TENTATIVE AGENDA STATE OF TENNESSEE REGULAR MEETING AIR POLLUTION CONTROL BOARD Nashville Room, 3rd Floor Tennessee Tower 312 Rosa L. Parks Avenue In Person and Remote Access Via WebEx link

Wednesday, January 10, 2024 9:30 A.M.

******Public Comments**: If you wish to speak on topic(s) shown here, please print your name on the Sign-In Sheet provided at the guest table or type your name into the Webex chat box. Someone will recognize you during the meeting for comments or questions. *********

	Item	Presenter	Page
1.	Elect Vice-Chair for 2024		
2.	Roll Call		
3.	Approval of the November 08, 2023, Board Meeting Minutes		2
4.	Conflict of Interest 2024	OGC	7
5.	Eastman Chemical Variance BO# 24-001	Chelsea Materi	13
	Comments from the Public or Online participants		
	General Business: 1. TVERS Update- GHG Inventory	Michelle Oakes	15
	Comments from the Public or Online Participants		

Air Pollution Control Board of the State of Tennessee Regular Meeting

On Wednesday November 08, 2023, at 9:36 A.M., the Air Pollution Control Board of the State of Tennessee, (hereinafter, referred to as the "Board"), began its meeting on the 3rd Floor of the Tennessee Tower in the Nashville Room. The following Board members were physically present.

Dr. Ronne' Adkins Dr. John Benitez Mr. Mike Haverstick Dr. Shawn Hawkins Mr. Richard Holland Ms. Caitlyn Jennings Mayor Ken Moore Mr. Nicholas Ramos Ms. Amy Spann Mayor Larry Waters Mr. Jimmy West Mr. Stephen Moore

The following Board members joined the meeting via WebEx.

Dr. Joshua Fu Dr. Chunrong Jia

Since the Chairman, David Salyers, P.E., could not attend the meeting, Dr. Ronne' Adkins represented the Chairman by proxy. Ms. Michelle Owenby, Director, Division of Air Pollution Control, served as Technical Secretary.

Ms. Caitlyn Jennings joined the meeting at 9:38. Ms. Jennings was not present for the Roll Call nor Approval of the Minutes.

The Vice-Chairman, Mayor Larry Waters, called the meeting to order and asked for a roll call and the response was as follows:

Dr. Adkins	Present	Dr. Benitez	Present
Dr. Fu	Webex	Mr. Haverstick	Present
Dr. Hawkins	Present	Mr. Holland	Present
Ms. Jennings	Absent	Dr. Jia	Webex
Mayor Moore	Present	Mr. Moore	Present
Mr. Ramos	Present	Ms. Spann	Present
Mayor Waters	Present	Mr. West	Present

Eleven (11) Board members were present, two (2) participated via WebEx and one (1) was absent.

The next item on the agenda was the approval of the minutes from the October 11, 2023, Board meeting. The Vice-Chairman requested a motion to approve the minutes. Mayor Moore made a motion to approve the minutes and Mr. Stephen Moore seconded the motion. The Vice-Chairman asked if there were any additions or corrections to the minutes. Hearing none, the Vice-Chair asked for a roll call and the response was as follows:

Dr. Adkins	Yes	Dr. Benitez	Yes
Dr. Fu	Yes	Mr. Haverstick	Yes
Dr. Hawkins	Yes	Mr. Holland	Yes
Ms. Jennings	Absent	Dr. Jia	Yes
Mayor Moore	Yes	Mr. Moore	Yes
Mr. Ramos	Yes	Ms. Spann	Yes

Mayor WatersYesMr. WestYesThe motion carried with Thirteen (13) affirmative votes; the minutes were approved as
presented.

Mayor Waters then invited Mr. James Johnston to the podium. Mr. Johnston presented the Title V Workload Analysis Fiscal Year 2024-2025.

Title V related activities are projected to require 56.4 full-time equivalent (FTE) positions in fiscal year 2024-2025 (FY2025). This Implementation Plan consists of eleven (11) separate functional units within the Division, plus the Small Business Environmental Assistance Program1, which has various responsibilities and functions related to Title V. Briefly, these units are:

Administrative Services Director's Office Small Business Environmental Assistance Compliance Validation Enforcement Field Services Permitting Regulatory Development Emissions Inventory and Special Projects Ambient Monitoring Quality Control Ambient Monitoring Quality Assurance

The activities of each of these units are described in this Workload Analysis. Each functional unit has identified the portion of total workload that can be attributed to Title V activities. In addition to the activities described in this plan, support services are provided to the Division by other bureaus, divisions, and offices within TDEC and the Bureau of Environment (BOE). Each of the divisions and offices within TDEC are charged for these services in accordance with formulae established by TDEC and BOE. A portion of these TDEC General and Administrative (G&A) expenses are charged to Title V. Further descriptions of these support services are described in the section of this plan entitled "TDEC General and Administrative Expenses".

