![TheRide - Ann Arbor Area Transportation Authority]

Monitoring Report:
Environmental Sustainability (Policy 2.11)
Monitoring Period: Jan 2024- Dec 2024.

Service Committee Meeting Review Date: April 29th, 2025
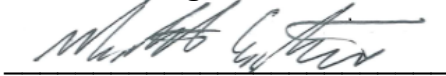**Board of Directors Meeting Review Date: May 15th, 2025**

INFORMATION TYPE
Monitoring

RECOMMENDED ACTION(S)
That the Board review this monitoring report and consider accepting it as: (A) a reasonable interpretation for **all** policy items and that the evidence demonstrates compliance with the interpretations. (B) a reasonable interpretation for all policy items and that the evidence demonstrates compliance with the interpretations, except for the CEO's stated non-compliance with item(s) x .x, which the Board acknowledges and accepts the proposed dates for compliance. (C) 1. For policy items x.x.x – there is evidence of compliance with a reasonable interpretation 2. For policy items x.x.x – the interpretation is not reasonable 3. For policy items x.x.x – the interpretation is reasonable, but the evidence does not demonstrate compliance 4. For policy items x.x.x – the Board acknowledges and accepts the CEO's stated non-compliance and the proposed dates for compliance

PRIOR RELEVANT BOARD ACTIONS & POLICIES
Monitoring Reports are a key Policy Governance tool to assess organizational/CEO performance in achieving Ends (1.0) within Executive Limitations (2.0). A Policy-Governance-consistent Monitoring Process is: 1. CEO sends Monitoring Report to all board members 2. At Board meeting, board accepts Monitoring Report through majority vote (or if not acceptable, determines next steps)

ISSUE SUMMARY
TheRide's Board of Directors establish policies that define what methods are unacceptable to use to achieve expected results, called Executive Limitations. This monitoring report provides the CEO's interpretations of those policies, evidence of achievement, and an assertion on compliance with the Board's written goals. As with

other monitoring reports, the Board decides whether the interpretations are reasonable, and the evidence is convincing.

Per Appendix A of the Board Policy Manual, this report was scheduled for monitoring in April and was submitted in May.

I certify that the information is true and complete, and I request that the Board accept this as indicating an acceptable level of compliance.

CEO's Signature	**Date**
_____	4/15/2025 _____

ATTACHMENTS
1. Monitoring report for Environmental Sustainability (Policy 2.11)

Table of Contents

POLICY TITLE: ENVIRONMENTAL SUSTAINABILITY	Page#	Compliance
2.11 The CEO will not cause or allow organizational practices or activities that are inconsistent with achieving environmental sustainability. Further, without limiting the scope of the above statement by the following list, the CEO shall not:	4	🟢
2.11.1. Operate without measures to minimize, reduce, and eliminate emissions including greenhouse gasses and air pollutants.	5	🟢
2.11.2. Allow organizational operations that are inconsistent with the achievement of carbon neutrality.	8	🟢
2.11.3. Operate without processes that minimize material and energy consumption and provide for proper disposal of waste.	11	🟢
2.11.4. Allow operations which do not minimize harmful local ecological impact.	13	🟢

🟢 Fully Compliant   🟡 Partially Compliant   🔴 Not Compliant

Preliminary CEO Interpretations and Evidence

2.11 The CEO will not cause or allow organizational practices or activities that are inconsistent with achieving environmental sustainability.

Degree of Compliance: Compliant

Interpretation

Operational Definition
I interpret this policy to mean that the agency will work towards reducing their carbon footprint, pollution and conserve resources to the extent possible without jeopardizing the fiscal health of the organization.

Measure/Standards & Achievement
The Board has fully defined sustainability in the policies below. Therefore, compliance with this policy will be achieved when all lower-level policies are compliant.

Rationale
This is reasonable because lower-level policies address all areas of environmental sustainability.

