

**Dryden**  
**2045**

# Dryden Comprehensive Plan Update

Climate Action Plan Strategy Review and Discussion

April 29, 2021

# New York Energy Policy



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- Reforming the Energy Vision (REV) is Governor Andrew Cuomo's strategy to build a clean, resilient and affordable energy system for all New Yorkers
- Clean Energy Standard: 70% renewable energy by 2030
- Clean Energy Fund (CEF)
  - 10-year, \$5 billion funding commitment
- Climate Leadership and Community Protection Act
  - 40% reduction in emissions from 1990 levels by 2030
  - 85% reduction and "net zero" emissions by 2050
  - 100% of electricity from renewable sources by 2040
  - 9,000 MW of offshore wind by 2035
  - 6,000 MW of solar PV by 2025
  - 3,000 MW of energy storage by 2030
  - 185 trillion BTUs reduction in energy consumption by 2025

**70%**  
**renewable**  
**energy by**  
**2030**

**Green New Deal #GND**

# Main Sources of Greenhouse Gases in NYS



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TRANSPORTATION

36%



BUILDINGS

30%



ELECTRICITY  
GENERATION

15%



WASTE

7%



REFRIGERANTS

5%



AGRICULTURE

4%

# New York's Climate Commitment

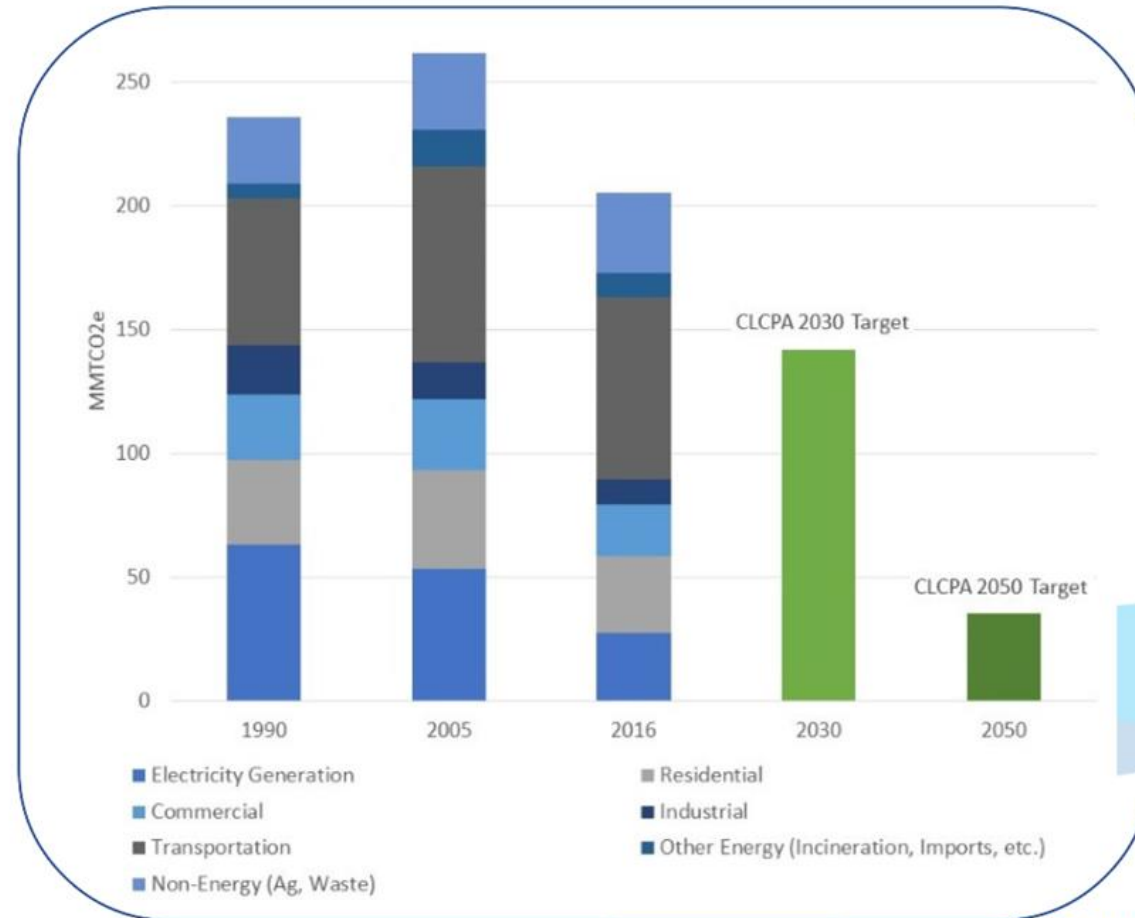


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The state achieved a **13% reduction** in overall GHG between 1990 and 2016, but in that timeframe, transportation GHG increased by 25%.

