li>Manufacture of fertilizers and nitrogen compounds</li> <li>Manufacture of plastics in primary forms and of synthetic rubber</li> <li>Manufacture of pesticides and other agrochemical products</li> <li>Manufacture of paints, varnishes and similar coatings, printing ink and</li> </ul>

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
					<ul> <li>mastics</li> <li>Manufacture of pharmaceuticals, medicinal chemicals and botanical products</li> <li>Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations</li> <li>Manufacture of man-made fibres</li> </ul> Detailed list of activities is provided in ISIC Division 24
10	FUEL COMBUSTION ACTIVITIES	Pulp, Paper and Print	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	<ul> <li>Manufacture of pulp, paper and paperboard</li> <li>Manufacture of corrugated paper and paperboard and of containers of paper and paperboard</li> <li>Manufacture of other articles of paper and paperboard</li> <li>Manufacture of other articles of paper and paperboard</li> <li>Publishing of books, brochures and other publications</li> <li>Publishing of newspapers, journals and periodicals</li> <li>Publishing of music</li> <li>Printing</li> <li>Service activities related to printing</li> <li>Reproduction of recorded media</li> </ul> Detailed list of activities is provided in ISIC Divisions 21 and 22
11	FUEL COMBUSTION ACTIVITIES	Food processing beverages and tobacco	Data on the amount of fuel combusted	Tonnes/ Litres	Combustion of fuels for the:     Production, processing and preservation of meat, fish, fruit,

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
			Type of fuel used		<ul> <li>vegetables, oils and fats</li> <li>Manufacture of dairy products</li> <li>Manufacture of grain mill products, starches and starch products, and prepared animal feeds</li> <li>Manufacture of bakery products</li> <li>Manufacture of sugar</li> <li>Manufacture of cocoa, chocolate and sugar confectionery</li> <li>Manufacture of macaroni, noodles, couscous and similar farinaceous products</li> <li>Distilling, rectifying and blending of spirits; ethyl alcohol production</li> <li>from fermented materials</li> <li>Manufacture of wines</li> <li>Manufacture of malt liquors and malt</li> <li>Manufacture of soft drinks; production of mineral waters</li> <li>Manufacture of tobacco products</li> </ul> Detailed list of activities is provided in ISIC Divisions 15 and 16
12	FUEL COMBUSTION ACTIVITIES	Non-metallic minerals	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	<ul> <li>Manufacture of glass and glass products</li> <li>Manufacture of non-metallic mineral products</li> <li>Manufacture of non-structural non-refractory ceramic ware</li> <li>Manufacture of refractory ceramic products</li> <li>Manufacture of structural non-refractory clay and ceramic products</li> </ul>

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
12	FUEL COMPLICATION ACTIVITIES		Date on the	Topod	<ul> <li>Manufacture of cement, lime and plaster</li> <li>Manufacture of articles of concrete, cement and plaster</li> <li>Cutting, shaping and finishing of stone</li> <li>Manufacture of other non-metallic mineral products</li> </ul> Detailed list of activities is provided in ISIC Division 26
13	FUEL COMBUSTION ACTIVITIES	Transport Equipment	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	<ul> <li>Manufacture of motor vehicles</li> <li>Manufacture of bodies (coachwork) for motor vehicles; manufacture of</li> <li>trailers and semi-trailers</li> <li>Manufacture of parts and accessories for motor vehicles and their engines</li> <li>Building and repairing of ships and boats</li> <li>Building and repairing of pleasure and sporting boats</li> <li>Manufacture of railway and tramway locomotives and rolling stock</li> <li>Manufacture of aircraft and spacecraft</li> <li>Manufacture of transport equipment</li> <li>Manufacture of bicycles and invalid carriages</li> <li>Manufacture of other transport equipment</li> <li>Detailed list of activities is provided in ISIC Divisions 34 and 35</li> </ul>

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
14	FUEL COMBUSTION ACTIVITIES	Machinery	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	<ul> <li>Manufacture of fabricated metal products, except machinery and equipment (i.e. pure metal products such as parts, containers and structures),</li> <li>Manufacture of engines and turbines, except aircraft, vehicle and cycle engines</li> <li>Manufacture of pumps, compressors, taps and valves</li> <li>Manufacture of bearings, gears, gearing and driving elements</li> <li>Manufacture of ovens, furnaces and furnace burners</li> <li>Manufacture of lifting and handling equipment</li> <li>Manufacture of other general-purpose machinery e.g. refrigerating or freezing, air conditioners and fans</li> <li>Manufacture of agricultural and forestry machinery e.g. tractors, mowers, ploughs, manure spreaders, seeders, harrows, harvesting machinery, threshing machinery, milking machines, spraying machinery, poultry, bee keeping,</li> <li>Manufacture of machine tools used for working metals and other materials., turning, drilling, milling, shaping, planning, boring, grinding</li> <li>Manufacture of machinery for metallurgy including machines and equipment for handling hot metals</li> </ul>

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
					<ul> <li>Manufacture of machinery for mining, quarrying and construction</li> <li>Manufacture of machinery for food, beverage and tobacco processing e.g. agricultural dryers, dairy industry machinery e.g. cream separators, grain milling machines, presses, crushers</li> <li>Manufacture of machinery for textile, apparel and leather production, e.g. spinning machines, textile yarn preparation machines, knitting machines, ironing machines, commercial washing machines, dry cleaning machines</li> <li>Manufacture of weapons and ammunition including tanks and other fighting devices, artillery, mobile guns, rocket launchers, torpedo tubes, heavy, machine guns, revolvers, shotguns, light machine guns, air or gas guns and pistols, hunting, sporting or protective firearms and ammunition, explosive devices such as bombs, mines and torpedoes</li> <li>Manufacture of domestic appliances e.g. domestic</li> <li>The manufacture of office machinery (e.g. photocopiers, cash registers etc.) and computer equipment (e.g. computers, word processors and peripherals)</li> <li>Manufacture of products that generate, distribute and store electrical power. Also included is the manufacture of electrical lighting and signalling</li> </ul>