Evidence

Source of Data: Lower-level policies
Date of data review: 4/2/25 as verified by the Corporate Strategy and Performance Officer
Data
Lower-level policies are compliant; hence this policy is noted as compliant.

2.11.1. The CEO shall not…Operate without measures to minimize, reduce, and eliminate emissions including greenhouse gasses and air pollutants.

Degree of Compliance: Compliant

Interpretation

Operational definition
I interpret this policy to mean that the agency will establish interim targets and timelines to reduce and eventually eliminate greenhouse gases that are *directly* created by agency operations by 2045. Specifically, the agency will focus on methane, nitrous oxides and carbon dioxides. Carbon emissions are addressed in policy 2.11.2

Measure/Standards & Achievement
Compliance will be demonstrated when the following milestones for GHG emissions are met:

Monitoring year*	Milestones
2024	• Complete zero-low emissions fleet propulsion study.
2025	• Develop a reliable way of measuring emissions. Confirm baseline. • **Bus Fleet:** Establish interim targets & timeline for reducing emissions from the large bus fleet. Preceded by technical studies.
2026	• **Facilities:** Establish interim targets & timelines for reducing emissions from facilities. Preceded by technical studies.
2027	• **Paratransit:** Establish interim targets & timelines for reducing emissions from paratransit buses and all other vehicles. Preceded by technical studies.
2045	• Eliminate GHG emissions

*Timeline is dependent on adequate funding, staff capacity and timely technological advancement.

The use of these milestones to demonstrate compliance is temporary. Once studies are complete and all targets are established, compliance will be determined by using the tracking tool to demonstrate quantitative progress towards those targets. The tool primarily estimates emissions based on fossil fuel consumption.

A table illustrating the growing number of quantitative targets is below:

Monitoring year	GHG emission targets in tons		
	Fleet Targets	Facilities	Paratransit
2025 (baseline)	Baseline: 　　Methane: 0.038 　　Nitrous oxides: 0.171	TBD, pending studies	TBD, pending studies
2030	-10% 　　Methane: 0.034 　　Nitrous oxides: 0.154		
2035	-40% 　　Methane: 0.023 　　Nitrous Oxides 0.102		
2040	-80% 　　Methane: 0.008 　　Nitrous Oxides: 0.034		
2045	-100% 　　Methane: 0 tons 　　Nitrous Oxides: 0 tons		

*Projections are dependent on adequate funding, staff capacity and timely technological advancement.

Rationale

These definitions and interim milestones are reasonable because:

A. Eliminating emissions is a long-term exercise with considerable risks and opportunity costs. It is reasonable to conduct technical studies that will help establish aggressive but realistic targets and timelines. Without such technical review, targets could become politically driven rather than policy driven. We are intentionally focusing on the outcome (emissions) as a means to demonstrate progress rather than staff activities.

B. Once technical studies have informed the establishment of quantitative targets and timelines, demonstration of compliance will shift to using the emissions tracking tool to estimate progress toward those targets. Further study of targets is not anticipated.

C. 2025: Having an in-house emissions tracking tool will allow us to track our progress over time. It also allows us to establish baseline data (2024). Establishing targets for the bus fleet first is reasonable as they are likely the largest source of emissions.

D. 2026-2027: Having separate plans for each functional area is reasonable because they are technologically distinct and will require different solutions and likely different funding solutions. Having interim targets is reasonable because it will take many years to fully eliminate emissions, and progress will need to be demonstrated in the intervening period. Staggering the planning work over a few years is necessary due to staff capacity limits.

E. 2045 is a reasonable target for final elimination of all emissions because, with 12–14-year lifespans, the bus fleet will likely be the last part of the agency to complete the transition. Our current plans sees the last hybrid buses (electric/diesel) purchased about 2031 and aging out of the fleet by 2045. We plan to replace diesel

buses, with hybrid, and then hydrogen fuel-cell buses. We believe all facilities and other vehicles can be transitioned within that timeframe.

