Renewable Energy Aggregation

Real Action for Local Clean Energy



Parsippany Green Team

Our mission is to collaborate with our residents, town government and business community to identify and implement programs that improve our quality of life and the physical, environmental and financial sustainability of our community.



Impacts of Air Pollution & Climate Change

Air pollution

- ✓ New Jersey air is among the most polluted in the US
- ✓ Morris County rated 'F' for ground level ozone (American Lung Assoc.)
 - Parsippany location and density makes it the worst in Morris County
 - ➤ Air pollution exacerbates impact of COVID-19 on lungs
- ✓ 200,000 deaths/year in US from fossil fuel air pollution
- ✓ 12,000 deaths/year in US from excessive heat

Climate change

- ✓ NJ one of the fastest warming states in the country.
- Municipal Costs: Storm destruction, flood prevention, storm water utilities, drought, lake algae, insect infestations, vector borne diseases, insurance, public health, crime prevention
- ✓ Consumer Costs: Insurance, health care, loss of income, crime, property devaluation, increased energy costs, power outages



What is REAP

- Renewable Energy Aggregation
- Municipalities aggregate energy usage to <u>lower prices</u> and <u>increase usage of green energy</u>
 - ✓ Mass adoption of clean energy with no risk or effort
 - ✓ Elegant solution to challenge of convincing each individual to take action
- Available to residents and commercial entities



How Does REA Work?

- Parsippany offers its aggregated residential and commercial electricity demand in a reverse auction (sellers bid)
- Third party suppliers bid on Parsippany's demand
 - √ No individual residential or commercial sales
 - √ No salespeople
 - √ No commissions paid to anyone
- Parsippany TC and Administration decide which bid to accept, if any
- Fixed price and contract period
 - ✓ Price must be less than JCP&L and cannot go up
 - ✓ Process repeats when contract expires, if no new contract, return to JCP&L
 - ✓ Participating residents will be notified of status by mail
 - ✓ No concerns for residents about forgetting status
- No action needed by any resident who wants to participate



Benefits of REA

- Reduce resident and business cost of electricity
 - ✓ By law, third party base contracts must charge less than JCP&L
- Protection from market price increases
- Increases the use of clean renewable energy
 - ✓ Opportunity for everyone to painlessly contribute to solving climate crisis
- Increase choices of sources and percent of clean content
 - ✓ Safely exercise freedom to use other than JCP&L (only offers 21% clean energy)
 - ✓ Drives change using free market forces, not government mandates
- Provides Town Council and Administration with complete control



Benefits of Renewable Energy

- Increasingly lower cost than fossil fuels and dropping
- Reduces costs and risks of air pollution and climate change
 - ✓ Health & premature death risks
 - ✓ Pressure to increase cost of insurance (health, property, life)
 - ✓ Property damages, flooding, drought, crime, etc.
- Carbon footprint reduction



Annual Carbon Footprint Reductions*

- Increasing Parsippany residential RPS** to 40% is equivalent to:
 - ✓ Removing 24,113 tons of carbon from the atmosphere or
 - ✓ Removing the greenhouse gas emissions from 60M passenger miles or
 - ✓ Removing CO2 emissions from 133 railcars worth of coal or
 - ✓ Removing CO2 emissions from 2.4M gallons of gasoline
- Increasing Parsippany residential RPS** to 100% is equivalent to:
 - ✓ Removing 106,320 tons of carbon from the atmosphere or
 - ✓ Removing the greenhouse gas emissions from 240M passenger miles or
 - ✓ Removing CO2 emissions from 530 railcars worth of coal or
 - ✓ Removing CO2 emissions from 10.8M gallons of gasoline
 - ✓ Total residential carbon footprint decrease of 26%!

Can all be accomplished without any effort by any resident!



