

# OTC SAS Committee Update

## OTC/MANEVU Stakeholders Meeting

### September 21, 2023

## Stationary and Area Sources Committee

Chair, Frank Steitz, New Jersey DEP



# OZONE TRANSPORT COMMISSION

# Presentation Overview

## **SAS 2023 Charge**

- ✓ Assessing Source Emissions Inventory
- ✓ Provide Technical Support on Individual Sectors
- ✓ Cross-Committee Collaboration
- ✓ Office of Air Quality Planning and Standards (OAQPS) Engagement

## **Additional Focus Areas**

- ✓ Employ available emission inventory estimates to research and analyze additional strategies that reduce stationary and area source emissions in a cost-effective manner

# Assessing Source Emissions Inventory

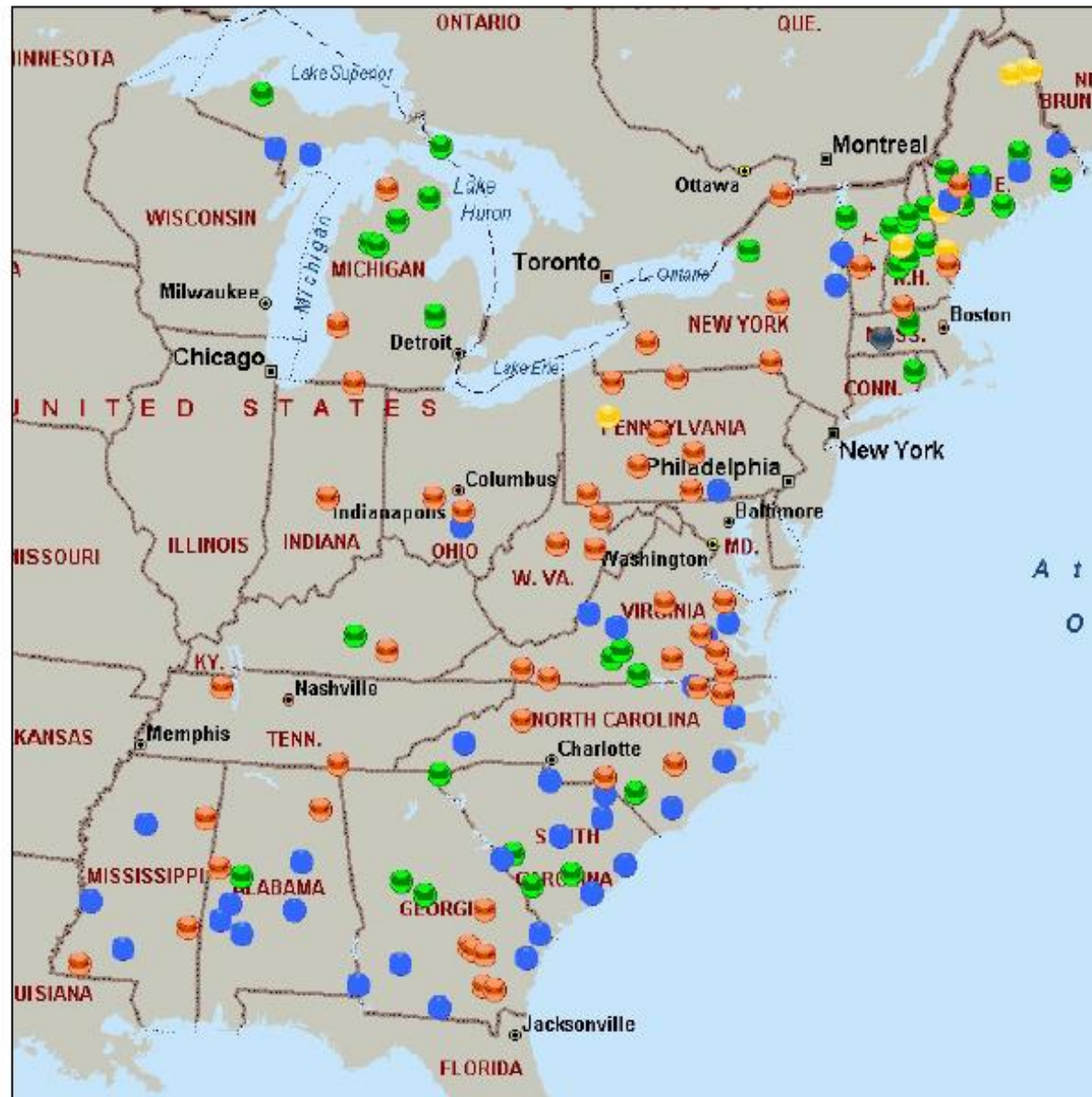
## Update:

- Making recommendations on how to improve emissions estimates for VOC emissions from natural gas boilers, NOx emissions from IC engines, and VOC emissions from consumer products.
- The recommendations will be sent to the directors in October.
- The workgroup will begin work on the list of regional or localized control strategies after recommendations on the NEI inventory have been sent to the directors.

# ICI Wood Boiler Inventory

- The workgroup is developing conclusions and next steps based on emissions inventory work.
- These will be discussed with the SAS Committee and the directors this fall.