Mr. James Johnston invited Mary-Margaret Chandler to the podium.

Ms. Chandler, Business Administrator with Air Pollution Control, presented a brief update about TEDC general administrative expenses, pay for performance, and the market adjustments to reflect the increased projections.

Michael Lewis, TEDC OGC on behalf of the Department of Air Pollution Control, briefed members of DOHR's consult with Ernest and Young. E&Y provided a 3rd party comprehensive market study to bring the state of Tennessee salaries in line with the metrics from those studies.

The Vice-Chairman requested a motion to approve the Title V Workload Analysis BO-23-005. Dr. John Benitez made a motion to approve, and Dr. Shawn Hawkins seconded the motion.

The Vice-Chair asked for a Roll Call and the response was as follows:

Dr. Adkins	Yes	Dr. Benitez	
Dr. Fu	Yes	Mr. Haverstick	Yes
Dr. Hawkins	Yes	Mr. Holland	Yes
Ms. Jennings	Yes	Dr. Jia	Yes
Mayor Moore	Yes	Mr. Moore	Yes
Mr. Ramos	Yes	Ms. Spann	Yes
Mayor Waters	Yes	Mr. West	Yes

The motion carried with Fourteen (14) affirmative votes; Title V Workload Analysis BO-23-005 was approved.

Mayor Waters invited James Johnston to the podium.

Mr. James Johnston presented the Title V Program Funding Diversification, General Permit Fees, and Miscellaneous Fee Rule Revisions. Rule Chapter 1200-3-26-2023 Title V Amendment

The Vice-Chairman requested a motion to approve the Rule Chapter 1200-3-26-2023 Title V Amendment. Mayor Ken Moore made a motion to approve, and Dr. John Benitez seconded the motion.

The Vice-Chair asked for a Roll Call and the response was as follows:

Dr. Adkins	Yes	Dr. Benitez	Yes
Dr. Fu	Yes	Mr. Haverstick	Yes
Dr. Hawkins	Yes	Mr. Holland	Yes
Ms. Jennings	Yes	Dr. Jia	Yes
Mayor Moore	Yes	Mr. Moore	Yes

Mr. Ramos	Yes	Ms. Spann	Yes
Mayor Waters	Yes	Mr. West	Yes

The motion carried with Fourteen (14) affirmative votes; Rule Chapter 1200-3-26-2023 Title V Amendment was approved.

There being no further business to discuss before the Board, nor members of the public wishing to address the Board, the meeting was adjourned at 11:10 am.

(Signed) Michelle Owenby, Technical Secretary Tennessee Air Pollution Control Board

Approved at Nashville, Tennessee on ______

(Signed) Mayor Larry Waters, Vice-Chairman Tennessee Air Pollution Control Board

(Signed) David Salyers, Chairman Tennessee Air Pollution Control Board

TENNESSEE AIR POLLUTION CONTROL BOARD

Disclosure of Financial Interests or Other Potential Conflicts of Interest

Pursuant to the terms of Tenn. Code Ann. § 68-201-105(e) and Tenn. Comp. R. & Regs. 0400-30-17-.05(2), the undersigned member of the Air Pollution Control Board ("Board") discloses financial interests as of the date below that are or have the potential to become a conflict of interest (in terms of "significant portion of income") in handling a matter that may arise before the Board. The undersigned also discloses any other potential conflicts of interest (as of the date below) with regard to matters that may come before the Board.

<u>DIRECTIONS</u>: Check the appropriate response(s), provide any required explanation(s) in the lines below, and sign and date.

() The undersigned member has none of the financial interests listed below that are or could have the potential to be a conflict of interest.

() The undersigned member falls into one or more of the following financial categories that does or could pose a conflict of interest with a particular source because the member derives a "significant portion of income" from a particular source, as defined in rule 0400-30-17-.02(b).