^{*}Assumes 100% of residents participate, no commercial participation

^{**}Renewable Portfolio Standard - Percent of clean energy content required by NJ law

Importance of Increasing Demand for Clean Energy

- Increasing market demand for clean energy
 - ✓ Incents more renewable energy sources
 - ✓ Increases competition
 - ✓ Lowers price of renewable energy
 - ✓ Drives down demand for dirty fossil fuels

Virtuous Cycle

- Over time entire electric grid becomes cleaner and air quality of entire region improves
- Market demand is much better than government mandate

REAs communicate to the market that there is a preference for renewable energy



How Electricity is Sold In NJ

- Electric bill has two components, delivery and supply
 - ✓ Delivery is the network (remains JCP&L by law, no choice)
 - ✓ Supply is the electricity (choice)
- Delivery service stays the same
 - ✓ Same bill and format
 - Same payment arrangement (e.g., budget)
 - ✓ Same wires
 - ✓ Same company for service calls, emergencies
- Supply of electricity is customer's choice
 - ✓ Third party electricity generation
 - ✓ More renewable energy content and options



REA Transactions

What really happens when we adopt REA?

Paper Transaction

- JCP&L sends list of all Parsippany residents to consultant.
- Consultant indicates which residents want to receive new price.
- JCP&L changes its billing records to apply new prices to bills for those residents. For example, JCP&L prices average 9.2¢– 9.3¢/kWh. Third party may charge 9.1¢/kWh.
- Third party provider never sees any customer names or records.
- Next customer bill shows new price.

Physical Transaction

- At resident's home No actual change of service.
 JCP&L delivers the same electrons it would have delivered without RFA.
- In PJM network third party sells contracted amount of clean energy into the PJM grid from which all customers are served.
- Net effect over time is that PJM pool of electricity gets cleaner as more towns use REA and residents receive higher proportion of electrons from clean energy sources.



Breaking News – JCP&L Raises Rates

- October 28, 2020 NJBPU approved JCP&L rate increase of 4% which translates into a raise of \$4/month for average resident
 - ✓ Likely to be in the delivery portion of customer bills
 - ✓ Will not appear on customer bills until November 2021
- REA will reduce the impact of this increase

- Parsippany is limited in what it can to minimize residents' direct tax burden.
- REA enables Parsippany to further reduce residents' expenses.



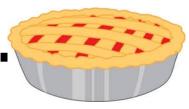
"Opt-in" Vs "Opt-out"

- Commercial customers opt-in*
- Residential customers opt-out*
- Previous "opt-in" programs never achieved the volume of customers needed to receive the best prices and cost savings
- Many residents ignore the "opt-in" request or delay responding, making this approach impractical
- This "opt-in" / "opt-out" process is the only way residents can receive the benefits of this program
- Energy consultant makes the "opt-out" process very easy

For most residents "opt out" is much more desirable



Opting Out is As Easy As...



- ✓ Prepaid return mail
- ✓ Email
- ✓ Web site
- **√** 800#
- ✓ Verbally inform consultant at town meeting
- ✓ Can be done **any time** during the term of the contract
- ✓ Never any penalty

Each residential customer will receive written notification <u>30 DAYS</u>

<u>BEFORE THE CONTRACT STARTS</u> showing the price, the comparison to the utility price, and their right to opt out.

Group Contract Benefits

- Protection against
 - ✓ Hidden fees
 - ✓ Teaser rates
 - ✓ Automatic transition to variable rate plan
 - ✓ Misleading claims on renewable energy
 - ✓ Confusing fine print
 - ✓ Billing problems
- Utilizes our own consultant to address problems
 - ✓ No consultant payments



No third party door-to-door or mail solicitation



No Risks

- Energy auction under auspices of PJM Interconnect
- Contracts have fixed rates (no market increases)*
 - ✓ Offer to residents must be below JCP&L rates
- Customers can opt out at any time with no charge
- Third party providers never see customer information
- No increased risk of blackouts** from renewables
 - ✓ Electricity is provided from network of utilities that ensure all customers have sufficient electricity at all times
- Town Council and Administration need not to accept any unsatisfactory bids



^{*}State or Federal law changes could affect rates but impact would be same for JCP&L

** JCP&L local distribution network reliability is unchanged

Clean Energy Examples

- Livingston*: 100% renewable electricity. Expects \$1.125 million in savings
- Maplewood: 8,000 households will save \$1M
- Montclair: Residents expect to save \$1.8M
- Glen Rock: 100% renewable energy for less than the current PSE&G rate for the area

The savings described above are significant but market conditions vary over time and savings in JCP&L areas are expected to be more modest.



