

# AIRPORTS MOU WG3 DRAFT AQIP - ONT

July 18, 2019



# The AQIP

- The Air Quality Improvement Plan (AQIP) consists of the following items:
  - *Baseline emissions (2017)*
  - *Projected, business-as-usual emissions for 2023 and 2031*
  - *Reduction measures to be put in place to reduce air emissions compared to business-as-usual*



# Emissions Calculations

- Includes sources for which reduction measures have been proposed.
- Emissions from the following sources were quantified in the AQIP
  - *Airside:*
    - Ground Support Equipment (GSE)
    - Fuel Trucks
    - Fire Station Equipment
  - *Landside*
    - OIAA and Maintenance Fleet Vehicles
    - Delivery Trucks
    - Passenger Vehicles



# Reduction Measures

- The AQIP includes a set of emission reduction measures that will result in lower emissions compared to business-as-usual levels.
- Two main type of reduction measures:
  - *Measures that contain concrete requirements or goals that result in quantifiable emission reductions*
  - *Initiatives that provide infrastructure, incentives, or other tools that promote emissions reductions, but do not contain requirements*



# Reduction Measures and Initiatives

- Reduction Measures included in the ONT Draft AQIP
  - *Ground Support Equipment (GSE) Fleetwide NOx Emission Factor Requirement*
  - *Fuel Truck Operation Policy*
  - *Crash Truck Replacement*
  - *OIAA Vehicle Fleet Policy*
  - *Maintenance Truck Fleet Reduction*
  - *Consolidated Airside Delivery (Sally Port)*
  - *Construction Equipment Tier-4 Engine Requirements*
- Initiatives included in the ONT Draft AQIP
  - *CalGreen and LEED Silver Requirements*
  - *Electric Vehicle Charging Infrastructure for Passenger Vehicles*



# Reduction Measure 1

- Ground Support Equipment (GSE) Fleetwide NOx Emission Factor Requirement:
  - *ONT will establish and implement a GSE policy that will promote the use of newer, cleaner equipment*
  - *Reduction measure effectiveness will be quantified by the reduction in overall fleet average NOx emission factor*
  - *The following approaches can be used to reduce overall NOx fleet average:*
    - Replacing/repowering old equipment with newer, cleaner equipment and engines
    - Replacing traditional-fueled equipment with alternative fuel equipment
    - Replacing equipment with combustion engine with electric equipment
  - *Exact GSE calculations and emission factor targets are under review at this time.*

# Reduction Measure 2

- Fuel Truck Operation Policy

- *ONT plans to develop a second jet fuel loading rack located on the south side of the air operations air area, which will result in:*
  - Reduction of vehicle miles traveled by fuel trucks
  - Reduction in the time required per delivery to the south side of airfield
- *The location, layout, and capacity of the proposed second loading rack has not yet been determined. The emission reductions will be quantified as part of the AQIP annual reporting once plans have been finalized*



