SUSTAINABLE WESTCHESTER 2023 ANNUAL

MEMBERS MEETING

02 | 15 | 2023



### **2023 Board Nominees**



### **Bridget Gibbons**

Bridget Gibbons is the Director of Economic Development for the County (She has served as Deputy Director since January 2018 and was appointed Director in October 2018). She heads the Westchester County Industrial Development Agency (IDA) and Westchester County Local Development Corporation (LDC)



#### **Dane Warren**

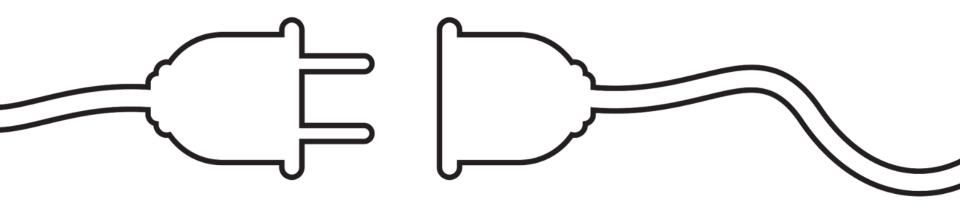
Dane is an attorney with Sive, Paget & Riesel P.C. Dane's practice focuses on an environmental review of renewable energy development projects, environmental and land use litigation, and regulatory compliance counseling.



# **PROGRAMS**



# **ELECTRICITY SECTOR**





### **Sector Focus: Electricity**

### Working together on the challenge of the clean energy transition:

- Demand for electrical energy projected to double by 2050
- Much of this increase results from electrification as part of the goals of the Climate Act
- Residents, municipal governments, Westchester County, and New York
  State must align strategies to make this possible

### The Climate Act Scoping Plan reaffirms that this work will require us to:

- Transform power generation and distribution
- Invest in renewables and new technologies
- Design solutions that ensure benefits reach disadvantaged communities

### Inflation Reduction Act (IRA) allows governments & nonprofits to utilize tax credits

 Creates an opportunity to build a public asset base supporting community energy programming with focus on low-to-moderate income population

### New York State 2022 GHG Emissions Report





# WESTCHESTER POWER

### **Westchester Power: Overview**









- Leadership: 58 municipalities in Community Choice Aggregation (CCA)
  Programs now statewide
- Market impact: CCAs now account for 34% of the voluntary renewable energy market in New York State (NYS), demonstrating the power of collective effort
- State recognition: highest value action NYSERDA Clean Energy Communities program with Westchester Power as the state model
- Momentum: reduction of Westchester County's greenhouse gas footprint, acceleration of sustainability efforts, and foundation for electrification
- Human capital: municipal leaders, staff, residents, and small businesses with a heightened understanding of energy issues



### **Westchester Power: 2022 Highlights**









- Market challenges most volatile period ever seen; historical highest and lowest pricing
- Launched the new NYSEG and Con Edison contracts
- Successful start of the Yonkers community energy program
- 29 municipalities, ~ 150K accounts, approximately 40% of the County households



### Westchester Power: 2023 and Ahead









**Operational continuity:** current NYSEG and Yonkers for renewal; Con Edison remains fixed through 2024

Municipal participation: Several municipalities in various stages of pre-process

**Program evolution:** strategies and structures to realize Climate Act goals and position the County for State and Federal funding:

- Near term: Procurement/contract enhancements to eliminate limitations of turnkey fixed-price Energy Services Company (ESCO) offers
- Looking ahead: Exploring new structures to enable full leveraging of the program's transaction volume and the ownership of clean energy assets; supporting energy justice goals and building equity



# **SOLAR PROGRAMS**

# **Solar Program: Overview**



**Advance statewide goals:** New York's targets are 10 gigawatts of solar and 6 gigawatts of energy storage be deployed by 2030. Westchester's share of these targets is large!

- Westchester's share: 500 megawatts of solar; 300 megawatts of energy storage by 2030
- Annual target in Westchester of 35 megawatts of new solar and 35 megawatts of new energy storage per year for seven years

**Mission:** Rapid deployment of renewable energy and energy storage capacity to benefit our stakeholders in Westchester County. *How?* 

#### Facilitate all the stakeholders

- Assess potential sites for solar and energy storage to educate owners
- 2. Assist solar and energy storage developers acquire valuable project sites
- 3. Enroll residents and businesses enroll in community solar farms
- 4. Prioritize serving low-to-moderate income households in disadvantaged communities



# **Solar Program: 2022 Highlights**





Impact: Leadership, partnerships and municipal goals

- 1. Community Solar Enrollments: Increasing access to solar benefits
- 2. Clean Energy Communities Campaign: Helping municipalities get grants
- 3. Westchester Power Solar Savings: Integrating community solar into Community Choice Aggregation (CCA)
- Westchester Municipal Solar Partnership: Helping municipalities host community solar projects