REA Bottom Line

- Reduces/controls costs
- Grows the market for renewable energy
 - ✓ Protects our health
 - ✓ Cleans our air
 - ✓ Reduces pressure to increase health care costs
 - ✓ Reduces our carbon footprint
 - ✓ Reduces climate change disruptions
- No risks to residents (trusted program)
- Increases choices of providers and volume of clean energy
- Elegant solution to lower carbon footprint no action required
 - ✓ Opportunity to painlessly contribute to solving climate crisis
- Gives us more control of our future

Next Steps

- Parsippany Town Council must pass an ordinance to authorize program
- Council has asked to see evidence of support for REA from residents
- Please fill out survey at https://s.surveyplanet.com/ ciReenYC5



Other Actions You Should Take

- Speak to neighbors and friends
- Resources (copy of PowerPoint, description of program) at Parsippany Green Team FB page
 - √ https://www.facebook.com/ParsippanyGreenTeam/?ref=page_internal
- Contact members of the Town Council via email
 - √ http://www.parsippany.net/165/Elected-Officials
- Speak at Town Council meetings
- Submit letters to Parsippany Focus & Patch
- Invite the Green Team to speak to your organizations
- Have everyone fill out survey at https:// s.surveyplanet.com/ciReenYC5



TOGETHER, LET'S SAVE THE WORLD TAKE ACTION FOR CLEAN ENERGY



QUESTIONS?

KEN DOLSKY - kdolsky@optonline.net

Parsippany Green Team - parsippanygreenteam@gmail.com

BACKUP SLIDES

Sustainable Jersey & REA



- Sustainable Jersey is a statewide network of municipalities and schools, launched in February 2009
 - ✓ Mission: empower New Jersey communities to build a better world for future generations with the tools, training and financial incentives necessary to pursue critical sustainability initiatives
 - ✓ PSE&G, NJ Board of Public Utilities, Governor's Office, Division of the Rate Counsel
 - ✓ As of 2020, 456 NJ municipalities are participating in SJ programs.
- The <u>Renewable Energy Aggregation</u> (REA) program is sponsored and supported by Sustainable Jersey



Appendix – Resolution Establishing PGT

TOWNSHIP OF PARSIPPANY-TROY HILLS MORRIS COUNTY, NEW JERSEY RESOLUTION

R2019-192: RESOLUTION OF THE TOWNSHIP COUNCIL OF THE TOWNSHIP OF PARSIPPANY-TROY HILLS SUPPORTING PARTICIPATING IN THE SUSTAINABLE JERSEY MUNICIPAL CERTIFICATION

WHEREAS, a sustainable community seeks to optimize quality of life for its residents by ensuring that its environmental, economic and social objectives are balanced and mutually supportive; and

WHEREAS, the Township of Parsippany Troy Hills (the "Township") strives to save tax dollars, assure clean land, air and water, improve working and living environment; and

WHEREAS, the Township hereby acknowledges that the residents of the Township desire a stable, sustainable future for themselves and future generations; and

WHEREAS, the Township wishes to support a model of government that benefits our residents now and far into the future by exploring and adopting sustainable, economically-sound, local government practices; and

WHEREAS, by endorsing a sustainable path, the Township is pledging to educate itself and community members further about sustainable activities and to develop initiatives supporting sustainable local government practices; and

WHEREAS, as elected representatives of the Township, the Mayor and Township Council have the responsibility to provide leadership, which will seek community-based sustainable solutions to strengthen the community; and

Appendix – Resolution Establishing PGT

WHEREAS, the Township previously attained bronze certification from Sustainable Jersey in 2009 and the Mayor and Township Council wish to renew its certification as a Sustainable Jersey community.