# Reduction Measure 3

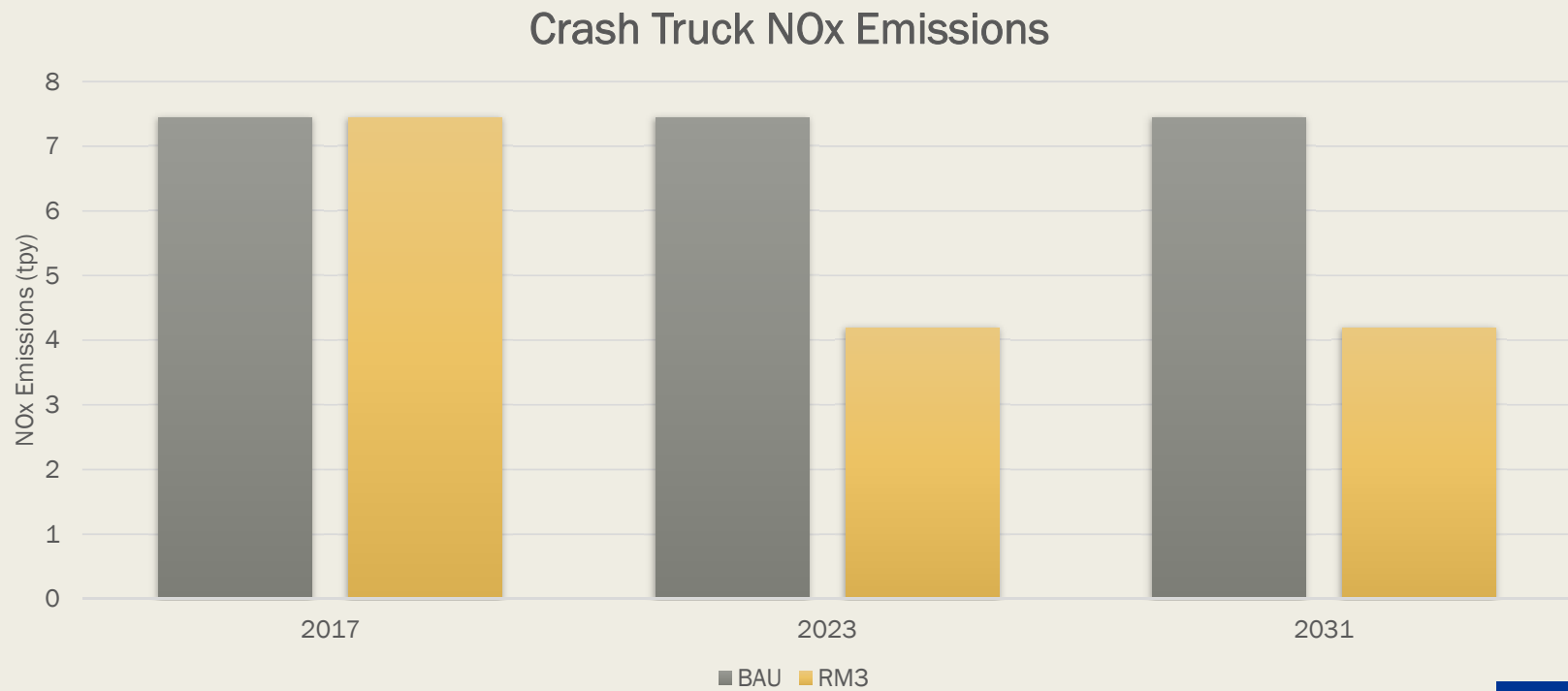
## ■ Crash Truck Replacement

- *ONT and Ontario Fire Department propose to implement a policy to ensure that upon replacement of heavy-duty diesel emergency vehicles, the replacement vehicle has Tier 4 or cleanest available engine*
- *OFD plans to replace 7 of the existing 12 vehicles at fire station 10 before 2023*
- *The replacement is expected to result in 44% reduction of NOx emissions*





# Reduction Measure 3



# Reduction Measure 4

- OIAA Vehicle Fleet Policy

- *OIAA fleet consists of gasoline and natural gas-fueled vehicles*
- *OIAA will implement a policy where leased vehicles will be turned over every three years*
- *OIAA will look to purchase/lease additional CNG vehicles, and will look to incorporate electric vehicles into its fleet*
- *OIAA proposes to install electric vehicle charging stations in the Administration Building parking lot*