The CLCPA targets GHG reductions of

- **40% below 1990 levels by 2030**
- **at least 85% below 1990 levels by 2050**



Data source: NYS GHG Inventory: 1990-2016, NYSERDA (2019)

CADMUS

# New York System Energy Mix



# Dryden 2045



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## Real-Time Fuel Mix

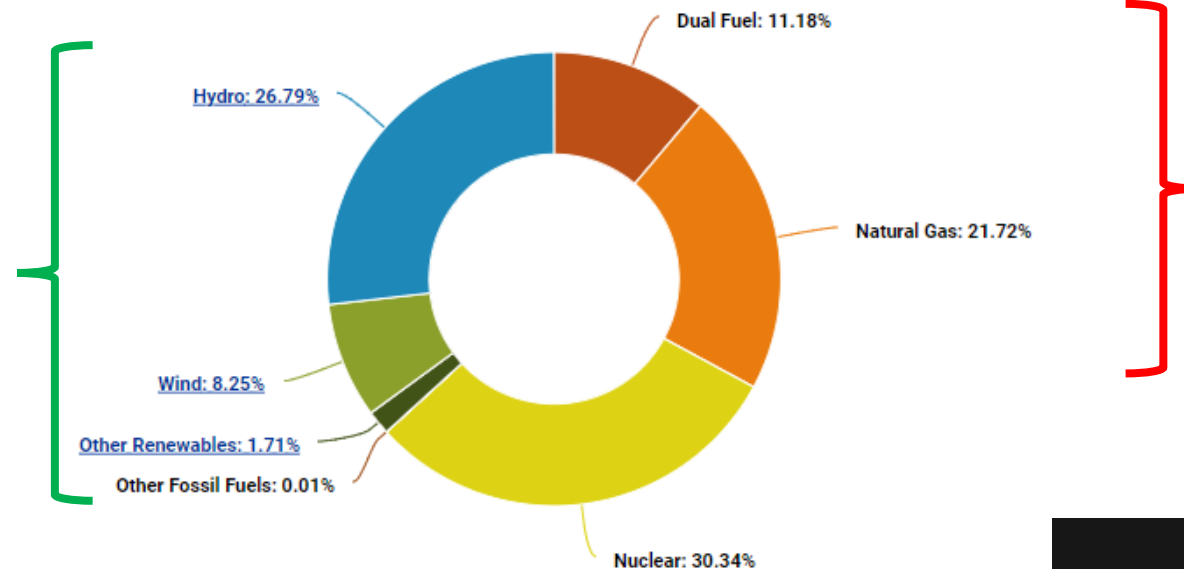
All Fuels

Renewables

4/20/2021 11:30am

Energy generated within New York State

**Renewables  
36.8%**

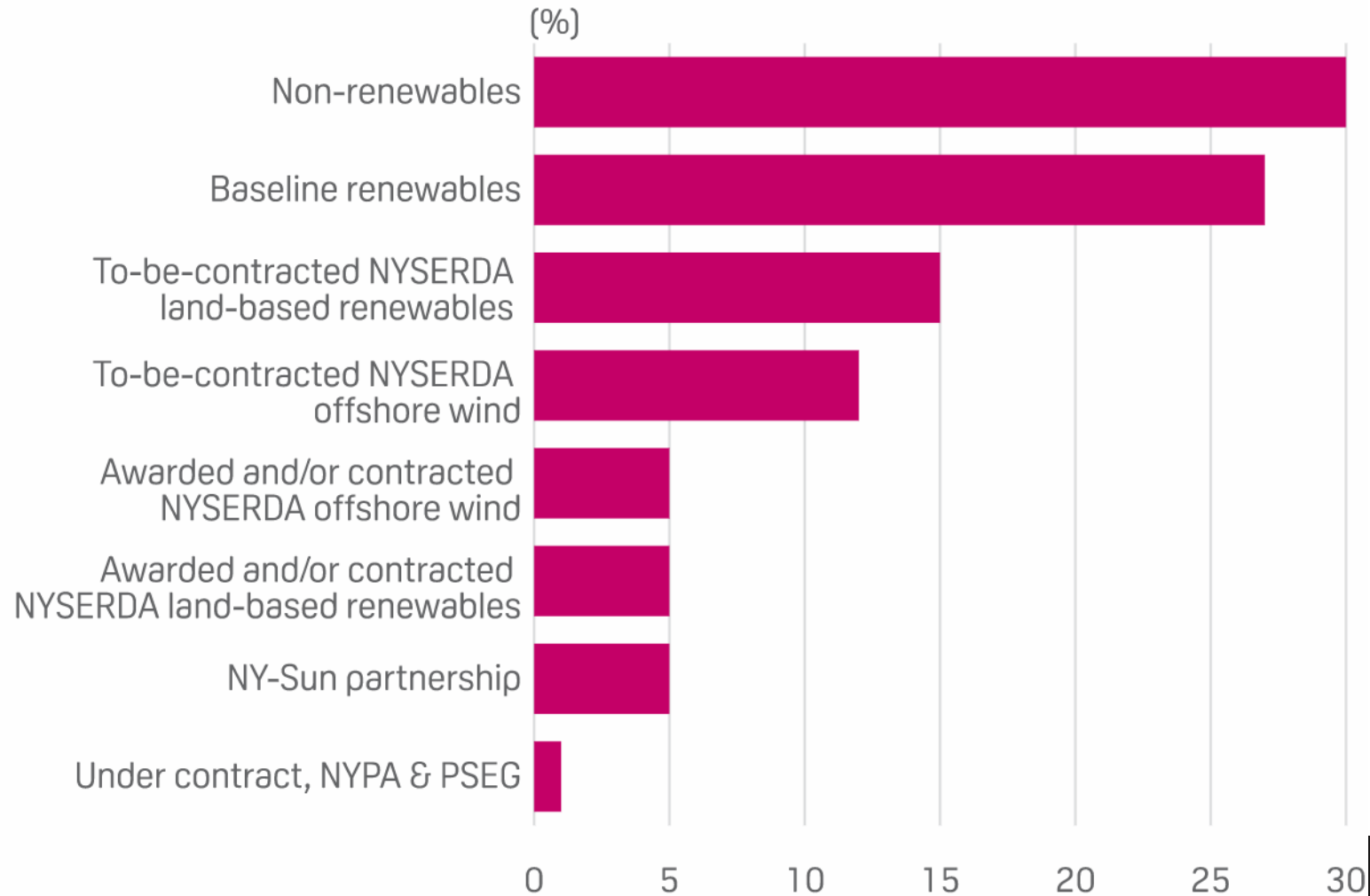


**Fossil Fuels  
32.9%**

# Projected 2030 Power Generation Mix



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Source: NYSERDA

# Climate Action Council Timeline



# Dryden 2045



Source: New York State Department of Environmental Conservation



## Role of Local Government

Land Use Regulation

Public Health and Safety

Public Infrastructure

Employee and Purchasing Policies

Economic Development Agenda

Lead by Example



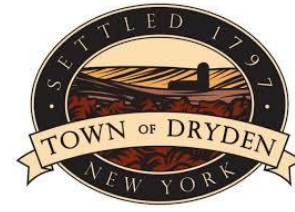
# Land Use Regulation



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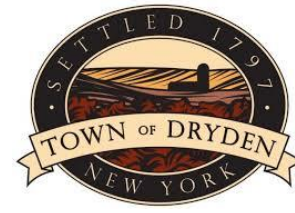
- Promote smart growth through codes and practices that focus on issues of how and where to accommodate new development and redevelopment (e.g., “density bonus” or parking waivers for green buildings or compact, mixed-use development).
  - more compact and mixed-use communities
  - smart street design (e.g., bike lanes, road diets)
  - more transportation options
  - preservation of green space
- Facilitate the permitting of on-site, community distributed generation and utility-scale renewable energy facilities, energy storage and EV charging stations on private property.
- Require new construction to include solar PV and EV charging stations or to be solar PV and EV “ready.”