F. The agency tracks methane, carbon dioxide (policy 2.11.2) and nitrous oxides. This is reasonable because they make up 97% of all greenhouse emissions. Other greenhouse gases make up a smaller amount of overall emissions and are harder to track as they are based on more complex situations. For example, particulate emissions result from incomplete combustion, while hydrofluorocarbon (HFC) emissions stem from leaking refrigerants. Tracking these emissions would be cost-prohibitive and offer minimal benefit, as they contribute to about 3% of total emissions.

Evidence

Source of Data: Fuel consumption data and EPA emission factors.
Date of data review: 3/13/2025 as verified by the Corporate Strategy & Performance Officer, and Manager of Fleet.
Data
The two targets for 2025 are as follows.

1. **Emissions tracker.** The organization has developed its own in-house model for calculating GHG emissions based on EPA guidance.
2. **Bus fleet targets & timelines:** Targets and timelines for reducing GHG emissions from the bus fleet are provided in the table below. Facility and other fleet data will be added in future years.

	Emissions in tons		Target achieved Y/N
	Bus Target	**Actual emissions**	
2025 (baseline)	Methane: 0.038 Nitrous oxides: 0.171	Methane: 0.04 Nitrous oxide 0.171	Yes, baseline established
2030	Methane: 0.034 Nitrous Oxides 0.154	TBD	TBD
2035	Methane: 0.023 Nitrous Oxides 0.102	TBD	TBD
2040	Methane: 0.008 Nitrous Oxides 0.034	TBD	TBD
2045	Zero GHG emissions	TBD	TBD

*Projections are dependent on adequate funding, staff capacity and timely technological advancement.

2.11.2. The CEO shall not…Allow organizational operations that are inconsistent with the achievement of carbon neutrality.

Degree of Compliance: Compliant

Interpretation

Operational definition
I interpret this policy to mean that the agency will establish interim targets and timelines to reduce and eventually eliminate carbon emissions *directly* created by agency operations by 2045.

Measure/Standards & Achievement
Compliance will be demonstrated when the following milestones are met in the following timelines:

Monitoring year*	Milestones
2024	• Complete zero-low emissions fleet propulsion study.
2025	• Develop a reliable way of measuring carbon emissions. Confirm baseline. • **Bus Fleet:** Establish interim targets & timeline for reducing carbon emissions from the large bus fleet. Preceded by technical studies.
2026	• **Facilities:** Establish interim targets & timelines for reducing carbon emissions from facilities. Preceded by technical studies.
2027	• **Paratransit:** Establish interim targets & timelines for reducing carbon emissions from paratransit buses and all other vehicles. Preceded by technical studies.
2045	• Eliminate carbon emissions

*Timeline is dependent on adequate funding, staff capacity and timely technological advancement.

The use of these milestones to demonstrate compliance is temporary. Once studies are complete and targets are established, compliance will be determined by using the tracking tool to demonstrate quantitative progress towards those targets. The following table illustrates the growing number of quantitative targets:

Monitoring year*	Carbon emission targets		
	Fleet	Facilities	Paratransit
2025 (baseline)	8,462 tons	TBD, pending studies	TBD, pending studies
2030	7,616 tons (-10% from baseline)		
2035	5,077 tons (-40%)		
2040	1,692 tons (-80%)		
2045	0 tons (-100%)		

*Projections are dependent on adequate funding, staff capacity and timely technological advancement.

Rationale

These definitions and interim milestones are reasonable because:

A. Eliminating emissions is a long-term exercise with considerable risks and opportunity costs. It is reasonable to conduct technical studies that will help establish aggressive but realistic targets and timelines. Without such technical review, targets could become politically driven rather than policy driven. We are intentionally focusing on the outcome (emissions) as a means to demonstrate progress rather than staff activities.