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
					equipment  • Manufacture of electronic equipment for broadcasting and transmission, data communications equipment, receivers, recorders and reproduction equipment. The division covers all intermediate products from professional equipment to that for the general public.  Detailed list of applicable activities is available in ISIC Divisions 28, 29, 30, 31 and 32.
15	FUEL COMBUSTION ACTIVITIES	Mining (excluding fuels) and quarrying	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	Combustion of fuels for the:  Mining of iron ores  Mining of non-ferrous metal ores, except uranium and thorium ores  Quarrying of stone, sand and clay  Mining and quarrying n.e.c.  Mining of chemical and fertilizer minerals  Extraction of salt  Detailed list of applicable activities is
16	FUEL COMBUSTION ACTIVITIES	Wood and wood products	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	available in ISIC Divisions 13 and 14  Combustion of fuels for the:  Sawmilling and planing of wood Manufacture of veneer sheets; manufacture of plywood, laminboard, particle board and other panels and boards Manufacture of builders' carpentry and joinery Manufacture of wooden containers Manufacture of other products of wood;

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
					Manufacture of articles of cork, straw and plaiting materials  Detailed list of applicable activities is available in ISIC Division 20
17	FUEL COMBUSTION ACTIVITIES	Construction	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	Combustion of fuels for:      Site preparation     Building of complete constructions or parts thereof; civil engineering     Building installation     Building completion     Renting of construction or demolition equipment with operator
					Detailed list of applicable activities is available in ISIC Division 45
18	FUEL COMBUSTION ACTIVITIES	Textile and Leather	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	Combustion of fuels for the:  Preparation and spinning of textile fibres; weaving of textiles Finishing of textiles Manufacture of made-up textile articles, except apparel Manufacture of carpets and rugs Manufacture of cordage, rope, twine and netting Manufacture of other textiles n.e.c. Manufacture of knitted and crocheted fabrics and articles Manufacture of wearing apparel, except fur apparel Dressing and dyeing of fur; manufacture of articles of fur Tanning and dressing of leather Manufacture of luggage, handbags and

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
					the like, saddlery and harness • Manufacture of footwear  Detailed list of applicable activities is
					available in ISIC Divisions 17, 18 and 19
19	FUEL COMBUSTION ACTIVITIES	Non specified Industries	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	Combustion of fuels from any manufacturing industry/construction not included above or for which separate data are not available. This includes:  • Manufacture of rubber and plastics products  • Manufacture of medical, precision and optical instruments, watches and clocks  • Manufacture of furniture; manufacturing  • Recycling of metal waste or scrap  • Recycling of non-metal waste and scrap  Detailed list of applicable activities is available in ISIC Divisions 25, 33, 36 and 37
20	FUEL COMBUSTION ACTIVITIES	Commercial / Institutional	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	Combustion of fuels in commercial and Institutional buildings including the following activities:  Collection, purification and distribution of water Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel Wholesale trade and commission trade, except of motor vehicles and

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
					<ul> <li>motorcycles</li> <li>Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods</li> <li>Hotels and restaurants</li> <li>Supporting and auxiliary transport activities; activities of travel agencies</li> <li>Post and telecommunications</li> <li>Financial intermediation, except insurance and pension funding</li> <li>Insurance and pension funding, except compulsory social security</li> <li>Activities auxiliary to financial intermediation</li> <li>Real estate activities</li> <li>Renting of machinery and equipment without operator and of personal and household goods</li> <li>Computer and related activities</li> <li>Research and development</li> <li>Other business activities</li> <li>Public administration and defence; compulsory social security</li> <li>Education</li> <li>Health and social work</li> <li>Sewage and refuse disposal, sanitation and similar activities</li> <li>Activities of membership organizations</li> <li>Recreational, cultural and sporting activities</li> <li>Other service activities e.g. washing and dry cleaning of textile and fur products, hairdressing and other beauty treatments, funeral and related services</li> </ul>

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
					Extraterritorial organizations and bodies
					Detailed description of applicable activities is available in ISIC Divisions 41, 50, 51, 52, 55, 63-67, 70-75, 80, 85, 90-93 and 99.
21	FUEL COMBUSTION ACTIVITIES	Residential	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	Combustion of fuels in households
22	FUEL COMBUSTION ACTIVITIES	Stationary - Agriculture / Forestry / Fishing / Fish farms	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	Combustion of fuels in pumps, grain drying, horticultural greenhouses and other agriculture, forestry or stationary combustion in the fishing industry.
23	FUEL COMBUSTION ACTIVITIES	Off-road Vehicles and Other Machinery in Agriculture / Forestry / Fishing / Fish farms	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	Combustion of fuels in traction vehicles on farm land and in forests.
24	FUEL COMBUSTION ACTIVITIES	Fishing (mobile combustion) - in Agriculture / Forestry / Fishing / Fish farms	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	Combustion of fuels for inland, coastal and deep-sea fishing. Fishing should cover vessels of all flags that have refuelled in the country (include international fishing).

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
25	FUEL COMBUSTION ACTIVITIES	Non-Specified — Stationary	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	Combustion of fuel in stationary sources that are not specified elsewhere
26	FUEL COMBUSTION ACTIVITIES	Non-Specified- Mobile (Aviation component)	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	Combustion of fuel in vehicles and other machinery, marine and aviation (not included in the sector "Off-road Vehicles and Other Machinery in Agriculture / Forestry / Fishing / Fish farms" described above or elsewhere).
28	FUEL COMBUSTION ACTIVITIES	Non-Specified- Mobile (waterborne component component)	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	Combustion of fuel in all remain aviation activities that are not specified elsewhere. This includes combustion fuel that is delivered to the country's military.
28	FUEL COMBUSTION ACTIVITIES	Non-Specified- Mobile (other)	Data on the amount of fuel combusted  Type of fuel used	Tonnes/ Litres	Combustion of fuel in all remaining water- borne activities that are not specified elsewhere.
29	FUEL COMBUSTION ACTIVITIES	Civil Aviation -International Aviation (International Bunkers)	Amount of Fuel Sold  Type of fuel (e.g. petrol, diesel,	Tonnes/ Litres	<ul> <li>Combustion and evaporation of fuel from flights that depart in one country and arrive in a different country.</li> <li>(Include take-offs and landings for these flight stages.)</li> <li>Combustion and evaporation of fuel from international military aviation can</li> </ul>