# Protect Public Health and Safety



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- Pass a local law to enforce the NYStretch Energy Code.
  - One cycle ahead of current code.
  - Result in average energy reduction of more than 10%.
- Ban the use of fossil fuels in new construction or substantially rehabilitated buildings.



## Invest in Public Infrastructure

- Convert cobra-head and decorative street lights to LEDs.
- Weatherize town buildings, install heat pumps, LEDs and energy conservation measures.
- Install variable frequency drives (VFDs) for all water/sewer districts.
- Install EV charging stations for use by municipal vehicles and the general public.
- Install on-site solar and other renewable energy sources.

# Employee and Purchasing Policies



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- Green energy supply with on-site renewable energy, subscribing to Community Distributed Generation (CDG) or purchasing Renewable Energy Certificates (RECs).
- Implement enforceable green purchasing policies including recycled materials.
- Support telecommuting and alternative transportation options for employees.
  - Promote flexible and compressed work schedules where appropriate.
  - Subsidize transit passes.
  - Provide bicycle parking (racks, lockers).
  - Provide free EV charging.

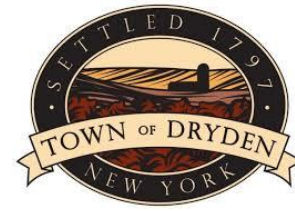
# Economic Development Agenda



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- Work with Ithaca Area Economic Development, Tompkins County Development Corporation and other partners to promote alternative financing opportunities (e.g., Open C-PACE) for commercial property owners to install energy efficiency and renewable energy projects.
- Work with partners to promote policies that encourage or require the use of clean energy technologies (e.g., “green PILOTs” for LEED certified buildings).
- Work with local educational institutions, businesses and non-profit organizations to address workforce development needs for emerging clean energy markets, esp. for under-represented communities and veterans.
- Support home-based businesses including clean energy start-ups.

# Lead by Example / Educate the Community



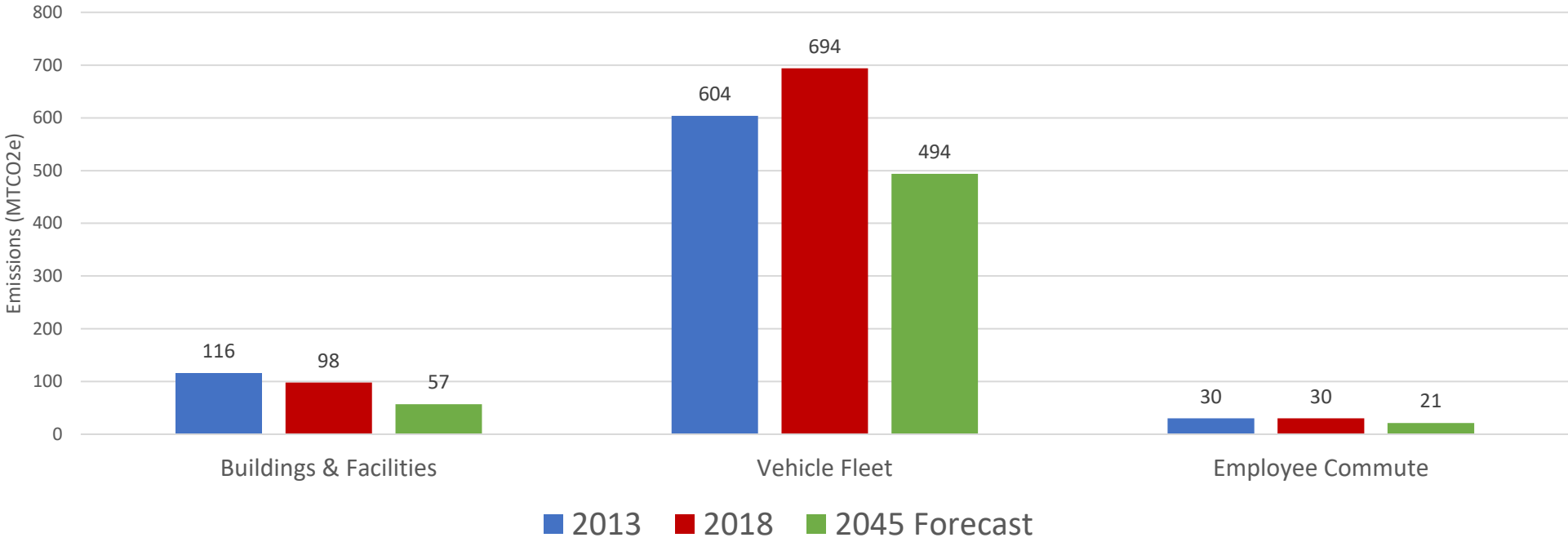
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- Establish a Community Choice Aggregation program.
- Support local education and outreach campaigns (e.g., HeatSmart Tompkins, Finger Lakes Climate Fund).
- Host open houses and other educational events (e.g., EV “Ride and Drive” events) to showcase clean energy technologies on municipal facilities.
- Replace town light- and medium-duty vehicles with EVs; consider use of biodiesel for heavy-duty vehicles.

