

Reducing Greenhouse Gas Emissions in Illinois Transportation

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October 4, 2024



Agenda

1. Illinois Alliance for Clean Transportation (IACT)
2. Supporting Transportation Electrification – Leadership, Learning, Assistance, and Resources (“STELLAR”)
3. US DOE Clean Energy to Communities (“C2C”)
4. Ozinga Energy Alternative Fuels Case Study



Awareness, not age, leads to wisdom: Publilius Syrus, 50 BC



Illinois Alliance for Clean Transportation



- ***Mission: bring together stakeholders and assist them in understanding technologies and policies that reduce emissions in the transportation sector.***
- Formerly known as Chicago Area Clean Cities (CACC)
 - Formed in 1994
- Went state-wide in 2023 and changed name
- Volunteer members from related industries
- One of more than 75 coalitions across the country
- Affiliated with the U.S. Department of Energy's Clean Cities program.
- Focus: *Decarbonization of Illinois fleets and related stakeholders*



U. S. Department of Energy



IACT Snapshot



- IACT/ CACC facilitated reduction 182,000 annual tons of CO₂ equivalent and other pollutants by assisting Illinois fleets (2022):
 - Educate the public on the operation and benefits of clean fuels and technologies
 - Introduce fleets to relevant programs and incentives.
 - Facilitate efforts to secure funding for clean fuel and petroleum displacement projects.
 - Initiate and support legislation and programs that promote clean fuels, clean fuel vehicles, idle reduction, enhanced fuel economy, and other clean technologies
 - Enable networking and collaboration for stakeholders.
 - Help integrate as many clean-fuel vehicles as possible across Illinois.



STELLAR

Supporting Transportation Electrification – Leadership, Learning, Assistance, and Resources [STELLAR](#)

Mission: Transportation decarbonization by raising awareness and building skills.

- Develop workforce training programs to advance skills in clean tech industries while providing advancement towards good paying jobs.
 - Educate community members on electric mobility and the commensurate opportunities
 - Identify aspects of electric mobility that the community supports to define workforce goals
 - Identify challenges and prioritize solutions
 - Define and develop clean transportation curricula
 - Provide technical and other relevant education.
- Focus on equity
 - Ensure that the voices of communities are heard and represented.
 - Prioritize engaging underserved communities through *Community Based Organizations* (CBOs)

STELLAR

Supporting Transportation Electrification – Leadership, Learning, Assistance, and Resources [STELLAR](#)

- IACT Roles
 - **Outreach** – Develop and deploy strategies to raise awareness about the types and benefits of clean transportation
 - **Technical assistance** – define and provide capacity-building opportunities.
 - **Resources** – identify and connect useful resources and experts
 - **Project development** – help identify project scope, issue RFPs for CBO partners
 - **Funding assistance** - identify funding sources for projects
 - **Collaboration** - build partner and process capacity
- Partners: 13 CBO Partners
 - **Engage and activate communities**
 - **Listen** to the communities, provide feedback, identify needs and priorities
 - **Develop and deploy outreach and training** workforce development programs for the emerging green job market



Staff Training
& Capacity
Building



Community-Driven
Organization
Strategic Plans



Workforce
Training
Events



Community
Outreach
Events



Technical
Assistance for
Fleets & Others

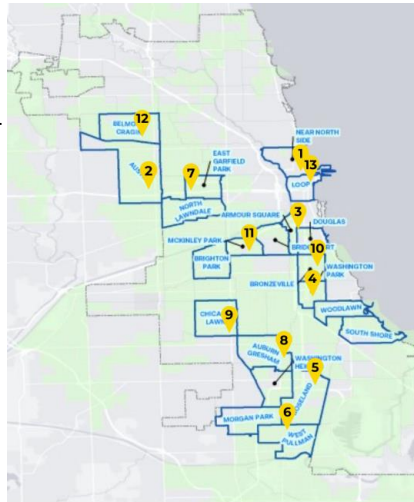
STELLAR Collaborators

CBOs

- [Access Living](#)
- [Austin Coming Together](#)
- [Coalition for a Better Chinese American Community](#)
- [Emerald South Economic Development Collaborative](#)
- [Endeleo Institute](#)
- [Far South Community Development Corporation](#)
- [Foundation for Homan Square](#)
- [Greater Auburn-Gresham Development Corporation](#)
- [Greater Southwest Development Corporation](#)
- [Jitney EV](#)
- [Neighbors for Environmental Justice](#)
- [Northwest Center](#)
- [OAI, Inc.](#)