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
			natural gas, LPG etc)		be included as a separate subcategory of international aviation provided that the same definitional distinction is applied and data are available to support the definition.
30	FUEL COMBUSTION ACTIVITIES	Civil Aviation - Domestic Aviation	Amount of Fuel Sold  Type of fuel (e.g. petrol, diesel, natural gas, LPG etc)	Tonnes/ Litres	<ul> <li>Combustion and evaporation of fuel from civil domestic passenger and freight traffic that departs and arrives in the same country (commercial, private, agriculture, etc.), including take-offs and landings for these flight stages.</li> <li>This excludes military, which should be reported in section "Non specified mobile" below</li> </ul>
31	FUEL COMBUSTION ACTIVITIES	Road Transportation - Cars	Amount of Fuel Sold Type of fuel (e.g. petrol, diesel, natural gas, LPG etc)	Tonnes/ Litres	Combustion and evaporation of fuel in the vehicle registering country primarily for transport of persons and normally having a capacity of 12 persons or fewer
32	FUEL COMBUSTION ACTIVITIES	Road Transportation - Light duty trucks	Amount of Fuel Sold  Type of fuel (e.g. petrol, diesel, natural gas, LPG etc)	Tonnes/ Litres	<ul> <li>Combustion and evaporation of fuel in vehicles so designated in the vehicle registering country primarily for transportation of light-weight cargo or</li> <li>Which are equipped with special features such as four-wheel drive for off-road operation.</li> <li>The gross vehicle weight normally</li> </ul>

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
33	FUEL COMBUSTION ACTIVITIES	Road Transportation - Heavy duty trucks and buses	Amount of Fuel Sold  Type of fuel (e.g. petrol, diesel, natural gas, LPG etc)	Tonnes/ Litres	<ul> <li>ranges up to 3500-3900 kg or less.</li> <li>Combustion and evaporation of fuel in any vehicles so designated in the vehicle registering country</li> <li>Normally the gross vehicle weight ranges from 3500-3900 kg or more for heavy duty trucks and the buses are rated to carry more than 12 persons.</li> </ul>
34	FUEL COMBUSTION ACTIVITIES	Road Transportation - Motorcycles	Amount of Fuel Sold  Type of fuel (e.g. petrol, diesel, natural gas, LPG etc)	Tonnes/ Litres	Combustion and evaporation of fuel in any motor vehicle designed to travel with not more than three wheels in contact with the ground and weighing less than 680 kg.
35	FUEL COMBUSTION ACTIVITIES	Railways	Amount of Fuel Sold  Type of fuel (e.g. petrol, diesel, natural gas, LPG etc)	Tonnes/ Litres	Combustion and evaporation of fuel in railway transport for both freight and passenger traffic routes.
36	FUEL COMBUSTION ACTIVITIES	Water Borne Navigation- International Water Borne Navigation	Amount of Fuel Sold  Type of fuel (e.g. petrol, diesel, natural gas, LPG etc)	Tonnes/ Litres	Combustion and evaporation of fuel used by vessels of all flags that are engaged in international water-borne navigation
37	FUEL COMBUSTION ACTIVITIES	Water Borne Navigation - Domestic water Borne	Amount of Fuel Sold	Tonnes/ Litres	Combustion and evaporation fuels used by vessels of all flags that depart and arrive in

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
		navigation	Type of fuel (e.g. petrol, diesel, natural gas, LPG etc)		the same country (exclude fishing and military activities)
38	FUEL COMBUSTION ACTIVITIES	Other Transportation- Pipeline Transport	Amount of Fuel Sold  Type of fuel (e.g. petrol, diesel, natural gas, LPG etc)	Tonnes/ Litres	<ul> <li>Combustion and evaporation fuels for the operation of pump stations and maintenance of pipelines.</li> <li>Transport via pipelines includes transport of gases, liquids, slurry and other commodities via pipelines.</li> <li>Distribution of natural or manufactured gas, water or steam from the distributor to final users is excluded in this activity</li> </ul>
39	FUEL COMBUSTION ACTIVITIES	Other Transportation- Off- road	Amount of fuel sold  Type of fuel (e.g. petrol, diesel, natural gas, LPG etc)	Tonnes/ Litres	Combustion and evaporation fuels from other transportation excluding Pipeline Transport.
40	FUEL COMBUSTION ACTIVITIES	Fishing (mobile combustion)	Amount of Fuel Sold  Type of fuel (e.g. petrol, diesel, natural gas, LPG etc)	Tonnes/ Litres	<ul> <li>Combustion and evaporation fuels for inland, coastal and deep-sea fishing.</li> <li>Fishing should cover vessels of all flags that have refuelled in the country</li> <li>(Include international fishing).</li> </ul>
41	FUEL COMBUSTION ACTIVITIES	Non specified stationary	Amount of Fuel Sold	Tonnes/ Litres	Combustion and evaporation from fuel in stationary sources that are not specified elsewhere

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
			Type of fuel (e.g. petrol, diesel, natural gas, LPG etc)		
42	FUEL COMBUSTION ACTIVITIES	Non specified mobile	Amount of Fuel Sold  Type of fuel (e.g. petrol, diesel, natural gas, LPG etc)	Tonnes/ Litres	<ul> <li>Combustion and evaporation vehicles and other machinery, marine and aviation (not included in elsewhere).</li> <li>Includes combustion and evaporation of fuel delivered for aviation and water-borne navigation to the country's military as well as fuel delivered within that country but used by the militaries of other countries that are not engaged in.</li> </ul>
43	FUGITIVE EMISSIONS FROM FUELS	Coal mining and handing - Underground mines	Underground Coal Production	Tonne/year	<ul> <li>Mining -Includes all seam gas emissions vented to atmosphere from coal mine ventilation air and degasification systems</li> <li>Post-mining seam gas emissions - methane and CO2 emitted after coal has been mined, brought to the surface and subsequently processed, stored and transported</li> <li>Abandoned underground mines - methane emissions from abandoned underground mines</li> <li>Flaring of drained methane or conversion of methane to CO2 - Methane drained and flared, or ventilation gas converted to CO2 by an oxidation process</li> </ul>