Please identify all of the following which are applicable and in the space below identify the name of the source(s) in which there is financial interest. Note the exception for mutual funds and other diversified investments.*

() Receives 10% or more of gross personal income for a calendar year, including retirement benefits, consultant fees, and stock dividends, from persons subject to Division of Air Pollution Control permits or enforcement orders (or 50% or more of gross personal income for a calendar year if the recipient is over 60 years of age and receiving such portion pursuant to retirement, pension, or similar arrangement).

() Receives more than \$5,000 annually in investment income from a source. Said investment is limited to those that arise from the purchase of shares of stock in the source that were purchased on the open market and generally available to any person at that price.

() Receives more than \$100 annually due to a private investment made in a source. Said private investment is one where the purchase of stock or interest in a partnership was made directly with the source and such opportunity was not generally available to the public as a whole.

() Receives a salary in any amount from a source for services rendered.

() Sells or is about to sell property or equipment to a source. For the purposes of this part, equipment does not include consumer goods that are offered to the public at the same price offered to the source.

() Buys or is about to buy property or equipment from a source. For the purposes of this part, equipment does not include consumer goods that can be purchased by the public at the same price the source offered to the Technical Secretary or Board Member.

() Has taken out a loan from a source in any amount unless:

(i) The loan is from a financial institution whose deposits are insured by an entity of the federal government, or such loan is made in accordance with existing law and is made in the ordinary course of business. A loan is made in the ordinary course of business if the lender is in the business of making loans, and the loan bears the usual and customary interest rate of the lender for the category of loan involved is made on a basis which assures repayment, is evidenced by a written instrument, and is subject to a due date or amortization schedule;

(ii) The loan is secured by a recorded security interest in collateral, bears the usual and customary interest rate of the lender for the category of loan Involved, is made on a basis which assures repayment, is evidenced by a written instrument, and is subject to a due date or amortization schedule.

*For purpose of the categories above, income derived from mutual-fund payments, or from other diversified investments as to which the recipient does not know the identity of the primary sources of income, shall be considered part of the recipient's gross personal income but shall not be treated as income derived from persons subject to permits or enforcement orders under this rule division 0400-30 or rule division 1200-03 (i.e., shall not be treated as a "significant portion of income"). Tenn. Comp. R. & Regs. 0400-30-17-.02(b).

Name of Source(s): _____

() The undersigned has the following other potential conflicts of interest:

() The undersigned has no other potential conflicts of interest.

Signature of Board Member

Date

Please Print Name

TENNESSEE AIR POLLUTION CONTROL BOARD

Acknowledgement -

Policy of Ethics and Conflicts of Interest Rule

Pursuant to Tenn. Code Ann. § 68-201-105(e) and Tenn. Comp. R. & Regs. 0400-30-17-.05(2), the undersigned member of the Air Pollution Control Board ("Board") acknowledges that, as of the date below, he or she has read and understands all aspects of the Board's Policy of Ethics and the Avoidance of Conflicts of Interest rule, found at Tenn. Comp. R. & Regs. 0400-30-17-.05 (the "Rule"). The undersigned also states, as a condition to serving on the Board, that he or she is not in conflict with the conditions of the Rule.

Signature of Board Member

Please Print Name

Date

TENNESSEE AIR POLLUTION CONTROL BOARD

Board Member Determination - Representing the Public Interest

To enable the Air Pollution Control Board ("Board") to determine whether a majority of Board members "represent the public interest", as required by Tenn. Comp. R. & Regs. 0400-30-17-.02(1), the undersigned board member indicates whether, as of the date below, he or she "represents the public interest."*

<u>DIRECTIONS</u>: Check the appropriate response and sign and date below.

I do (_) / I do not (_):

Own a controlling interest in;

Have 5% or more of capital invested in;

Serve as an attorney for;

Act as a consultant for;

Serve as an officer or director of; or

Hold any other official or contractual relationship with :

- (1) Either a person subject to permits or enforcement orders under this rule division, 0400-30- or rule division 1200-03**; or
- (2) Any trade or business association of which such person is a member.

Signature of Board Member

Date

Please Print Name

*"Represent the public interest" means not owning a controlling interest in, having 5% or more of his or her capital invested in, serve as attorney for, act as a consultant for, serve as officer or director of, or hold any other official or contractual relationship with, either a person subject to permits or enforcement orders under this rule division, 0400-30 or rule division 1200-03, or a trade or business association of which such a person is a member. Tenn. Comp. R. & Regs. 0400-30-17-.02(2)(a)

**"Persons subject to permits or enforcement orders under this rule division, 0400-30 or rule division 1200-03" or a "source," as used in this chapter, includes any individual, corporation, partnership, or association who holds, is an applicant for, or is subject to any permit, or who is or may become subject to any enforcement order under this rule division, 0400-30 or rule division 1200-03, except that it does not include:

1. An individual who is or may become subject to an enforcement order by reason of his or her ownership or operation of a motor vehicle,

Any department or agency of a state, local, or regional government; or
Any individual who is involved in the program of an institute of higher learning whose duties do not include the institute's compliance with this rule division,
0400-30 or rule division 1200-03. Tenn. Comp. R. & Regs. 0400-30-17-.02(2)(c).

