Inventory Results for Dutchess County

Dutchess Climate Action Planning Institute

7/19/23
Kelsey West, Devin Rigolino, Carolyn Klocker

Dutchess CAPI is a project of the Hudson Valley Regional Council and is funded by the DEC Climate Smart Communities Grant Program.
Background on the Municipality

• Size: 801.6 square miles
• Ancestral home of the Lenni Lenape. Post European settlement, DC became a county in 1683
• Population: 295,911 people at the 2020 census
• Bronze-certified Climate Smart Community (2019)
• Designated NYSERDA Clean Energy Community
Background on the Inventory

- Baseline year 2019
- Scopes 1&2 included, with employee commute for scope 3. Not included
  - Water and Waste Water Treatment Facilities
  - County Resource Recovery Agency Incinerator
Snapshot: Emissions by Sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>CO2e</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings &amp; Facilities</td>
<td>1,896</td>
</tr>
<tr>
<td>Street Lights &amp; Traffic Signals</td>
<td>3</td>
</tr>
<tr>
<td>Vehicle Fleet</td>
<td>3,583</td>
</tr>
<tr>
<td>Transit Fleet</td>
<td>3,033</td>
</tr>
<tr>
<td>Employee Commute</td>
<td>5,332</td>
</tr>
<tr>
<td>Solid Waste Facilities</td>
<td>248</td>
</tr>
</tbody>
</table>

Total: 14,095
Employee Commute

- 37.8% of the county’s CO2e
Vehicle and Transit Fleets

25.4%

CO2e By Record

Vehicle fleet - Diesel Consumption

Vehicle Fleet - Gasoline Consumption

21.51%

CO2e By Record

Dutchess County Public Transit - Fleets - Gasoline Consumption

Dutchess County Public Transit - Fleets - Diesel Consumption
Buildings and Facilities

- 13.4% of CO2e
- 44 Buildings were considered
- Top emissions producers include:
  - The County Jail Complex: electricity consumption
  - 60 Market Street: Department of Community and Family Services: electricity
  - 50 Market Street: Dutchess County Courthouse: electricity
Solid Waste

• 248 CO2e, or 1.75% of emissions

• This is an estimate based on the waste generation of county employees. It does not factor in construction debris.
Challenges

• The sheer amount of data!

• Resources constraints
Take Aways / Learnings

- Would have been interesting to include solid waste generation

- Opportunities for reducing employee commute emissions through incentivization programs.

- Formalizing and regularly conducting a fleet inventory would be useful.
A BIG Thank You To:

- Devin Rigolino and Jen Cocozza of the DC Planning Dpt.
- Bob Balkind, DC Commissioner of DPW
- Kerry Russell, DC Deputy Commissioner of Solid Waste
- HVRC: Mary Lambert
- ICLEI: Kale Roberts, Caroline Dickey, and others!
Thank You

Kelsey West, DC CCE. kjw228@cornell.edu