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
					Mining, post-mining, abandoned mines and flaring of drained methane.
44	FUGITIVE EMISSIONS FROM FUELS	Coal mining and handing – surface mines	Surface Coal Production	Tonne/year	<ul> <li>Mining activity - Includes methane and CO2 emitted during mining from breakage of coal and associated strata and leakage from the pit floor and highwall</li> <li>Post-mining seam gas emissions - methane and CO2 emitted after coal has been mined, subsequently processed, stored and transported</li> <li>Uncontrolled combustion and burning coal dumps – uncontrolled combustion associated with coal exploitation activities</li> </ul>
45	FUGITIVE EMISSIONS FROM FUELS	Venting in Oil Production	Volume of oil produced, by type	10 <sup>3</sup> m <sup>3</sup>	Venting of associated gas and waste gas/vapour streams at oil facilities
46	FUGITIVE EMISSIONS FROM FUELS	Flaring in Oil Production	Volume of oil produced, by type	10 <sup>3</sup> m <sup>3</sup>	Flaring of natural gas and waste gas/vapour streams at oil facilities
47	FUGITIVE EMISSIONS FROM FUELS	Other Activities – During Exploration of Oil e.g. equipment leaks storage losses, pipeline breaks, well blowouts, land farms, gas migration to the surface around the outside of wellhead casing, surface	Volume of oil produced, by type	10 <sup>3</sup> m <sup>3</sup>	Release of fugitive emissions (excluding venting and flaring) from oil well drilling, drill stem testing, and well completions

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
		casing vent bows, biogenic gas formation from tailings ponds and any other gas or vapour releases not specifically accounted for as venting or flaring			
48	FUGITIVE EMISSIONS FROM FUELS	Other Activities - Production and Upgrading of oil	Volume of oil produced, by type	10 <sup>3</sup> m <sup>3</sup>	Release of fugitive emissions oil production (excluding venting and flaring) at the oil wellhead or at the oil sands or shale oil mine through to the start of the oil transmission system. Example activities include:  • Well servicing • Oil sands or shale oil mining • Transport of untreated production (i.e , well effluent, emulsion, oil shale and oilsands) to treating or extraction facilities • Activities at extraction and upgrading facilities, associated gas re-injection systems and produced water disposal systems
49	FUGITIVE EMISSIONS FROM FUELS	Other Activities – Transport of Oil	Volume of oil produced, by type	10 <sup>3</sup> m <sup>3</sup>	Activities resulting in fugitive emissions related to the transport of marketable crude oil (including conventional, heavy and synthetic crude oil and bitumen) to upgraders and refineries.
50	FUGITIVE EMISSIONS FROM FUELS	Other Activities – Refining of oil	Volume of oil produced, by type	10 <sup>3</sup> m <sup>3</sup>	Activities resulting in fugitive emissions (excludes venting and flaring) at petroleum refineries.
51	FUGITIVE EMISSIONS FROM FUELS	Other Activities – Distribution of oil	Volume of oil produced, by type	10 <sup>3</sup> m <sup>3</sup>	Activities resulting in fugitive emissions (excluding venting and flaring) from the transport and distribution of refined products, including those at bulk terminals and retail

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
					facilities
52	FUGITIVE EMISSIONS FROM FUELS	Other Fugitive emissions from oil industry	Volume of oil produced, by type	10 <sup>3</sup> m <sup>3</sup>	<ul> <li>Activities resulting in fugitive emissions from oil systems (excluding venting and flaring) not otherwise accounted for in the above categories.</li> <li>This includes spills and other accidental releases, waste oil treatment facilities and oilfield waste disposal facilities</li> </ul>
53	FUGITIVE EMISSIONS FROM FUELS	Venting of natural gas	Volume of natural gas produced	10 <sup>3</sup> m <sup>3</sup>	Venting of natural gas and waste gas/vapour streams at gas facilities
54	FUGITIVE EMISSIONS FROM FUELS	Flaring of natural gas	Volume of natural gas produced	10 <sup>3</sup> m <sup>3</sup>	Flaring of natural gas and waste gas/vapour streams at gas facilities.
55	FUGITIVE EMISSIONS FROM FUELS	All other activities associated with natural gas	Volume of natural gas produced	10 <sup>3</sup> m <sup>3</sup>	Equipment leaks, storage losses, pipeline breaks, well blowouts, gas migration to the surface around the outside of wellhead casing, surface casing vent bows and any other gas or vapour releases not specifically accounted for as venting or flaring.
56	FUGITIVE EMISSIONS FROM FUELS	Exploration of natural gas	Volume of natural gas produced	10 <sup>3</sup> m <sup>3</sup>	Gas well drilling, drill stem testing and well completions (excludes flaring and venting)
57	FUGITIVE EMISSIONS FROM FUELS	Production of natural gas	Volume of natural gas produced	10 <sup>3</sup> m <sup>3</sup>	<ul> <li>Fugitive emissions (excluding venting and flaring) from the gas wellhead through to the inlet of gas processing plants, or, where processing is not required, to the tie-in points on gas transmission systems.</li> <li>This includes fugitive emissions related to well servicing, gas gathering, processing and associated waste water and acid gasdisposal activities</li> </ul>

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activities
58	FUGITIVE EMISSIONS FROM FUELS	Processing of natural gas	volume of raw gas feed	10 <sup>3</sup> m <sup>3</sup>	Fugitive emissions (excluding venting and flaring) from gas processing facilities
59	FUGITIVE EMISSIONS FROM FUELS	Transmission and storage of natural gas	volume of marketable gas	10 <sup>3</sup> m <sup>3</sup>	Fugitive emissions from systems used to transport processed natural gas to market (i.e., to industrial consumers and natural gas distribution systems)
60	FUGITIVE EMISSIONS FROM FUELS	Distribution of natural gas	Volumes of as sold	10 <sup>3</sup> m <sup>3</sup>	Fugitive emissions (excluding venting and flaring) from the distribution of natural gas to end users
61	FUGITIVE EMISSIONS FROM FUELS	Other Fugitive emissions from natural gas industry	Volume of natural gas produced	10 <sup>3</sup> m <sup>3</sup>	<ul> <li>Fugitive emissions from natural gas systems (excluding venting and flaring) not otherwise accounted for in the above categories.</li> <li>This may include emissions from well blowouts and pipeline ruptures or dig-ins</li> </ul>
62	FUGITIVE EMISSIONS FROM FUELS	Other emissions from energy Production	Volume of fuel Produced, Type of fuel produced	10 <sup>3</sup> m <sup>3</sup>	Release of fugitive emissions from geo thermal energy production and other energy production not included above