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION BUREAU OF ENVIRONMENT DIVISION OF AIR POLLUTION CONTROL

IN THE MATTER OF)
)
Eastman Chemical Company)
(82-0003))
)
Variance Request))

Order Number: 24-001

BOARD ORDER

The following matter came before the Tennessee Air Pollution Control Board on January 10, 2024.

On November 7, 2023, Eastman Chemical Company requested that the Technical Secretary renew an existing variance (Board Order 23-001, issued January 11, 2023) pursuant to Tennessee Code Annotated §68-201-118 from the applicability provisions of Tennessee Air Pollution Control Regulations 1200-03-20-.03 (Notice Required When Malfunction Occurs) for excess sulfur dioxide emissions.

This rule states that when an air contaminant source malfunctions in such a manner as to cause emissions in excess of an applicable standard or permit condition, the owner or operator must promptly notify the Technical Secretary of the malfunction within 24 hours and must provide a statement of all pertinent facts, including the estimated duration of the malfunction. The rule also requires the owner or operator to notify the Technical Secretary when the malfunction has been corrected. Notification is not required for:

- Violations of the visible emission standard (excluding visible emissions caused by hazardous air pollutants named in Chapter 1200-03-11) which occur for less than 20 minutes in one day (midnight to midnight); or
- Emissions from sources located in attainment and unclassified areas that are not designated as significantly impacting on a nonattainment area, provided that emissions in excess of the standards will not and do not occur over more than a 24-hour period (or will not recur over more than a 24-hour period) and no damage to property and or public health is anticipated.

Any malfunction that creates an imminent hazard to health must be reported by telephone immediately to the Division's Nashville office and to the State Civil Defense.

The variance request states that because Eastman's Tennessee Operations facility is located in an area classified as nonattainment for the sulfur dioxide National Ambient Air Quality Standard (NAAQS), the rule and related Title V Operating Permit conditions require prompt notification to the Technical Secretary on any event (malfunction or breakdown) that results in emissions of sulfur dioxide in excess of applicable emission standards. For facilities located in attainment areas, only excess emission events that occur for more than 24 hours (or recur over more than a 24-hour period) require notification. Due to the type of process, Eastman's Coal Gasification facility experiences several short-term events a year that result in excess sulfur dioxide emissions that require these notifications. Eastman believes these notifications serve no useful purpose and that the administrative burden for both Eastman and the Division should be relieved. Any such events will be reported in Eastman's Title V semiannual compliance reports.

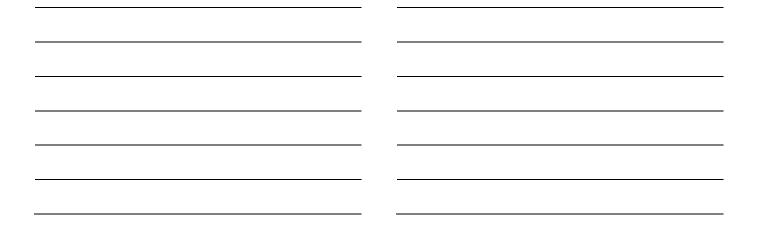
Rule 1200-03-20-.03 was adopted in 1979 and revised several times prior to the adoption of a final rule in 1994. Prior to the implementation of the Title V Operating Permit program in Tennessee, this rule ensured that excess emissions events would be reported to the Division.