# Summary of GHG inventories: Municipal Operations Inventory



## Municipal Operations Emissions Over Time

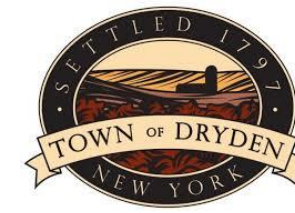


**2013 total: 750 MTCO<sub>2</sub>e**

**2018 total: 822 MTCO<sub>2</sub>e**

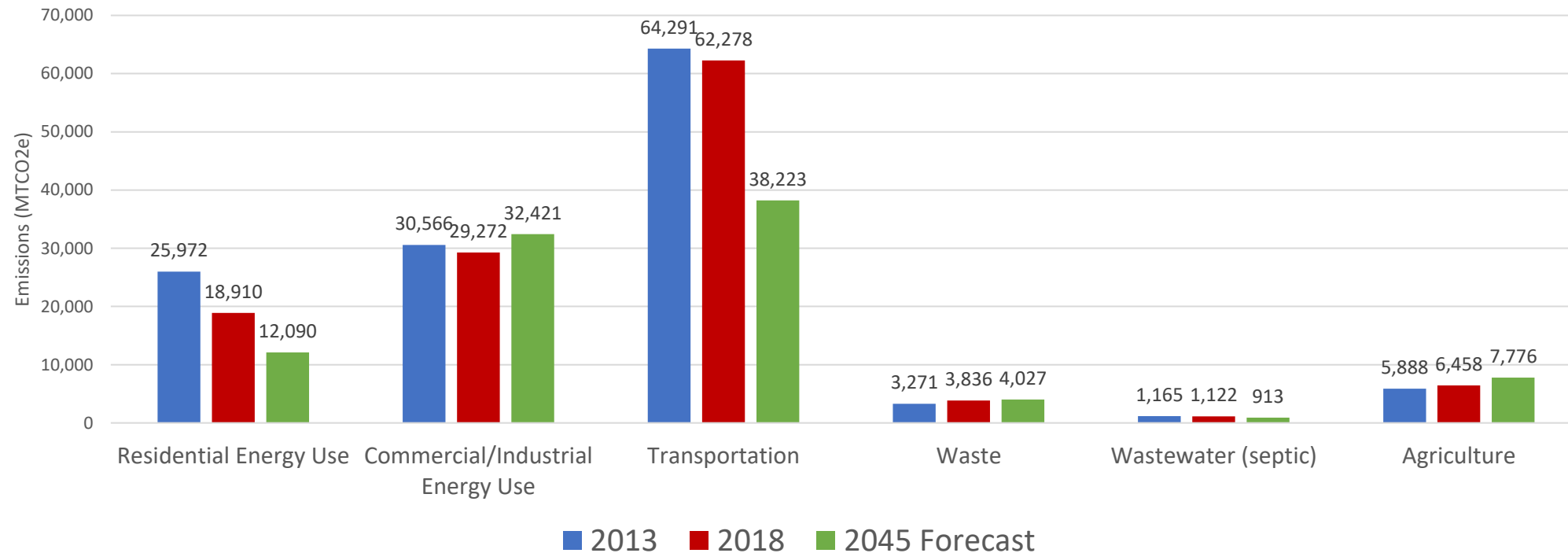
**2045 forecast total: 572 MTCO<sub>2</sub>e**