# 2. Agriculture, Forestry and Land Use

This relates to all activities resulting in GHG emissions arising human interventions and practices aimed at production, ecological or social functions on land

#	BROADER CATERGORISATION	Sector	Required Data	Unit	Reportable Activities
1	Methane emissions from enteric Fermentation	Livestock Sector	Livestock species and categories	Type	Livestock management
			Annual population	#	
2	Methane emissions from manure	Livestock Sector	Livestock species and categories	Туре	Livestock manure management
	Management		Annual population	#	
			Manure management system usage data		
3	N2O Emissions From Manure  Management	Livestock Sector	Livestock species and categories	Туре	Livestock manure management

#	BROADER CATERGORISATION	Sector	Required Data	Unit	Reportable Activities
			Annual population  Manure management system usage data	#	
4	N2O Emissions from Managed Soils	Synthetic fertilizer	Total amount of synthetic fertiliser consumed annually	Tonnes	Application of synthetic fertilisers to soils
5	N2O Emissions from Managed Soils	Organic Fertilizer	annual amount of animal manure N applied to soils,	kg N yr-1	Application of organic fertilizer to soils
			annual amount of total sewage N that is applied to soils	kg N yr-1	

#	BROADER CATERGORISATION	Sector	Required Data	Unit	Reportable Activities
			annual amount of total compost N applied to soils  Annual amount of other organic amendments used as fertiliser e.g., rendering waste, guano, brewery waste, etc.)	kg N yr-1	
6	N2O Emissions from Managed Soils	Urine and dung from grazing animals	Livestock species and categories	Туре	Animal grazing

#	BROADER CATERGORISATION	Sector	Required Data	Unit	Reportable Activities
			Annual population	#	
7	Indirect N2O emissions	Synthetic N fertilisers	Annual amount of synthetic fertiliser N applied to soils	kg N yr-1	Application of synthetic nitrogen fertilisers to soils
8	Indirect N2O emissions	Organic nitrogen (N) applied as fertiliser (e.g., applied animal manure, compost, sewage sludge, rendering waste and other organic amendments) (FON);	Annual amount of managed animal manure, compost, sewage sludge and other organic N additions applied to soils	kg N yr-1	Application of organic nitrogen as fertilisers to soils
9	Indirect N2O emissions	Urine and dung nitrogen (N) deposited on pasture, range and paddock by grazing animals	annual amount of urine and dung N deposited by grazing animals on pasture, range and paddock	kg N yr-1	Livestock grazing activities resulting nitrogen deposits from urine and dung in the soil
10	Indirect N2O emissions	Nitrogen (N) in crop residues (above- and below-ground), including N-fixing crops and forage/pasture renewal returned to soils	Crop residues (above- and below-ground), including N-fixing crops, and from forage/pasture renewal, returned to soils annually in regions where	kg N yr-1	Cultivation or application of nitrogen rich crop residues

#	BROADER CATERGORISATION	Sector	Required Data	Unit	Reportable Activities
			leaching/runoff occurs		
11	CO2 emissions from liming	additions of carbonate limes to soils	annual amount of calcic limestone (CaCO3) or dolomite (CaMg(CO3)2) applied to soils	Tonnes yr-	Activities involving additions of carbonate limes to soils
12	CO2 Emissions From Urea Fertilization	Additions of Urea to soil	Amount of urea applied annually to a soil in the country  This data can be derived from the domestic production records and import/export data on urea	Tonnes urea yr-1	Activities involving additions of Urea to soil
13	Methane emissions from rice cultivation	Rice cultivation	Annual harvested area  Cultivation period of rice	Ha/yr  Number of days	Rice cultivation
14	Harvested Wood Products	Solid Wood and Paper Production	Production, imports and exports of solid wood and paper products	tonnes	Harvesting of wood products for production of solid wood and paper products

#	BROADER CATERGORISATION	Sector	Required Data	Unit	Reportable Activities
15	Forest Land	Forest Management	Areas of managed Forest Land according to different forest types, climate,  Management systems, and regions.	На	Management of forest land
16	Non-CO2 emissions from biomass burning	Burning in Forest Land	Estimates of area burnt in Forest Land Remaining Forest Land are needed  Nature of fires especially how they affect forest carbon dynamics (e.g., effects on tree mortality)	На	Activities involving burning of forest land
17	Land Converted to Forest Land	Forest Management	Areas converted to Forest Land over the 20 years prior to the inventory year.  After 20 years or other time interval chosen, the lands	На	Activities involving conversion of land areas into forest land

#	BROADER CATERGORISATION	Sector	Required Data	Unit	Reportable Activities
			converted to Forest Land, as defined in the country, should be transferred to and accounted for.		
18	Crop Land	Cropland remaining cropland	Estimates of land areas of growing stock and harvested land with perennial woody crops	Ha	Activities involving growing and harvesting woody crops on crop land
19	Crop Land	Land converted to cropland	Area of Forest Land and natural Grassland converted to Cropland	На	Activities involving conversion of forest land and natural grass land to cropland
20	Grassland	Grassland remaining grassland	Total grassland areas	На	Activities conducted on grassland areas
21	Grassland	Land converted to grassland	Estimates of areas converted to Grassland, from initial land uses (i.e., Forest Land, Cropland, Settlements, etc.) to final grassland	На	Activities involving conversion of land (from initial land uses) to grassland type

#	BROADER CATERGORISATION	Sector	Required Data	Unit	Reportable Activities
			type,		
22	Wetland	Flooded Land	Flooded land area	На	Activities conducted on flooded land areas



# 3. Industrial processes and use<sup>1</sup>

This relates to all activities resulting in GHG emissions from industrial processes i.e. the use of greenhouse gases in products, and from non-energy uses of fossil fuel carbon.