NOW, THEREFORE, BE IT RESOLVED by the Township Council of the Township of Parsippany-Troy Hills, in the County of Morris, and State of New Jersey, that the Township will focus attentions on matters of sustainability within the Township.

BE IT FURTHER RESOLVED, that the Township Council supports the pursuit of initiatives and actions that will lead to Sustainable Jersey Municipal Certification. The Township Council hereby designates Judy Hernandez, Vice Chair of the Township Environmental Advisory Committee, to serve as the agent for the Sustainable Jersey Municipal Certification process and authorizes her to complete the Municipal Registration on behalf of the Township

BE IT FURTHER RESOLVED, that all Township officials and employees are hereby authorized and directed to take all action necessary and appropriate to effectuate the terms of this Resolution.

Appendix – Inspire Selling Door to Door

- Inspire Energy Holdings, LLC, a NJBPU authorized third party seller of electricity is selling their service door to door
- Inspire claims to be selling 100% clean energy from wind farms in Atlantic City
- Salespeople are asking residents to show them their utility bills so they can "ensure they are buying clean energy"
- The rate the sales person cited was 14¢/KWh, while the rate for the 07054 zip code on the Inspire site was 12.29¢. Both are considerably higher than JCP&L (9.2¢ to 9.3¢).
- Inspire is taking advantage of residents who are not aware of the JCP&L price or other third party offers with better deals.
- By implementing its own REA program Parsippany will reduce the susceptibility of its residents to this type of sales effort, while providing much better prices.

Global Warming Response Act 80 x 50 Report*

"Make no mistake: the changes New Jersey must continue to undertake in the next 30 years are significant," DEP Commissioner Catherine McCabe said. "But we know well the risks of inaction. Just as New Jersey is uniquely vulnerable to risks from climate change, so too is our great state uniquely positioned to turn this challenge into tremendous opportunity for our people, businesses and institutions."



Community Energy Aggregation

- Commercial customers opt-in*
- Residential customers opt-out*
- Historical opt-in programs have failed





Differences From 2013

- Clean energy component
- No individual residential or commercial sales
- No salespeople
- No commissions paid to anyone



Clean Energy Options

- Renewable Portfolio Standards (RPS) is state mandated percent of clean energy in electricity
- Current RPS in NJ is 21%
 - ✓ Most of the clean energy comes from out of state
- Third party base offer usually increases clean energy to 40%
- Options will exist for individual residents to increase this to 100%, usually for higher price
- Over time, market will increase its renewable energy content
- PGT proposed goal is to reach 100% by 2030









NJ Electricity Basics







- Government mandates our electricity delivery company
- How much of our electricity is from clean energy sources today?
- How fast is NJ energy going green?
- Reductions in cost of clean energy have improved REA savings
- Driving change by government mandate vs. market demand



Renewable Energy Aggregation Process

- Municipal ordinance to create program
- Select consultant through bid process
- Solicit third party provider bids, review and accept/deny
- Enter contracts
- Advise residents through a mailing
- Residents have 30 days to opt out before program starts and any time after that (30 days notice)
- No disruption in billing or customer service



Role of Consultant

Experienced consultant will guide Parsippany through the process

- Prepare Parsippany's RFP for electricity auction
- Manage opt-in and opt-out process
- Handle all interfaces with JCP&L
- Advise on market and design renewable product to meet our needs
- Conduct outreach to residents and businesses
- Provides residents with the contract price, the comparison to the utility price, and instructions to opt out
- Can provide cost saving estimator tool for residents and businesses
- Provide customer support (help desk)
- Manage billing issues