# Solar Program: 2023 and Ahead



- 1. Westchester Power Evolution: solar savings offering
- 2. Westchester Municipal Solar Partnership: more sites under review
- 3. Solar technical assistance for affordable multifamily housing providers
- 4. Solarize Westchester Program





# **BUILDINGS SECTOR**





# **Sector Focus: Buildings**

New York State's 2050 Vision for the Buildings Sector sees 85% of residential and commercial buildings electrified statewide

### Recommended strategies in this sector:

- Energy Efficiency initiatives directed to low-to-moderate income homes. These will reduce energy costs and increase health benefits in underserved communities
- Scale up public financial incentives and expand access to public and private low-cost financing for **Building Decarbonization**

New York State 2022 GHG Emissions Report





# **EnergySmart HOMES**

### **EnergySmart Homes: Overview**



**Addressing a critical need:** almost 75% of the energy used in a typical New York home is for heating and cooling

#### Homeowner-focused solution:

- Energy efficiency improvements
- Clean heating and cooling with air source heat pumps and geothermal
- Homeowner education and "consultation"
- Contractor partner list
- Rebate, incentive, and financing assistance



# **EnergySmart Homes: 2022 Highlights**







**Successful adoption:** 445 jobs were completed through Sustainable Westchester's contractor network and EnergySmart Homes program.

### Community collaboration at the heart of the program's success:

- Community campaigns for Energy Smart Homes
- Statewide "Electrify" webinar series
- Community Housing Innovations
- Educational webinars
- Over 3,128 homeowners signed up
- Homeowner case studies



### **EnergySmart Homes: 2023 and Ahead**





3-4 times of times of

Mission: significantly reduce emissions from the existing residential buildings stock, improve living space, indoor air quality and grow New York's green economy through job creation.

- NYSERDA Regional Clean Energy Hubs
  - Connects residents to clean energy programs
  - Led by Cornell Cooperative Extension to bolster opportunities for low-income and underserved communities to participate in the clean energy economy
  - Sustainable Westchester: 4-year grant to implement in Westchester:
  - One-stop-shop for clean energy resources
- Contractor installer partnership
- Clean Energy Communities, grants for Clean Heating and Cooling Community Campaigns support for a municipal campaigns



# **GridRewards**<sup>TM</sup>

# GridRewards™: Program Overview



- Leadership: In 2020, GridRewards<sup>™</sup> was the first of its kind residential demand response program in New York State in partnership with energy aggregator Logical Buildings
- Impact: Reduce stress on the energy grid, lower carbon emissions, reduce noxious chemicals in Environmental Justice communities and earn cash back
- Action: Personalized energy insights change behavior, participation in demand response events lowers load demand, savings and cash rewards incentivize action



# **GridRewards™: 2022 Highlights**







Countywide reduction of 7 MW from 2022 performance

**Year 3 program momentum:** 3,000 signups, 23 CEC and local community campaigns, accessing \$160,000 in grant funding

**Education and Awareness** 

- Outreach to municipal buildings
- Westchester County Executive's Weekly Address
- Resident webinars countywide
- Peaker plant webinar in partnership with Environmental Justice groups

Broad recognition in 2022 as New York League of Conservation Voters (NYLCV) honoring Logical Buildings



# GridRewards™: 2023 and Beyond



- Continued momentum, greater adoption building toward grid resiliency
- Join the 2023 GridRewards™ cohort
   February-April 2023 Campaign to take an Earth Day Action
  - Scan the QR code to sign up
- Feature GridRewards<sup>™</sup> content in your communications and digital platforms
- GridRewards<sup>™</sup> to expand to NYSEG Territory





# BUILDING DECARBONIZATION: COMMERCIAL & NETWORKS

# **Building Decarbonization Commercial Overview**



- Leadership: Lead market transformation toward fossil-fuel free heating and cooling in commercial buildings replacing antiquated on-site combustion with carbon neutral ready technologies.
- Impact: Build coalitions that develop thermal energy networks and transition our fracked gas utility to clean district heating and cooling.
- Influence: Connect developers with technical assistance and funding.
- Equity: Prioritize clients located in or serving Disadvantaged Communities and affordable housing.
- Visibility: Showcase the innovative work of municipal and business leaders.



# **Building Decarbonization: 2022 Highlights**



Results driving momentum through municipal commitment, consultation and shared resources

### **Fostered Funding Opportunities:**

- Helped our clients secure over 1 million dollars in funding to evaluate feasibility, design, and install clean heating and cooling systems.
- Identified state and federal funding opportunities and guided applications for municipalities.
- Influenced NYSERDA to expand funding eligibility requirements to include municipalities for the study, design, and construction of thermal energy networks.