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activity
1	Mineral Industry	Cement Production	Weight (mass) of cement produced	Tonnes	Production of clinker
2	Mineral Industry	Lime Production	Lime production of type	Tonnes	Production of quicklime or CaO by heating limestone to decompose the carbonates
3	Mineral Industry	Glass Production	Glass production by weight	Tonnes	Activities resulting in CO <sub>2</sub> emissions during the melting of raw materials such as limestone, dolomite, and soda ash in the production of glass
4	Mineral Industry	Ceramics	Mass of carbonate consumed	Tonnes	Activities involving the use of carbonate materials such as limestone for the production of ceramics including the production of bricks and roof tiles, vitrified clay pipes, refractory products, expanded clay products, wall and floor tiles, table and ornamental ware (household ceramics), sanitary ware, technical ceramics, and inorganic bonded abrasives.
5	Mineral Industry	Soda Ash	Mass of carbonate consumed	Tonnes	Activities involving the use of carbonate materials for the production and use of soda ash
6	Mineral Industry - Other Process Uses of Carbonates	Non- Metallurgical Magnesia Production	Mass of carbonate consumed	Tonnes	Activities involving the production of magnesia (MgO) production
7	Chemical Industry	Ammonia	Production of	Tonnes	Activities involving production of ammonia

<sup>&</sup>lt;sup>1</sup> Covers greenhouse gas emissions occurring from industrial processes, from the use of greenhouse gases in products, and from non-energy uses of fossil fuel carbon.

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activity
		Production	ammonia		
8	Chemical Industry	Nitric Acid	Production of	Tonnes	Activities involving production of nitric acid
		Production	nitric acid		
9	Chemical Industry	Adipic acid	Adipic acid	Tonnes	Activities involving production of adipic acid
10	Characteristics	production	production,	<b>-</b>	Add the transfer of the control of
10	Chemical Industry	Production of Caprolactam	Caprolactam production	Tonnes	Activities involving production of Caprolactam
11	Chemical Industry	Production of	Glyoxal and	Tonnes	Activities involving production of Glyoxal and Glyoxylic Acid
	Chemical Industry	Glyoxal and	Glyoxylic Acid	Tormes	receivings involving production of Gryoxal and Gryoxylle rela
		Glyoxylic Acid			
12	Chemical Industry	Production of	Petroleum coke	Tonnes	Activities involving production of silicon carbide and calcium
		Carbide	consumption or	raw	carbide
				material	
				used or	
			Carbide	Tonnes	
			production	carbide	
			production	produced	
13	Chemical Industry	Production of	Production of	Tonnes	Activities involving production Titanium dioxide
	·	Titanium	titanium slag,		
		Dioxide	synthetic rutile		
			or rutile TiO2		
14	Chemical Industry	Production of	Quantity of	Tonnes of	Activities involving production soda ash
		Soda Ash	Trona used or	Trona used or	
				useu oi	
			soda ash	Tonnes	
			produced	natural	
			·	soda ash	
				produced	
15	Chemical Industry	Petrochemicals	Annual	Tonnes	Activities involving production petrochemicals e.g.
		and Carbon	production of		methanol, ethylene, ethylene dichloride and vinyl chloride

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activity
		Black Production	petrochemical differentiated by type		monomer, ethylene oxide, acrylonitrile and carbon black
16	Metal Industry	Iron and steel, and metallurgical coke production	Quantity of coke produced nationally	Tonnes	Activities involving production of iron and steel
17	Metal Industry	Ferroalloy production	Production of ferroalloy	Tonnes	Activities involving production of Ferroalloys i.e. concentrated alloys of iron and one or more metals such as silicon, manganese, chromium, molybdenum, vanadium and tungsten.
18	Metal Industry	Aluminium production	Metal production from Prebake process	Tonnes Al	Activities involving primary aluminium production
			Metal production from Søderberg	Tonnes Al	
19	Metal Industry	Magnesium production	National primary magnesium production from dolomite	Tonnes	Activities involving production and production of magnesium including  Raw Materials Preparation for Primary Production  Casting (primary & secondary)  Secondary Magnesium Production
			National primary magnesium production from magnesite,	Tonnes	
20	Metal Industry	Lead production	Quantity of lead produced by Direct Smelting,  Quantity of lead	Tonnes	Activities involving production and production of lead including both:  • Primary processes 1) interring/smelting and 2) direct smelting  • Secondary production of refined lead i.e. the
			produced from	Tonnes	processing of recycled lead to prepare it for reuse

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activity
			the Imperial Smelting Furnace, tonnes		
			Quantity of lead produced from secondary materials,	Tonnes	
21	Metal Industry	Zinc production	Quantity of zinc produced	Tonnes	Activities involving production of Zinc
22	Non-Energy Products from Fuels and Solvent Use	Lubricants used in transportation industry	Total lubricant consumption	TJ	Use of lubricant in transportation industry
23	Non-Energy Products from Fuels and Solvent Use	Paraffin waxes	Total wax consumption	TJ	Use of paraffin wax
24	Fluorinated Substitutes for ozone Depleting substances	Use of solvents non-aerosol	Quantity of solvents sold in year t,	Tonnes	Use of non-aerosol solvent in activities such as precision cleaning, electronic cleaning, metal cleaning
			Quantity of solvents sold in year <i>t</i> -1,	Tonnes	
25	Fluorinated Substitutes for ozone Depleting substances	Use of aerosols propellants and solvents	quantity of HFC and PFC contained in aerosol products sold in year <i>t</i> ,  Quantity of HFC and PFC	<i>t</i> –1, tonnes	Use of non-aerosol propellants and solvents including:  (i) Metered Dose Inhalers (MDIs); (ii) Personal Care Products (e.g., hair care, deodorant, shaving cream); (iii) Household Products (e.g., air-fresheners, oven and fabric cleaners); (iv) Industrial Products (e.g., special cleaning sprays such as those for operating electrical contact,
			contained in aerosol products sold in		lubricants, pipe-freezers); (v) Other General Products (e.g., silly string, tyre inflators, klaxons).