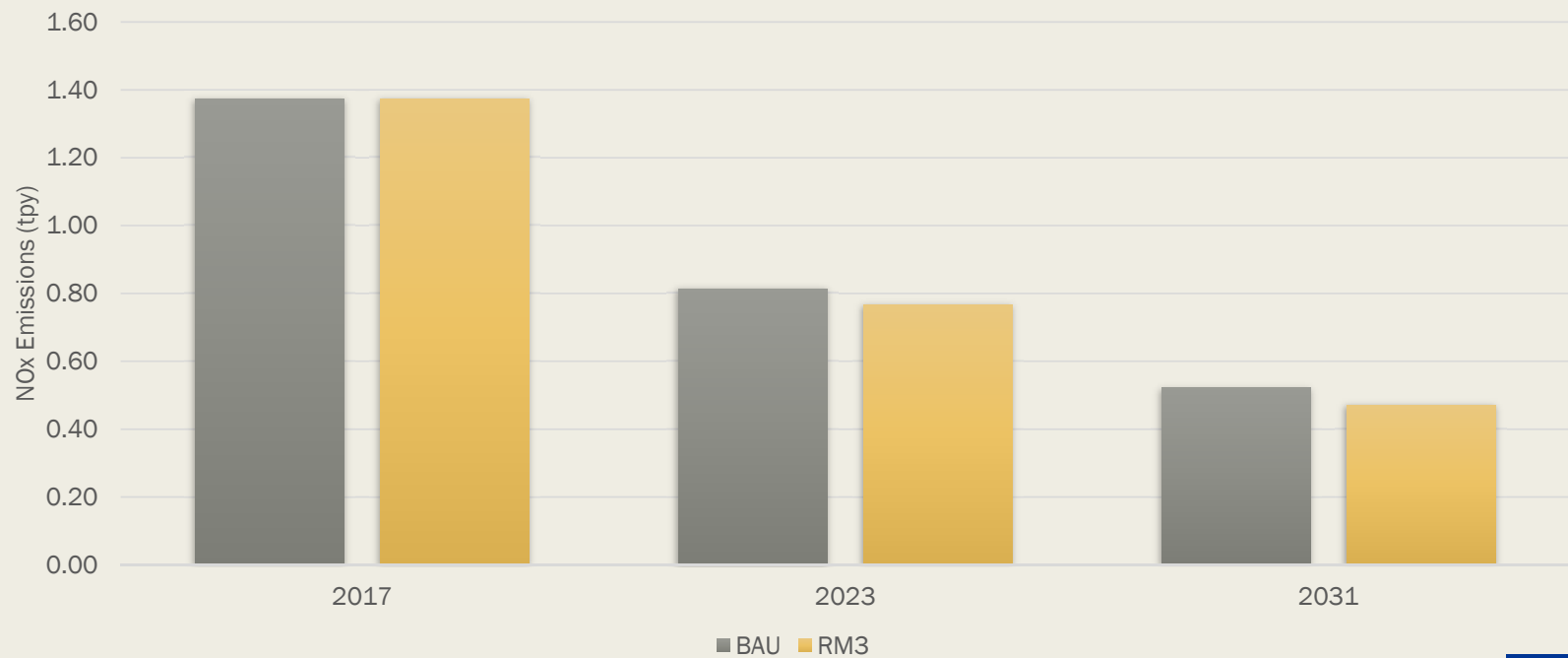
# Reduction Measure 5

- Maintenance Truck Fleet Reduction
  - *As part of this reduction measure, OIAA has begun reducing the size of their maintenance fleet as well as eliminating aging vehicles*
  - *ONT maintenance contractors have begun replacing aging trucks*
  - *Under this reduction measure, maintenance contractors will continue to replace aging vehicles with newer model years*



# Reduction Measure 4 and 5

## OIAA and Maintenance Contractor Fleet NOx Emissions



# Reduction Measure 6

- Consolidated Airside Delivery (Sally Port)
  - *ONT plans to construct and operate a Sally Port*
  - *The use of Sally Port in lieu of the terminal loading docks will result in reduction of emissions from delivery trucks by:*
    - Reducing required stops per trip and wait time per stop
    - Reducing the number of trips
  - *ONT plans to execute final-mile delivery within AOA using electric vehicles*
  - *The location, layout, and capacity of the Sally Port are under development. The emission reductions will be quantified as part of the AQIP annual reporting once plans have been finalized*



# Reduction Measure 7

- Construction Equipment Tier-4 Engine Requirements
  - *ONT will require construction contractors to utilize Tier 4 Final equipment*
  - *The policy will be achieved by including a requirement in project specification and contractor language*
  - *This policy will result in reduction of NOx and PM emissions from construction activities*



# Initiative 8

- CalGreen and LEED Silver Requirements
  - *Future structures constructed on airport property will meet the Title 24 standards for non-residential buildings*
  - *New buildings will meet LEED silver requirements*
  - *This measure will be implemented during the design phase of future projects*
  - *Meeting CalGreen standards will result in a net reduction in regional emissions*



# Initiative 9

- Electric Vehicle Charging Infrastructure for Passenger Vehicles
  - *EV chargers are available in ONT Parking LOTS 2 and 4*
  - *ONT plans to expand its electrical vehicle charging capacity to promote the use of zero emission vehicles.*
  - *Potential plans for EV infrastructure will be developed and implemented over the course of this AQIP*





# Process of Approval by OIAA

- Draft AQIP document submitted to the OIAA and other stakeholders for review.
- Draft AQIP submitted to SCAQMD and released to public as part of Airport MOU WG#3
- Comments incorporated into Final AQIP
- Final AQIP and Final MOU submitted to OIAA Board for discussion and approval at monthly Commission Meeting
- After OIAA Board approval, Final MOU and AQIP submitted to SCAQMD.

