Applying the Regional GHG Emissions Inventory to Your Community: *Mid-Hudson Case Study*

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Presented to
Climate Smart Communities

Presented by
VHB Engineering, Surveying and Landscape Architecture, P.C.
Regional GHG Inventory & the Mid-Hudson Regional Sustainability Plan

- Phase 1: Sustainability Plans
- Phase 2: Grants to Implement the Plans
GHG Inventory Process

- In compliance with the NY GHG Working Group Protocol
- GHG emissions inventory structure
  - Baseline year
  - Geographic boundaries
  - Sources

Image source: [http://esd.ny.gov/RegionalOverviews/images/MidHudsonMap.jpg](http://esd.ny.gov/RegionalOverviews/images/MidHudsonMap.jpg)
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2010 GHG Emissions in Each County of the Mid-Hudson Region, per Sector (million MTCO$_2$e)
2010 GHG Emissions in Each County of the Mid-Hudson Region, per Capita, per Sector (MTCO₂e)
What’s Next?

• GHG data is available for your community
• Climate Smart Communities Pledge Element 2
• Local Government Operations GHG Emissions Tool and GHG protocol
Clicking on each box will take you to its respective worksheet in the tool. Use this table of contents to keep track of your progress as you move through the tool.

Completed sheets are filled in. Incomplete sheets have a white background, while sheets that require no action by the user are in grey.

- Introduction
- Read Me
- Definitions
- Inventory Control Sheet
- Stationary Combustion - Entry Sheet
- Electricity Use - Entry Sheet
- Mobile Combustion - Entry Sheet
- Solid Waste - Control Sheet
- Wastewater - Control Sheet
- Employee Commute Sheet
- Stationary Combustion - Data Sheet
- Electricity Use - Data Sheet
- Mobile Combustion - Data Sheet
- Solid Waste - Entry and Calculations Sheet
- Wastewater - Entry Sheet
- Water Use Sheet
- Stationary Combustion - Calculation Sheet
- Electricity Use - Calculation Sheet
- Mobile Combustion - Summary Sheet
- Wastewater - Calculation Sheet
- Additional Emission Sources Sheet
Thank you!

Angela Vincent
Sustainability Project Manager

avincent@vhb.com

Phone: 617.924.1770 x1287
Community Greenhouse Gas Emissions Protocol
Protocol Purpose

- New national standard
- Allow local governments to more easily
  - develop high-quality GHG inventories
  - communicate results

Download protocol:
www.icleiusa.org/tools/ghg-protocol/community-protocol
Protocol Development

• Steering Committee and Technical Advisory Committees
  • Local government staff
  • Academics
  • Federal/state agencies
• Recommended by State of California Governor’s Office of Planning and Research
## Activities and Sources

<table>
<thead>
<tr>
<th>Source</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any physical process inside the jurisdictional boundary that releases GHG emissions into the atmosphere</td>
<td>The use of energy, materials, and/or services by members of the community that result in the creation of GHG emissions.</td>
</tr>
</tbody>
</table>
Basic Emissions Generating Activities

1. Use of electricity by the community
2. Use of fuel in residential and commercial stationary combustion equipment
3. On-road passenger and freight motor vehicle travel
4. Use of energy in potable water and wastewater treatment and distribution
5. Generation of solid waste by the community
Multiple Frames

• Significant Influence
• Community-wide activities
• Household consumption

• In-boundary sources
• Government consumption
• Full consumption-based inventory
• Life cycle emissions of community businesses
• Individual industry sectors
• Create your own story
Supporting Resources

- Online inventory tool
  - Government ops and community inventories
  - User-friendly calculation
  - All data stored in cloud for future reference
  - Allow multiple users/data entry
  - Replace CACP
  - Available late summer
Supporting Resources

- Online training modules (available)
- Inventory instructions
- Master Data Workbook
- Report template
- ICLEI staff support

ICLEI membership: [www.icleiusa.org/join/](http://www.icleiusa.org/join/)
Questions?

Eli Yewdall  
Program Officer  
ICLEI-Local Governments for Sustainability USA  

Eli.yewdall@iclei.org  
404-937-3000
Climate Smart Communities Webinar

E-Mail Addresses

• Mark Lowery
  mdlowery@gw.dec.state.ny.us

• Kim Farrow
  kxfarrow@gw.dec.state.ny.us
Climate Smart Communities Webinar

Website Address

http://www.dec.ny.gov/energy/50845.html