#### **Extended Critical Communication:**

- Disseminated and developed critical NYStretch code information.
- Hosted education series including podcast, webinars, and roundtable discussions.



# **Building Decarbonization: 2023 and Ahead**

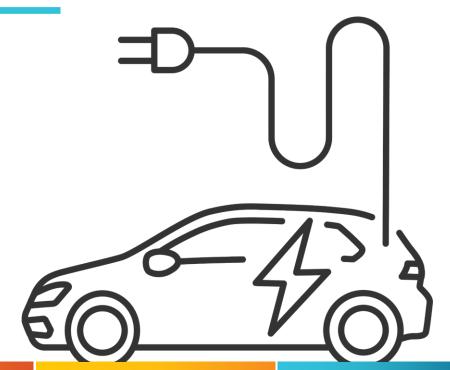


In 2023 Sustainable Westchester will continue to going to help our municipalities connect to NEW available resources and provide support such as:

- The Clean Energy Accelerator in partnership with Westchester County's Office of Economic Development.
- Community Thermal Coalition Campaigns: to deliver thermal energy network solutions to municipalities, downtowns, campuses, and multifamily buildings by supporting feasibility studies, development plans and community outreach.
  - Leverage Inflation Reduction Act providing tax rebates of up to 50%.
- Launch of GridRewards for Commercial & Industrial buildings.
- Continue focus to best serve disadvantaged communities and affordable housing.



# TRANSPORTATION & EQUIPMENT SECTOR





# **Sector Focus: Transportation & Equipment**

By 2050 nearly all vehicles newly registered in New York State will have zero carbon emissions.

### Recommended strategies in this sector:

- Transition to zero-emission vehicles and equipment
  - Invest in technologies to replace those that use fossil fuel.
  - Prioritize commercial vehicles substitution in Disadvantaged Communities
- Build Out and Upgrade Statewide EV Charging Infrastructure
  - National Electric Vehicle Infrastructure (NEVI), utilities' MakeReady
  - NYSERDA coming block incentives for storage
  - Public-private-partnership potential

New York State 2022 GHG Emissions Report



**29%**Transportation

# Clean Transportation Program: Overview



Charging station infrastructure changes

Level 2 charging for passenger cars; level 3 for heavier transportation



Advisor in the investment and development of new technologies

Helping municipalities lead the path to adoption

- Fleet charging hubs
- Street (curb) charging
- Public parking charging







# Clean Transportation Program: 2023 & Ahead



**Construction of Sunshine-to-EV** at Sustainable Westchester's headquarters in Mount Kisco

- Replicable municipal model also targets car dealerships
- Fosters the intersection of clean energy technologies and increases adoption



#### Construction of Sunshine-to-EA Westchester Airport

- Electrification of Aviation is happening now
- Such aircraft need high speed charging
- Solar+Storage+Mobile DCFC demonstration



# SUSTAINABLE LANDSCAPING

# Sustainable Landscaping: Program Overview

#### Mission:

Assist municipalities in their clean energy transition of landscaping and maintenance equipment.

Provide specifications and comparative information on electrified power equipment & tools and provide best practices education on low impact landscaping methods

#### In 2022

- American Green Zone Alliance (AGZA) Certified Green Zone adoption: demonstration sites, stakeholder involvement & collaboration
- Education and awareness (via AGZA and Quiet Communities, Inc (QCI) partnerships)
- Municipalities led the way with a collaboration of stakeholders

#### In 2023

- A Green Zone in every community
- Positive engagement with local landscape companies
- Trade-in programs for gas to electric exchange



# **WASTE SECTOR**





### **Sector Focus: Waste**

The waste management sector includes all aspects of materials management and wastewater treatment.

Materials management includes waste reduction, reuse, recycling (including organics recycling), combustion, and landfilling.

Significant opportunities exist in Westchester communities to reduce further or avoid GHG emissions by improving both materials and materials management practices.

New York State 2022 GHG Emissions Report



Source: New York State 2022 Statewide GHG Emissions Report https://www.dec.ny.gov/energy/99223.html#Report https://www.dec.ny.gov/docs/administration\_pdf/ghgsumrpt22.pdf

# RECYCLE RIGHT

## **Recycle Right: Overview**







Connect local communities that are striving toward impactful, efficient, and cost-effective transition to zero waste through the power of aggregation.

