





Connecticut Clean Cities Collaborative

SIPRAC

February 9th, 2023

Clean Cities

Our Mission

Clean Cities coalitions foster the economic, environmental, and energy security of the United States by working locally to advance affordable, domestic transportation fuels, energy efficient mobility systems, and other fuel-saving technologies and practices.

Connecticut Coalitions

Capitol Clean Cities of Connecticut - Craig Peters

Connecticut Southwestern Area Clean Cities - Daphne Dixon

Greater New Haven Clean Cities Coalition - Paul Wessel

Capitol Clean Cities of Connecticut Coalition



Clean Cities of Connecticut, Inc.

Updates

Pride Stores

Pride Stores has been sold again to GMP Investments and will continue to add EV charging stations to existing and new property locations throughout CT and MA.

Air Liquide at Hartford Pride Travel Center

Air Liquide has agreed to open the hydrogen station at the Pride Travel Center in Hartford to the public this summer provided that we receive commitments for a minimum of 10 light duty vehicles to fuel. I have been in contact with Toyota North America and Hyundai Motor Company to determine if they can supply CT with Mirai and Nexo fuel cell vehicles.

Stakeholder Shout Out

As of January, 2023, U.S.A. Hauling and Recycling and All Waste Inc. operate over 100 of their trash and recycling trucks using renewable natural gas.

EJ Community, Frog Hollow has been Approved for the Eversource CT EV Charging Rebate

We're proud to announce that Hartford's Frog Hollow community (property locations: The Lyceum and Fire by Forge Restaurant formerly Firebox) has been approved for the Eversource EV Charging Rebate and will be moving forward with installation in time for the restaurant to open. This could lead to future projects in the area.

Connecticut Southwestern Area Clean Cities Coalition



Live Green Connecticut and CT Southwestern Area Clean Cities Coalition present



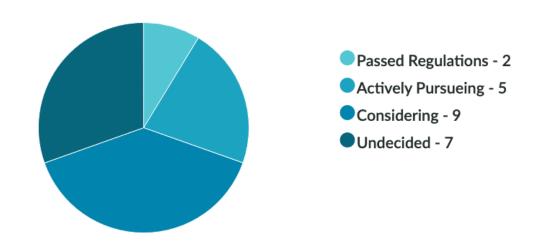


EV Zoning Regulations Bootcamp



Fairfield County Pilot

Current Status of EV Zoning Regs



Participating Municipalities

Bethel Norwalk

Bridgeport Redding

Brookfield Ridgefield

Danbury Shelton

Darien Sherman

Easton Stamford

Fairfield Stratford

Greenwich Trumbull

Monroe Weston

New Canaan Westport

New Fairfield Wilton

Newtown



Northeast Hydrogen Hub Proposal Highlights:

- 1. Manufacturing LuftCars in Bridgeport
- 2. 20 tons per day hydrogen generation facilities in Bridgeport and other locations

Status Update:

- 1. Community engagement and workforce development
- 2. Bridgeport selected for the building of the prototype
- 3. Prototype demo scheduled in Bridgeport with UPS in July 2023
- 4. MOU in process with UConn for airframe/hydrogen digital twin simulations
- 5. MOU with NREL and Argonne National Laboratory
- 6. NYSERDA announcing LuftCar as one of the MOU partners



Partnered with Argonne National Lab on GREET Model

Air Quality: GREET Model

The Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (GREET) model is a tool that examinesthe life-cycle impacts of vehicle technologies, fuels, products, and energy systems.

Greater New Haven Clean Cities Coalition

The Good, the Bad and the Ugly of the Future of Connecticut's Medium and Heavy-Duty Trucks and their Fuels

A kick-off by Greater New Haven Clean Cities

Cosponsors: Capitol Clean Cities and Connecticut Southwestern Area Clean Cities

"We are truly at an inflection point in our industry today. Forthcoming EPA and CARB NOx engine emission standards and truck greenhouse gas and fuel efficiency standards, the march toward zero-emission vehicles and likely future internal combustion engine bans have created a new road map unlike anything we have ever seen in our industry."

Glen Kedzie American Trucking Association VP and energy and environmental counsel

Quoted in <u>Transport Topics: Environmental Regulations Poised to Alter Future of Trucking Equipment</u> (10/23/22)



Topics

- Why MD HD trucks are important to Connecticut
- Changing federal and state legal climate
- How the industry shippers, truckers, manufacturers are responding
- Ways we might work together to move forward
- Industry insights

Interest

- 78 Registrations
- 45 attendees
- 21 views of recording at https://bit.ly/CTMDHD

Decarbonization

There is no one clear solution

Key Strengths and Challenges of Decarbonization Solutions (Not Exhaustive)

Pathways	Key Strengths	Key Challenge(s)
Liquids & Gases	 Efficient use of renewable waste resources with attractive GHG reduction potential Vehicle, infrastructure in use or commercially ready 	Limited capacity of most attractive resources
Electricity	 Efficient use of renewable electricity resources Strong innovation momentum from light duty vehicle market TCO payback potential, reduced noise, zero local emissions 	Energy densityInfrastructure capacityHigh CapEx
Hydrogen	 Energy density and weight advantages over battery-power Reduced noise, zero local emissions 	 Renewable hydrogen generation and distribution High CapEx and OpEx



- √ Support fleet owners and managers through this change
- ✓ Share CT based resources: connections with other fleets, truck manufacturers and upfitters
- ✓ Updates on DEEP's plans for adoption of CA MD HD standards
- ✓ Provide access to technical assistance
- ✓ Collaborate with Smartway, Motor Transport Association of CT (MTAC), NAFA Fleet Management Association, American Public Works Association, Sustainable CT
 - Support working group(s) of Connecticut fleets
- √ Hire a half-time staff person great retiree job need candidates!

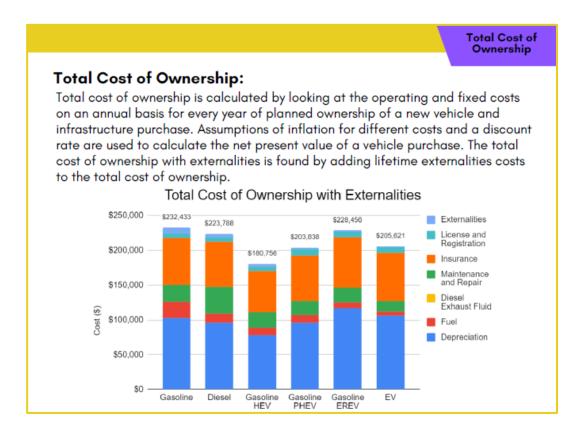


: fleet analysis pilot



Overview:

The Department of Energy's Technology Integration Program has enlisted the expertise of Argonne to develop a tool to examine both the environmental and economic costs and benefits of alternative fuel and advanced vehicles (AFVs). Argonne developed the Alternative Fuel Life-Cycle Environmental and Economic Transportation (AFLEET) Tool to help stakeholders estimate petroleum use, greenhouse gas (GHG) emissions, air pollutant emissions, and cost of ownership of light-duty and heavy-duty vehicles.



Let me know if you are interested!







Connecticut Clean Cities Collaborative