B. Once technical studies have informed the establishment of quantitative targets and timelines, demonstration of compliance will shift to using the emissions tracking tool to estimate progress toward those targets. Further study of targets is not anticipated.

C. 2025: Having an in-house emissions tracking tool will allow us to track our progress over time. It also allows us to establish baseline data (2024). Establishing targets for the bus fleet first is reasonable as they are likely the largest source of emissions.

D. 2026-2027: Having separate plans for each functional area is reasonable because they are technologically distinct and will require different solutions and likely different funding solutions. Having interim targets is reasonable because it will take many years to fully eliminate emissions, and progress will need to be demonstrated in the intervening period. Staggering the planning work over a few years is necessary due to staff capacity limits.

E. 2045 is a reasonable target for final elimination of all emissions because, with 12–14-year lifespans, the bus fleet will likely be the last element to complete the transition. Our current plan sees hybrid buses (electric/diesel) purchased about 2031 as aging out of the fleet by 2045. We plan to replace diesel buses, with hybrid, and then hydrogen fuel-cell buses. We believe all facilities and other vehicles can be transitioned within that timeframe.

Evidence

Source of Data: Fuel consumption data, EPA emission factors.
Date of data review: 3/13/2025 as verified by the Corporate Strategy & Performance Officer, Manager of Fleet and Manager of Facilities.

Data

The two targets for 2025 are as follows.
1. **Tracking emissions:** The organization has developed its own in-house model for calculating carbon dioxide emissions based on EPA guidance.
2. **Fleet emissions:** The results for 2025 baseline calculations and targets are provided below. Facility and other fleet data will be added in future years.

	Carbon emissions		Target achieved Y/N
	Bus Target	**Actual emissions**	
2025 (baseline)	8,462 tons	8,462	Yes, baseline established
2030	7,616 tons (-10%)	TBD	TBD
2035	5,077 tons (-40%)	TBD	TBD
2040	1,692 tons (-80%)	TBD	TBD
2045	0 tons (-100%)	TBD	TBD

*Projections are dependent on adequate funding, staff capacity and timely technological advancement.

2.11.3. The CEO shall not… Operate without processes that minimize material and energy consumption and provide for proper disposal of waste.

Degree of Compliance: Compliant

Interpretation

Operational definition

I interpret this policy to mean that the agency will 1) reduce material use and disposal to the lowest practical levels, 2) ensure material is disposed of according to relevant environmental regulations, and 3) energy use is reduced to the lowest practical level.

Measure/Standards, Achievement.

Compliance will be demonstrated when

    A. Waste is disposed of in accordance with city guidelines, and

    B. The following targets are met in the timeline below.

Monitoring Year	Targets
2027	• **Energy consumption** Establish interim targets, optimum operating thresholds & timelines for reducing energy consumption. Preceded by technical studies.
2028	• **Waste and material:** Establish interim targets, optimum operating thresholds & timelines for reducing waste and material. Preceded by technical studies.
2029-45	• Reduce waste, material, energy consumption in line with projections until a minimum operating threshold is achieved

Rationale

    A. Relying on city standards for disposal is reasonable as the city has protocols by which all kinds of waste (physical, biological, recyclable etc.,) should be properly disposed. Complying with those standards represents policy compliance.

    B. The agency will *always* need to consume some amount material and energy in order to deliver its mission. These consumables can be reduced to a minimum (defined by technology and affordability) beyond which further reductions will impact the organization's ability to deliver its mission. We expect to see initial reductions and then a plateau where additional reductions become cost-prohibitive until new technologies emerge, or additional resources appear. They will never reach zero. For example, we have already replaced most older light builds with LEDs, but those still require electricity. Establishing baseline consumption data and targets for future reductions will demonstrate progress toward the goal of the policy. Studies to help quantify current baselines and

realistic targets. Given the complexity and resources required, these studies are staggered.