- Easy to use APP and web widget with Westchester and municipality customized features
- Supports extended producer responsibility
- Recycle Right app builds awareness around recycling rules
- Municipal cost savings and effective solution (operational savings and share solution)



## Recycle Right: 2022 and Looking Ahead







### In 2022:

- Recycle Right municipal expansion = 9 at launch, now 18 participating
- 270,000 households
- Savings of thousands of dollars for municipalities
- Recyclopedia; 400,000+ searches
- 4.8 star rating

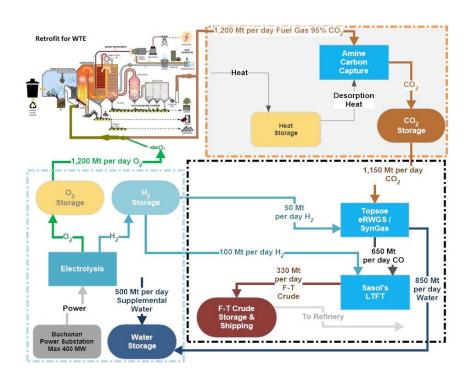
#### In 2023:

- Reducing barriers through streamlined communication
- Continued municipal expansion acts as a change agent



## BUSINESS DEVELOPMENT

## **Business Development: Waste to Energy**

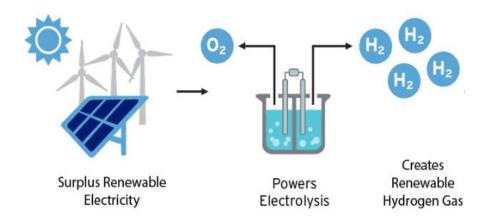


**Mission:** technical advisory for next generation solutions moving forward goals, maximizing opportunities on the state and national level

 Zero Waste: collaborating with waste-toenergy companies to eliminate GHG emissions from waste processing through potential Hydrogen Hub projects



## **Business Development: Hydrogen Hub**



### **Northeast Regional Hydrogen Hub**

Seven states and more than 100 companies:

- NYSERDA leading
- Stationary and mobile applications
- Low Carbon Fuels
- Capitalizing on funding potential: ~8.5 billion divided among 6-8 hubs
- Cost share from the DOE up to 50%



# SUSTAINABILITY POLICY & ENVIRONMENTAL JUSTICE





# SECTOR FOCUS: Policy & Environmental Justice: Role, Impact & Implications

Evolution of old & new policies is accelerating policy engagement is necessary to serve Westchester communities' collective sustainability interests

Sustainable Westchester is committed to serving communities most vulnerable to climate impacts

Critical policy engagement & environmental justice work advance resiliency and support an equitable clean energy transition, expanding:

- Greenhouse gas emission mitigation
- Disadvantaged Communities (DACs) participation in program solutions
- Financial benefits to community members and municipalities



## Sustainability Policy Engagement: 2022 and Looking Ahead









### In 2022, Sustainable Westchester began building policy capacity:

- Awarded a 2-year grant from Westchester Community Foundation
- Engaged in 15+ major policy development activities, including:
  - Submitting comments on the implementation of the IRA benefits,
  - Evaluating statewide CCA legislation
  - Staying apprised on progress of the Climate Act Scoping Plan and Disadvantaged Communities (DACs) criteria
- Performed policy informed planning and strategizing

In 2023, Sustainable Westchester will continue to engage and influence policy developments that affect the critical sectors, with the end goal of helping Westchester communities be more sustainable



### A Closer Look: Bond Act





Sustainable Westchester was a proud **member of the NY State Bond Act Coalition** 

- \$4.2 billion supports environmental improvements
- Creates 84,000 jobs
- Goal of 40% toward disadvantaged communities

Joined **300+ member organizations in coordinating outreach** around critical legislation to achieve New York State Climate Act recommendations

- 300 organizations
- Collaborative, on-the-ground policy advocacy and education
- Extensive communications campaign
- 63% support rate in Westchester County



## Climate Justice: 2022 and Looking Ahead









In 2022, Sustainable Westchester has targeted benefits to historically marginalized communities in several ways:

- Continued development of a Westchester Power Solar Savings offering to provide electric bill savings to households in utility assistance programs
- Increased accessibility of information by translating program communications in Spanish
- Created resources to help program development for the benefit of priority communities
- Continued work in prioritized communities via Westchester County Foundation grant
- Awarded grant funding and pivotal role in Regional Clean Energy Hubs
- Energy education and action advocacy in New Rochelle

In 2023, Sustainable Westchester will identify specific funding sources available to Disadvantaged Communities in Westchester to provide access to clean energy benefits to low-income and underserved communities Countywide.



## A Closer Look: New Rochelle Grant Energy Education





**In 2022:** Sustainable Westchester increasing community education, action and resiliency

- Elevate Sustainable Westchester's programming to support the adoption of energy savings measures
- Expand community visibility, awareness through local events and partnerships
- Support the the city of New Rochelle's sustainability efforts by attending coalition meetings.

In 2023: Outreach efforts continuing, with an enhanced presence in target populations.



# SUSTAINABLE WESTCHESTER

**End of Presentation** 