Technical Assistance

- IACT
- American Lung Association
- Forth
- Center for Neighborhood Technology (CNT)



Example:

Building out center and developing curriculum for EV and charging programs – Bridge Training programs.

Park Forest Project Contributors

- Northern Illinois Community Initiatives
- Chicago Southland EV Clean Energy Workforce Initiative
- Village of Park Forest
- Cook County Bureau of Economic Development
- United Way



Clean Energy to Communities Program “C2C”



National Renewable Energy Lab (NREL) Program, working with World Research Institute

C2C program: assist communities in moving forward with advancing clean energy programs.

Since 2023, over 250 communities through 3 levels of engagement:

1. In-depth technical partnerships.

- Multiyear **partnerships** that provide cross-sector modeling, analysis, and validation, paired with direct funding to help teams of local governments, electric utilities, and community-based organizations reach their goals and/or overcome specific challenges

2. Peer-learning cohorts

- Small groups of approximately 15 local governments, electric utilities, or community-based organizations each that meet regularly for approximately 6 months to learn from each other and lab experts in a collaborative environment to develop program proposals, action plans, strategies, and/or best practices on a pre-determined clean energy topic.

3. Expert matches.

- Short-term **assistance** (40—60 hours) with one or more technical experts to help address near-term clean energy questions or challenges for dozens of communities.