Board Order #23-001 Variance Request for Eastman Chemical Company (82-0003) Page **2** of **2**

Because Title V Operating Permits require facilities to semiannually report all deviations from permit conditions, the requirements of 1200-03-20-.03 are made redundant. The Division believes that the notification requirements should remain for longer term malfunction events (greater than 24 hours), but requiring facilities in nonattainment areas to immediately report short-term exceedances places an unnecessary administrative burden upon the facility and the Division. The Technical Secretary supports the granting of this variance to Eastman Chemical Company, subject to the following stipulations:

- 1. During the time period of this variance, the notification requirements of Tennessee Air Pollution Control Regulations 1200-03-20-.03, and any permit condition implementing this regulation, shall not apply to malfunction events resulting in excess sulfur dioxide emissions, provided that:
 - (a) Such events do not and will not occur over more than a 24-hour period (or will not recur over more than a 24-hour period);
 - (b) No damage to property and or public health is anticipated; and
 - (c) This variance shall not apply to any malfunction event(s) at emission sources 82-0003-01 (B-83 and B-253 powerhouses), emission source 82-0003-131 (B-325 powerhouse), emission source 82-0003-282 (B-248-1 Solid/Liquid Chemical Waste Incinerators), emission source 82-0003-283 (B-248-2 Liquid Chemical Waste Incinerator), emission source 82-0003-168 (B-334-1 Tail Gas Incinerator), emission source 82-0003-171 (B-351-5 Cold and Warm Flares), and emission source 82-0003-224 (B-55-1 Organic Acids and Anhydrides Manufacturing, Vents B, C, E, I and K).
- 2. If notification is required for any malfunction event, prompt notification shall be provided by telephone to the Division's Nashville office within 24 hours of the malfunction. Any malfunction, regardless of duration, that creates an imminent hazard to health must be reported by telephone immediately to the Division's Nashville office and to the State Civil Defense.
- 3. This variance shall become effective on January 10, 2024.
- 4. This variance shall expire on January 9, 2025.

In consideration of the Technical Secretary's recommendation, the Board grants the Eastman Chemical Company variance request subject to the stipulations specified above. Entered and approved by the following Board Members on January 10, 2024.





Tennessee Volunteer Emission Reduction Strategy: Greenhouse Gas Inventory

Michelle Oakes, Ph.D. January 10, 2024



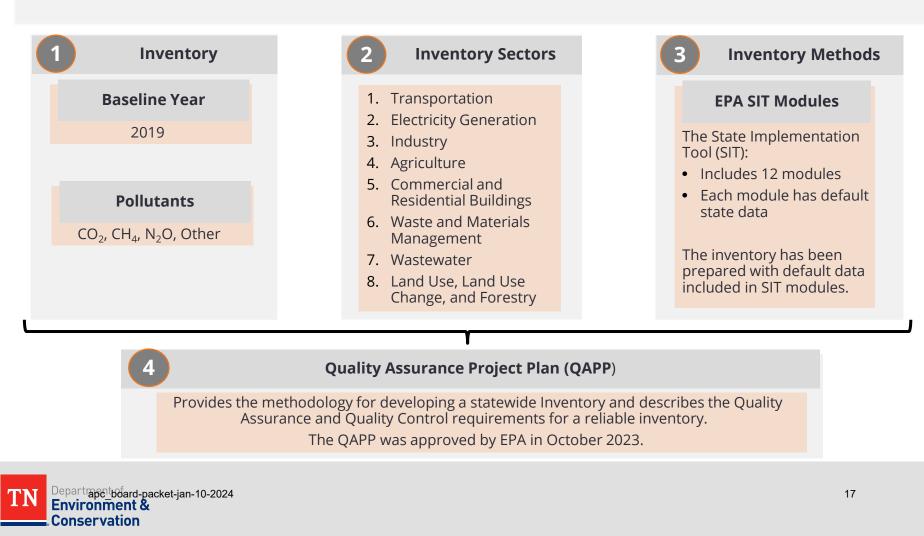
Tennessee Volunteer Emission Reduction Strategy Program

- Inventory Development
- Results
- Inventory Limitations & Potential Opportunities for Inventory Improvements



TN GHG Inventory Process

The development of Tennessee's Greenhouse Gas (GHG) Inventory was the first phase of this effort. The following steps were key components of TN's GHG Inventory development.