# ICI Wood Boiler Inventory



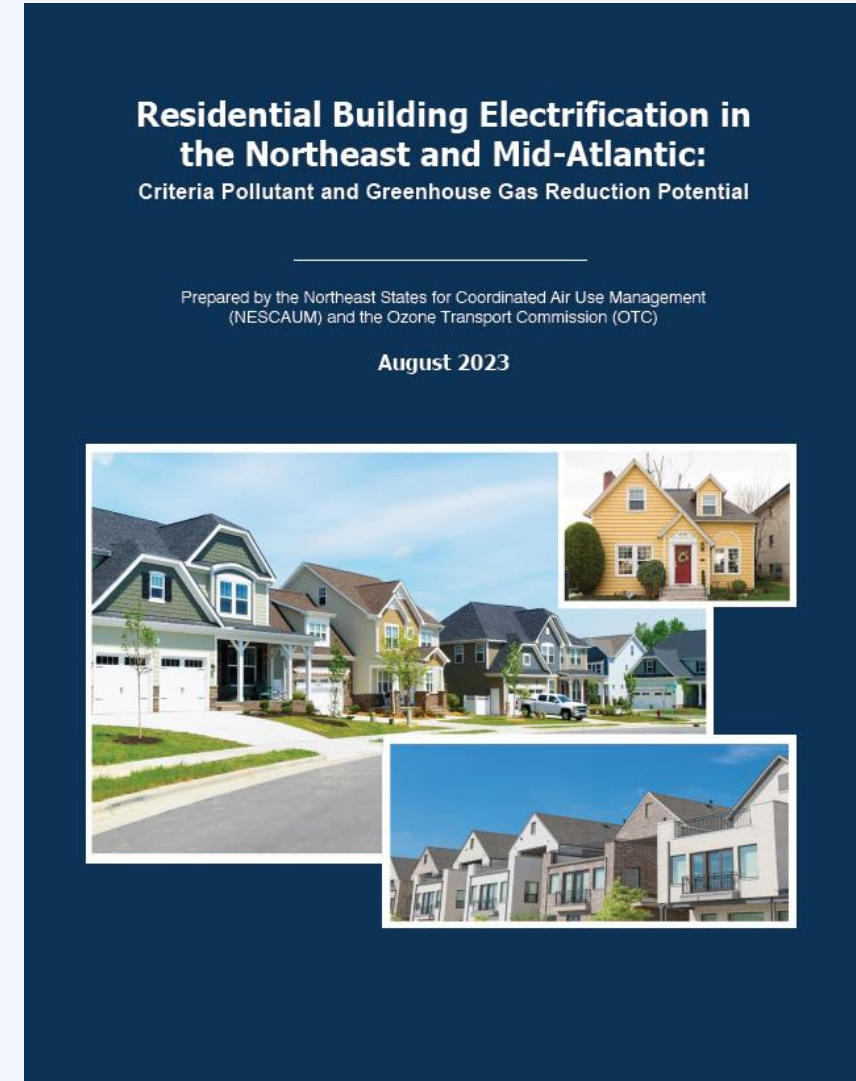
- Workgroup developed an emissions inventory for:
  - Biomass Power
  - Pellet plants
  - Paper mills
  - Forest products/sawmills
  - Building heat (thermal)
- Calculated low, high, and average estimates based on fuel use data
- Completed analysis of impacts by sector and will provide to SAS for review at next meeting
- Preparing recommendations for next steps
  - Move forward with detailed inventory
  - Request assistance from the Modeling Committee
  - Refer to MANEVU

# ICI Wood Boiler Status

- Preliminary Analysis
  - Inside the OTR, emissions range from 3 – 28 tons per ozone season day.
  - Outside the OTR, emissions range from 17 – 473 tons per ozone season day.
- Next Steps
  - Finalize inventory for inside and outside the OTR.
  - Identify sectors where emissions will be sufficiently addressed via Good Neighbor SIP.
  - Assess best practices for sources where SCR is not an option.

# Residential Building Electrification

- Final report on residential building electrification posted on the OTC website.
- Results are provided for three electrification scenarios:
  - Water heating
  - Space heating
  - Whole home electrification



# Whole Home Electrification Scenario – Potential NOx Reductions in the OTR

- Assumes all residential buildings/units converted to electric.
- Estimated annual and ozone season NOx reductions shown.
- Uses current grid emissions for “net” case.
  - a cleaner grid scenario is also presented in the report

	On-site NOx (Tons Reduced)	Net-Current Grid NOx (Tons Reduced)	Ozone Season NOx (Tons Reduced)
OTR	108,326	103,087	16,249



# Cross Committee Collaboration

## **Update/Next Steps:**

- Will schedule joint SAS and Modeling Committee call to discuss:
  - ICI wood boiler inventory;
  - Update of models and modeling of top control strategies;
  - Results for residential building electrification study.
- Will schedule joint SAS and MANEVU TSC call to discuss wintertime nitrates.

# Office of Air Quality Planning and Standards (OAQPS) Engagement



## Update:

- Will engage EPA this fall to discuss RACT and Control Measures Tool and other items of mutual interest.

**Thank You!**

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**OZONE TRANSPORT COMMISSION**