Evidence
Source of Data: Waste management records **Date of data review:** 3/13/2025 by Manager of Facilities **Data** During the monitoring period there were no records indicating that any guidelines for waste disposal were violated. Disposal was done in-line with regulations and guidelines.

2.11.4: The CEO shall not…Allow operations which do not minimize harmful local ecological impact.

Degree of Compliance: Compliant

Interpretation

Operational Definition
I interpret this policy to mean that agency operations will be conducted in a way that maintains biodiversity of the immediate non-human environment near transit operations. More specifically, to ensure that water runs off and fluid discharges are contained and cleaned up per legal requirements.

Measure/Standards & Achievement
Compliance with this policy will be demonstrated when:
A) A review of records by the State (occurs every three years) finds zero unresolved violations of the Storm Water Pollution Prevention Plan.
B) Annual reviews of monthly, quarterly, and annual inspection records for the underground tank systems demonstrate that there are no signs of leaks, and that any issues are resolved, and sufficient to pass periodic State inspections with no unresolved violation.
C) Construction activities include appropriate steps to minimize fluid impacts and comply with relevant laws. Outside approvals for planned new facilities confirm that 1) the plans conform to all existing environmental laws particularly regarding water runoff, and 2) cost/benefit assessments are made for additional mitigations (decisions are made on a case-by-case basis and depending on affordability).
D) Procedures, training, and equipment are in place to respond to any fluid leak from a vehicle, whether in the garage or on the road.

Rationale:
A) The focus on water and fluid discharges is reasonable because these are the primary ways in which facilities and vehicles could harm the immediate environment. Highest risk. Gaseous emissions are addressed in other policies.
B) Absence of unresolved violations of the Storm Water Pollution Prevention Plan is a reasonable measure because it covers proper management of all surface fluid runoff and discharges (gas, diesel, and water) at the garage property (2700 S Industrial Hwy). The Plan and its contents are required by State law because the facility has a retention pond. State agencies conduct periodic inspections against engineering standards. The three-year period is reasonable because the garage facility does not change much, and inspectors review records since the previous inspection so violations can be retroactive. All other facilities are hooked up to sewer systems and are addressed by leaks from bus fuel tanks.

C) Inspection of records of underground tanks is reasonable because these are engineering standards required by State law which are periodically checked by State agents. The records include daily monitoring of sensors that continuously monitor the tanks for signs of leaks.
D) Construction activities require additional measures that are outlined in codes.
E) Being prepared allows the agency to respond accordingly should any leak happen. Fuel tanks, like any other mechanism, can fail unexpectedly.

Evidence

Source of Data: State review feedback, storm water plans, agency inspection records, YTC records, compliance with building codes

Date of data review: 03/22/2025 as verified by the Facilities Manager and the DCEO, Planning

Data

A. The last Storm Water Pollution Prevention Plan state review was conducted in Feb 2022 and there were no records of unresolved violations. The next is expected in 2025.
B. A review of facility inspections indicates that underground tanks were in compliance with State guidelines -including being leak-free.
C. During the monitoring period, plans for the new YTC building included a review of environmental factors. Options will be discussed starting May 2025.
D. During the monitoring period staff was trained and adequate equipment was available to respond to any potential vehicle leakages.

Guidance on Determining "Reasonableness" of CEO Interpretations

Are the interpretations reasonable?
An interpretation is reasonable if the following are provided,
1. a measure or standard,
2. a defensible rationale for the measure or standard,
3. a level of achievement necessary to achieve compliance and
4. a rationale for the level of achievement.
Is evidence verifiable?
Evidence is verifiable if there is.
1. actual measurement/data,
2. the source of data and
3. the date when data was collected is provided.

CEO Notes: (If Applicable)

Board's Conclusion on Monitoring Report

Board's conclusion after monitoring the report.
Following the Board's review and discussion with the CEO, the Board finds the CEO:

(A) a reasonable interpretation for all policy items and that the evidence demonstrates compliance with the interpretations.