GHG Inventory QA/QC Procedures

- Rigorous QA/QC procedures resulted in greater accountability and defensibility with our inventory data.
- All QA/QC procedures were outlined in our Quality Assurance Project Plan (QAPP), which was approved by EPA prior to completing our inventory.
- Types of QA/QC
 - o Training/Education
 - Data Verification & Validation
 - Independent Error Checks
 - Independent Tool Simulations
 - Weekly Quality Assurance Audits
 - Corrective Actions
 - Data Management/Version control

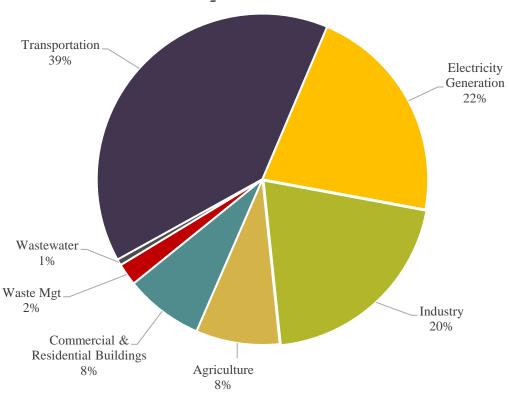


TN GHG Inventory Results

The TN GHG Inventory for 2019 indicates that **Transportation** is the highest sector, followed by **Electricity Generation** and **Industry**. The top 3 sectors account for 81% of total emissions.

Million Metric Tons CO ₂		
Sector	Total	
Transportation	44.2	
Electricity Generation	24.1	
Industry	22.9	
Agriculture	9.2	
Commercial & Residential Buildings	8.6	
Waste & Materials Management	2.4	
Wastewater	0.7	
Total Emissions	112.1	

Total emissions do not include carbon sinks. $CO_2e = carbon dioxide equivalents$

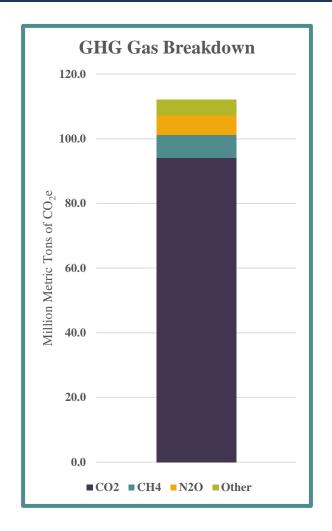


Sector CO₂e % of Total Emissions

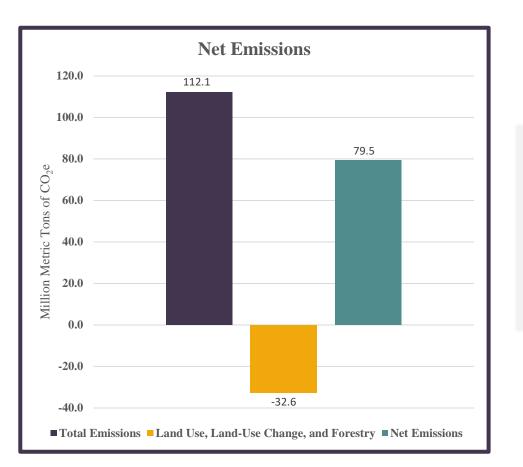
GHG Inventory Gas Breakdown

Million Metric Tons CO ₂ e (by GHG Gas)					
Sector	CO ₂	CH ₄	N ₂ O	Other	
Transportation	43.7	0.1	0.4	0.0	
Electricity Generation	24.0	0.0	0.1	0.0	
Industry	17.9	0.1	0.1	4.8	
Agriculture	0.2	3.6	5.4	0.0	
Commercial & Residential Buildings	8.5	0.1	0.0	0.0	
Waste & Materials Management	-0.2	2.7	0.0	0.0	
Wastewater	0.0	0.5	0.2	0.0	
Total Emissions	94.0	7.1	6.1	4.8	

- CO₂ emissions account for 84% of total emissions.
- Agriculture accounts for the majority of the methane (CH₄) & nitrous oxide (N₂O) emissions.
- Other emissions includes fluorinated gases (e.g., HFC, PFC, SF₆, and NF₃.)
- Industry accounts for the majority of the "other" emissions.



GHG Inventory Net Emissions



- Land use, Land-use Change, and Forestry (LULUCF) represent a carbon sink.
- LULUCF has a significant impact (–29% of the total emissions).
- Net emissions is 79.5 million metric tons CO2_{e} .

Limitations and Opportunities for Improvement

GHG Inventory Limitations

- Completed using default data in the EPA SIT modules.
- Approach may vary compared to other TN inventories (TVA Pathways, MSAs).
- Data only presented as state-level emission estimates.

Opportunity for Potential Inventory Improvement

- Integrating more customized/local input data may improve the inventory.
- Comparing to other inventories (TVA Pathways, MSAs) will inform us of certain data gaps.
- County-level emissions will provide more spatially-resolved information on where GHG emissions are located across TN.







tn.gov/environment/policy/tvers.html



tdec.tvers@tn.gov



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