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activity
			year		
26	Fluorinated Substitutes for ozone Depleting substances	Foam blowing	Total HFC used in manufacturing new closed-cell foam in year t	Tonnes	Use of HFCs in foams and insulation applications
			HFC charge blown into closed-cell foam manufacturing between year t and year t-n,  n = product lifetime of closed-cell foam t = current year (t-n) = The total period over which HFCs used in foams could still	Tonnes	
27	Fluorinated Substitutes for ozone Depleting substances	Refrigeration and Air Conditioning	be present  Sales of a specific refrigerant in the year to be reported  Year of introduction of the refrigerant  Growth rate in		HFCs and and/or PFCs use in refrigerators and air conditioning activities. This includes:  • Domestic (household) refrigeration • Commercial refrigeration • Industrial processes including chillers, cold storage, and industrial heat pumps • Transport refrigeration • Stationary air conditioning including air-to-air systems, heat pumps, and chillers • Mobile air-conditioning systems used in passenger cars,

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activity
			sales of new equipment (usually assumed linear across the period of assessment)		truck cabins, buses, and trains
28	Fluorinated Substitutes for ozone Depleting substances	Fire Protection	Amount of newly supplied agent (i.e., excluding recycled agent) in fire protection equipment produced in year t  Amount of agent in fire protection equipment in fire protection equipment imported in year t,	Tonnes	HFCs and and/or PFCs use in fire protection equipment 26
			Amount of agent in fire protection equipment exported in year <i>t</i> ,  Amount of agent from	Tonnes	

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activity
29	Fluorinated Substitutes for ozone Depleting substances	Other applications of HFC and PFC use	retired fire protection equipment that is collected and destroyed Quantity of HFC and PFC sold in year t  Quantity of HFC and PFC sold in year	Tonnes  t-1, Tonnes	Activities and application involving the use of HFCs and and/PFCs
30	Electronics Industry	Plasma etching intricate patterns, cleaning reactor chambers, and temperature control	Gas sales and use  or  The annual amount of electronics substrate processed by type e.g. amount of silicon processed for semi conductors	m3	Activities involving the utilisation of fluorinated compounds (FCs) for plasma etching intricate patterns, cleaning reactor chambers, and temperature control  Applicable sectors include semiconductor, thin-film transistor flat panel display (TFT-FPD), and photovoltaic (PV) manufacturing
31	Other product manufacture and use	Emissions of SF6 and PFCs from Electrical Equipment	Total SF6 consumption by equipment Manufacturers  Total nameplate capacity of new	Tonnes	Activities involving the use of SF6 and PFCs in electrification insulation and current interruption in equipment used in the transmission and distribution of electricity

#	BROADER CATEGORISATION	Sector	Required Data	Unit	Reportable Activity
			equipment filled on site (not at the factory)  Total nameplate capacity of installed equipment	-	
32	Other product manufacture and use	Nitrous Oxide (N <sub>2</sub> O) from product use	total quantity of N <sub>2</sub> O supplied in year t defined by application type	Tonnes	Activities that may result in evaporative emissions of nitrous oxide for example:  • Medical applications (anaesthetic use, analgesic use and veterinary use)  • Use as a propellant in aerosol products, primarily in food industry (pressure-packaged whipped cream, etc)
			Total quantity of N <sub>2</sub> O supplied in year t-1 defined by application type	Tonnes	<ul> <li>Oxidising agent and etchant used in semiconductor manufacturing</li> <li>Oxidising agent used, with acetylene, in atomic absorption spectrometry</li> <li>Production of sodium azide, which is used to inflate airbags</li> <li>Fuel oxidant in auto racing; and</li> <li>Oxidising agent in blowtorches used by jewelers and others.</li> </ul>

## 4. Waste

This relates to all activities resulting in GHG emissions from solid waste disposal, biological treatment of solid waste incineration and open burning of waste and waste water treatment and discharge

#	BROADER CATEGORISATION	Sector	Required data	Unit	Reportable Activity
1	Solid Waste Disposal	Solid Waste Disposal	Municipal Solid Waste Generated <sup>2</sup> Fraction of solid waste disposed to solid waste disposal sites, incinerated and composted	Percentage	Generation, collection and disposal of municipal solid waste that includes household, garden (yard) and park waste and commercial and institutional)

<sup>&</sup>lt;sup>2</sup> IPCC method option 2 (single phase method) that only requires data on bulk waste produced.

#	BROADER CATEGORISATION	Sector	Required data	Unit	Reportable Activity
			Industrial waste generated (tonnes)	Tonnes	Generation and collection of industrial waste
			Hazardous waste	Tonnes	Generation and collection of hazardous waste e.g. waste oil, waste solvents, ash, cinder and other wastes with hazardous nature, such as flammability, explosiveness, causticity, and toxicity,
			Clinical		Generation and collection of clinical waste e.g. syringes, animal tissues, bandages, cloths

#	BROADER CATEGORISATION	Sector	Required data	Unit	Reportable Activity
			waste	Tonnes	
2	Biological Treatment of Solid Waste	Biological Treatment of solid waste	Amount of Solid Waste treated in biological facilities e.g. biogas and composting, differentiated by the treatment method applied	Tonnes	Activities involving the biological treatment of waste e.g. composting, anaerobic and aerobic digestion
3	Incineration and Open Burning of Waste	Incineration and open burning	Amount of waste incinerated  Amount of waste burned in the open	Tonnes	Activities involving the incineration and open burning of waste  • Incineration is defined as the combustion of solid and liquid fuels in controlled incineration activities  • Open burning of waste is defined as the combustion of unwanted combustible materials e.g. paper, wood, plastics, textiles etc. in open nature (open air) or open dumps where smoke and other emissions are released to the air without passing through a chimney or stack
4	Wastewater Treatment and Discharge	Industrial Wastewater Treatment	Amount of waste water and sewage sludge	Tonnes	Generation and treatment of industrial and domestic waste water including sewage sludge

#	BROADER CATEGORISATION	Sector	Required	Unit	Reportable Activity
			data		
		and	generated		
		Discharge	and treated		
		Domestic			
		Wastewater			
		Treatment			
		and			
		Discharge			

## **SECOND SCHEDULE**

(r. 13(1))

### LIST OF MITIGATION ACTIONS

- Increasing of renewables in the electricity generation mix of the national grid. 1.
- 2. Making progress towards achieving a tree cover of at least 10% of the land area of Kenya.
- 3. Enhancement of REDD+ activities.
- 4. Development and promotion of clean, efficient and sustainable energy technologies to reduce over-reliance on fossil and non-sustainable biomass fuels.