# Summary of GHG inventories: Community Inventory



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## Community Emissions Over Time



**2013 total:** 131,154 MTCO<sub>2</sub>e

**2018 total:** 121,875 MTCO<sub>2</sub>e

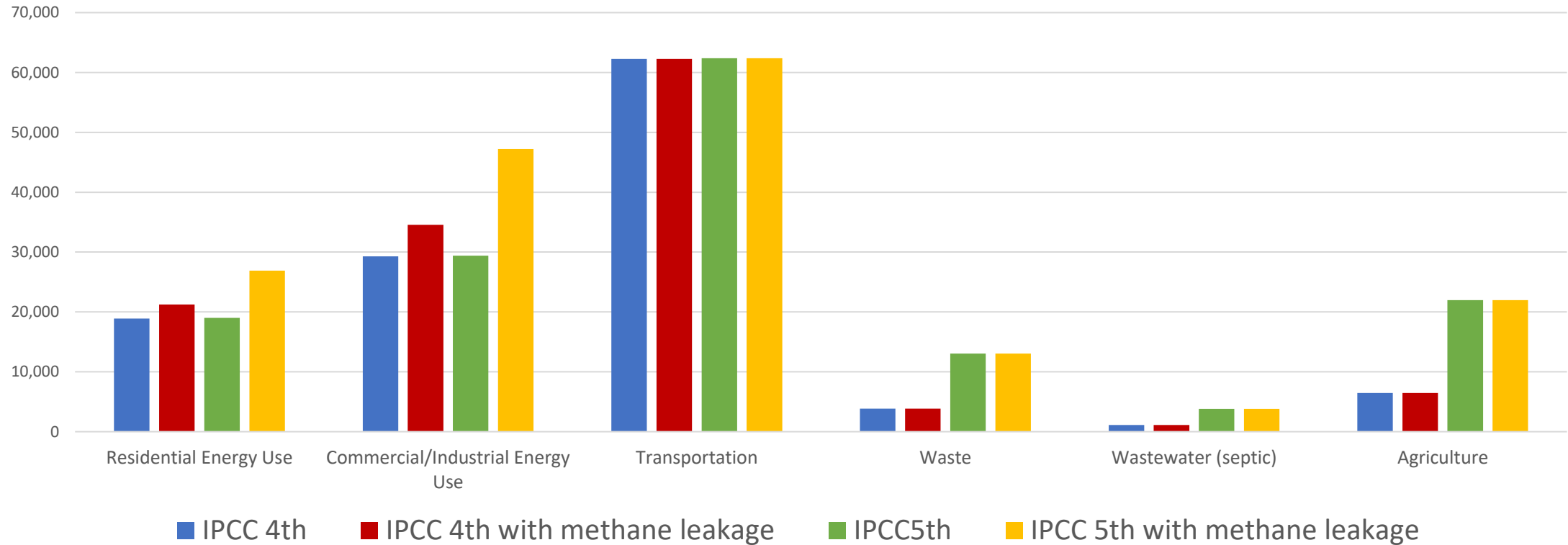
**2045 forecast total:** 95,450 MTCO<sub>2</sub>e



# Summary of GHG inventories: Community Inventory, various scenarios



## 2018 Town of Dryden Emissions Scenarios by Sector



# Purpose of today's meeting and next steps



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- Purpose of today's meeting
  1. Review the draft climate action plan mitigation strategies
  2. Brainstorm ideas to expand the list and associated information
  3. Answer questions (next slide)
- Next steps
  1. Hold second meeting to finalize strategies
  2. Develop an emissions reduction target (X% reduction by X year)
  3. Write the full text of the CAP

# Questions we'd like answered by the committee



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1. Are there other climate change mitigation strategies the committee would like to see added to the lists?
2. Are there any strategies currently included that the committee thinks should not be included?
3. Are there other partners/notes to add to any of the actions based on local knowledge/experience?
4. Does the list of strategy metrics provided by Alice work, or does anything need to be revised? (This will be shown in the spreadsheet we will review.)



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# Spreadsheet discussion