NREL: <https://www.nrel.gov/>

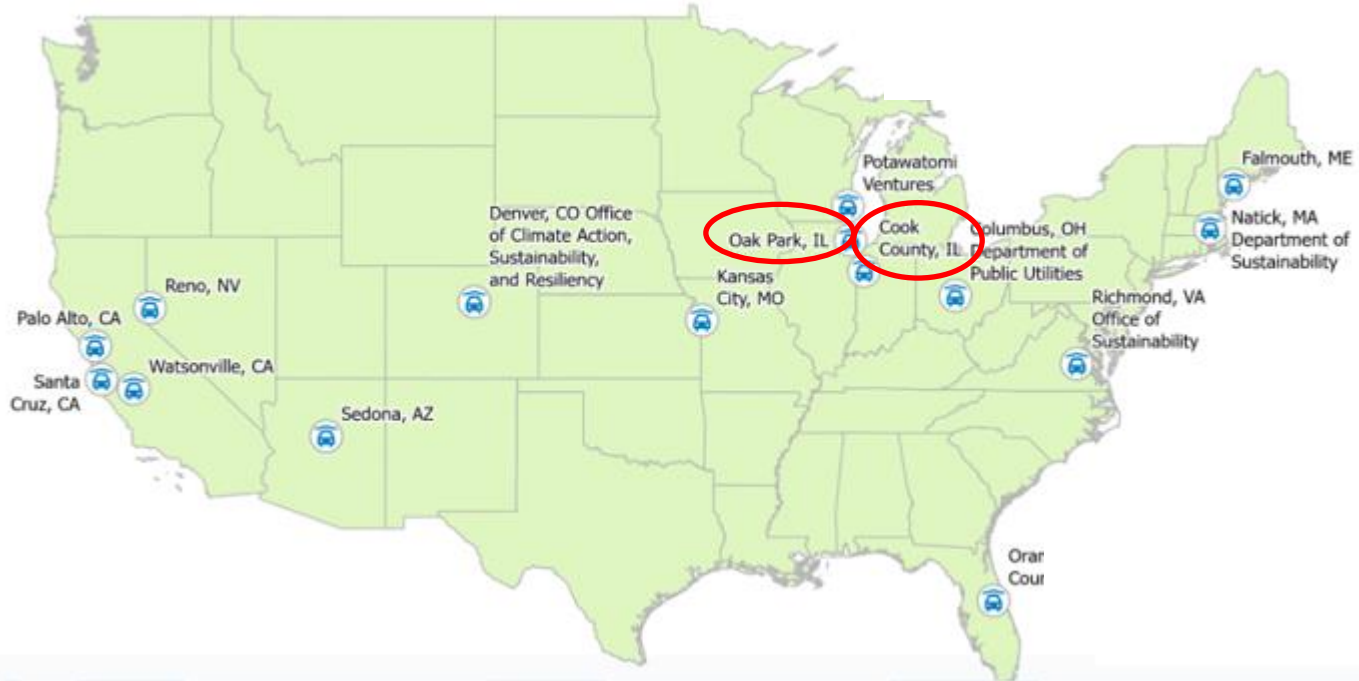




C2C: Clean Energy
to Communities

U.S. DEPARTMENT OF ENERGY

Selected C2C Peer Group





C2C: Clean Energy
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Local C2C Activities

- Oak Park and Cook County successfully applied to be part of 2024 Cohort for ***Municipal Fleet Electrification*** Peer Learning Group
 - IACT is facilitator, providing technical support.
 - About 1/3 of program complete.
 - Systematic process defined, assignments made, homework completed and reviewed.
 - NREL provides monthly meetings with experts and are available to support cohort / IACT.





**C2C: Clean Energy
to Communities**

U.S. DEPARTMENT OF ENERGY

C2C Process



Planning for Fleet
Electrification

July



Building Your Team and
Working with your Utility

September



Calculating and Managing Costs

November

August

Understanding Your Vehicle
and Charging Needs



October

Assessing, Upgrading, and Future-
proofing Sites



December

Training, Operations, and
Maintenance





**C2C: Clean Energy
to Communities**

U.S. DEPARTMENT OF ENERGY

Local C2C Activities

Oak Park

- 17 EVs in municipal fleet (Leafs, Ford Transits). Ordering more.
- Want to move into Class 2, 3, 4... over time
- Focusing on logical investments in EV charging /infrastructure, working with utilities as required to expand capacity.
- Challenges sourcing EVs.

Cook County

- Working to develop long term transportation plans, tied to their green fleet policy.
- Have over 1,900 vehicles, 28 departments
 - Have a few EVs and have been challenged to source more
 - Have had issues with availability and procurement.
- Need process to better collect, compile and use data in a standard way
- Determine best vehicle fits for transportation electrification and then define infrastructure needs
- Goals: develop clear set of fleet goals, outline plans, and strategize to overcome challenges





Commitment to GHG Reduction

Large concrete, bulk materials, energy and transportation services company serving Midwest and California.

Largest CNG-ready mix fleet in US

Compressed Natural Gas

- Since 2011, Ozinga has converted 200 Diesel to CNG trucks in its fleet (800 total trucks), plus added 50 CNG company support vehicles.
 - Benefitted from various incentive programs over 10 years.
- Fuel Displacement Per Year:
 - **> 1,000,000 Gallons of Diesel / Year**
- Ozinga Energy
 - Designed, built and operate 7 public CNG fast fill stations, plus fleet (time fill) stations.
 - Chicago, Northern Indiana and Southern Michigan areas.
 - 24 hours a day, seven days a week.
 - Have received significant incentive support for CNG infrastructure





Commitment to GHG Reduction

Electric Vehicles

- Have added several Electric Vehicles
- 5 Level 2 EV Public Charging Stations



Electric Vehicles Stations

- 5 Level 2 EV Public Charging Stations
- 1 DC Fast Charging Station

Biofuel Vehicles

- Use of up to 20% biodiesel of total diesel fuel usage





Commitment to GHG Reduction

- Has been strong supporter and collaborator of Clean Cities for over 10 years.
- On IACT Board (Rich DeBoer)
- Continue to provide resources, technical assistance, regular speakers, alt. fuel vehicles at events.
- Committed to sustainability and community
 - Alternative fuels make business sense and “Carbonsense”
 - Recycle materials in concrete mixes
 - “Lowered embodied Carbon Concrete”



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Thank You

Board Member



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