(r. 11(1)(a))

## CONTENT OF GREENHOUSE GAS EMISSIONS REPORTS

Name of registered en	tity:				
Address:	•				
Address:					
City:					
County:					
Councy:					
Contact person:					
Title:					
First name:					
Surname:					
Email address:					
Telephone number:					
Address line 1:					
Address line 2:					
City/Town:					
Postcode:					
Reporting Year:					
End of Reporting Perio	d:				
Date of Issue:					
First Schedule Sector(s	s) Applicable to the Report:				
PI	ease provide the following information in detail:				
Activity Data for the Reporting Period:					
Description of Methodo	ologies and Data used:				
Total Greenhouse Gas	Emissions:				

(r. 16(a))

#### CONTENT OF MITIGATION ACTIONS REPORT

#### Section 1

This section should include the following issues and have the table below filled out:

- A brief qualitative summary of the reporting entity's key mitigation strategies (including policies, concepts, planned activities and activities being implemented), their objectives and their implementation status;
- Address potential barriers to the planning and implementation of the mitigation actions; and lessons learned from the planning and implementation of the mitigation actions; and,
- A qualitative overview of key impacts and sustainable development benefits (e.g. air quality improvements, job creation, reduction of energy costs per household) incurred by the mitigation actions.

Summary of mitigation action progress								
No. of mitigation actions (Total)								
GHG emission reduction in total of all listed mitigation actions over a given period of time ( <i>If possible</i> )								
Mitigation actions by sector								
Short description of mitigation actions	Status [idea, planning phase, under implementation]	Impact [estimated GHG emission reduction, quantified in tCO <sub>2</sub> e] over a given time						
Sector (i.e. renewable energy)								

#### Section 2:

This section should address the following issues for each mitigation action and have the table below filled out:

- Name and description of the mitigation action, including information on the nature of the action, coverage (i.e. sectors and gases) and quantitative goals and progress indicators;
- Information on methodologies and assumptions;
- Objectives of the action and steps taken or envisaged to achieve the action:
- Information on the progress of implementation of the mitigation and the underlying steps taken or envisaged and the results achieved, such as estimated outcomes (metrics depending on type of action) and estimated emission reductions, to the extent possible;
- Information on international market mechanisms; and,
- Any further information the reporting entity would like to provide on the mitigation action, including lessons learned.

# Details of mitigation actions

Name of the mitigation action	Status [idea, planning phase, under implementation ]	Duration (20XX- 20YY)	Sector and subsector	Scope [i.e. national, county.]	Quantitative targets (both GHG-related and non-GHG impacts, as applicable)	GHGs covered		
	Objective of the m	itigation acti						
	Objective of the II	ntigation acti	ion					
	Describe here the ol	bjectives of the	e action, includin	g scope and goal	ls.			
	Brief description a	nd activities	planned unde	r the mitigation	n action			
	Describe here the ac <b>Note</b> : Also, indicate applicable.	•		_	ternational market mech	nanisms, if		
	Estimated outcom	es and estim	ated emission	reductions				
	Describe here the equantitative.	estimated GHG	-related and no	n-GHG impacts (	of the action, both qua	litative and		
	Methodologies an	d assumption	ns					
	Describe here the methodology used to estimate the emission reductions and key assumptions taken.							
	General description of the monitoring and reporting system							
	Include here a list and description of key indicators that will be monitored.							

(r. 20(3)(a))

#### CONTENT OF ADAPTATION ACTIONS REPORT

This report should address the following issues for each adaptation action and have the table below filled out:

- Name and description of the adaptation action, including information on the nature of the action, qualitative goals and progress indicators;
- Baseline and target data;
- Information on methodologies and assumptions;
- Objectives of the action and steps taken or envisaged to achieve the action;
- Information on the progress of implementation of the adaptation and the underlying steps taken or envisaged and the results achieved, such as estimated outcomes, to the extent possible;
- Any further information the reporting entity would like to provide on the adaptation action, including lessons learned.

_										
Name of the adaptation action	Status [idea, planning phase, under implementation]	Duration (20XX- 20YY)	Sector and subsector	Scope [i.e. national, county.]	Qualitative objectives	Key progress indicators				
	Objective of the adap	tation action	1							
	Describe here the obje	ectives of the	action, includin	g scope and goa	ls.					
	Baseline data, target	data and key	y indicators							
	Describe here the base	eline data bei	ing relied on, ta	rget data aspired	to and any key inc	dicators.				
	Brief description and	activities pl	anned under t	he adaptation a	ction					
	Describe here the action	ons and steps	s taken to achie	ve the objectives	5.					
	Estimated outcomes	and estimate	ed emission re	eductions						
	Describe here the est and quantitative (for the			ustainable goals	) of the action, bo	th qualitative				
	Methodologies and a	ssumptions								
	Describe here the methodology used.									
	Key progress indicat	ors.								
	Include here a list and	description o	f key indicators	that will be mon	itored.					

(r. 29(a))

#### CONTENT OF CLIMATE CHANGE ENABLERS REPORT

#### **Section 1 - Finance**

This section should address the following issues:

- 1. An overview of financial support provided or received from any source listed in the Regulations.
- 2. For private entities, an overview of private finance mobilized for mitigation and adaptation activities.
- 3. For public entities, an indication of funding from national or county budgets, if appropriate.
- 4. Where possible, please comment on the relation of support committed/disbursed for the reporting period (the timeframe you are reporting on), e.g. if a relevant share of the support committed has not been received or disbursed and or if certain finances committed have been delayed, but are expected to be received at a point in time in the future.
- 5. As far as possible, please provide the individual finance received and their focus (adaptation, mitigation, unspecified/combined).

	Repor	Reporting period (timeframe covered)										
	specif	Climate- specific amount										
Source of Finance	KES	USD	Status (Committe d or Disbursed)	Funding sources	Financial instrument (Grant, Concessional loan, Non- concessional loan, Equity, Other)	Focus of support (Mitigation Adaptation Cross- cutting, Other)	Sector	Additional information				
SUBTOTAL Public finance support												
Private finance mobilized												
TOTAL												

#### Section 2 – Technology Transfer and Capacity Building

This section should address technology and capacity building support received which was not received as financial support.

Reporting period (timeframe covered)										
Type of support [technology transfer or capacity building]	Support activity	Year(s) received	Status [ongoing, finalised]	Focus [mitigation, adaptation, unspecified]	Source of support					



(r. 38(1))

### **VERIFICATION REPORT**

A verification report shall contain the following:

- 1. Details of the person requesting the verification;
- 2. Information on whether the verification relates to greenhouse gas, mitigation actions, adaptation actions or climate change enablers;
- 3. A positive or negative opinion of the Directorate;
- 4. Details of non-compliance, where applicable;
- 5. Details of any mis-statements or non-conformities, where applicable;
- 6. Any data gaps, where applicable; and,
- 7. Recommended improvements and conditions of approval.

