Adding EVs to Your Municipal Fleet and Community

A Sustainable Jersey webinar
June 24, 2020
Today’s Presenters

*In speaking order

**Tracey Woods**  
Sustainable Jersey

**Cathleen Lewis**  
NJ Board of Public Utilities

**Ari Messinger**  
Cherry Hill

**Victor De Luca**  
Maplewood

**Andrea Friedman**  
NJ Department of Environmental Protection
What is Sustainable Jersey?

Certification program for municipalities and schools

- **Tools, resources, and guidance** to help municipalities and schools become more sustainable
- **Grants and funding** for municipalities and schools
- **Regional Hubs**
Sustainable Jersey Municipal Stats

- 2009 Program Started
- 81% Participating
- 89% Population
- 45% of Participants Certified

- 151 Bronze Certified
- 53 Silver Certified
- 1 Star

Map showing the distribution of certified municipalities in New Jersey.
Program Participants

**Municipal Program**
- 456 (81%) participating
- 204 Certified
  - 151 Bronze
  - 53 Silver

**Schools Program**
- 352 Districts (>50%)
- 968 Schools
- 241 Schools Certified
  - 223 Bronze
  - 18 Silver
Actions: Prosperity, Planet, People

- Municipalities choose from menu of actions to accumulate points
- Actions created by issue-based Task Forces:
  - subject matter experts
  - local leaders
  - state / federal agencies
  - stakeholders

<table>
<thead>
<tr>
<th>Green Design</th>
<th>Energy Efficiency for Municipal Facilities*</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Building Policy/Resolution</td>
<td>Energy Tracking &amp; Management*</td>
<td>5-50</td>
</tr>
<tr>
<td>Green Building Training</td>
<td>Buy Electricity from a Renewable Source</td>
<td>10-20</td>
</tr>
<tr>
<td>Create Green Development</td>
<td>Municipal On-Site Solar System</td>
<td>10-40</td>
</tr>
<tr>
<td>Green Building Education</td>
<td>Municipal Geothermal Energy System</td>
<td>10</td>
</tr>
<tr>
<td>Site Plan Green Design</td>
<td>Municipal Wind Energy System</td>
<td>10</td>
</tr>
<tr>
<td>New Construction</td>
<td>Renewable Government Energy Aggregation</td>
<td>5-50</td>
</tr>
<tr>
<td>Upgrade/Retrofit-Lighting</td>
<td>Commercial Energy Efficiency Outreach</td>
<td>10-20</td>
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<tr>
<td>Upgrade/Retrofit-Water</td>
<td>Residential Energy Efficiency Outreach</td>
<td>10-20</td>
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<tr>
<td></td>
<td>Make Your Town Solar Friendly</td>
<td>15-30</td>
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<tr>
<td></td>
<td>Community-Led Solar Initiatives</td>
<td>10-15</td>
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<tr>
<td></td>
<td>Wind Ordinance</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Fleet Inventory*</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Meet Target for Green Fleets</td>
<td>10-20</td>
</tr>
<tr>
<td></td>
<td>Purchase Alternative Fuel Vehicles</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Public Electric Vehicle Charging Infrastructure</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Make Your Town Electric Vehicle Friendly</td>
<td>15</td>
</tr>
</tbody>
</table>
# Sustainable Jersey Energy Actions

## Facilities Operations

<table>
<thead>
<tr>
<th>Energy Efficiency</th>
<th>Renewable Energy</th>
<th>Alternative Fuel Vehicles (AFVs)</th>
</tr>
</thead>
</table>
| • Energy Tracking and Management  
• Energy Efficiency for School/Municipal Facilities  
• Behavior-Based Energy Conservation Programs | • On-Site Solar Energy  
• On-Site Geothermal  
• On-Site Wind Energy  
• Buy/Purchase Renewable Energy | • Fleet Inventory  
• Meet Target for Green Fleets  
• Purchase AFVs  
• Sustainable Fleets |

## Community Energy Use

<table>
<thead>
<tr>
<th>Energy Efficiency</th>
<th>Renewable Energy</th>
<th>Alternative Fuel Vehicles (AFVs)</th>
</tr>
</thead>
</table>
| • Residential Energy Efficiency Outreach  
• Commercial Energy Efficiency Outreach | • Community Choice Aggregation (R-GEA)  
• Make Your Town Solar Friendly  
• Community-Led Solar Initiatives | • Make Your Town EV Friendly  
• Public EV Charging Infrastructure |
Fleet Inventory

10 points

Maintaining a Fleet inventory helps municipalities and schools:

• Track fleet emissions
• Identify vehicles that should be replaced with alternative fuel options or decommissioned

Template fleet inventory spreadsheet, automatically calculates fleet emissions
Purchase Alternative Fuel Vehicles

5-15 points

Vehicles eligible for points

• Plug-in hybrid electric vehicle
• Plug-in electric vehicle
• Pursuit class hybrid vehicles
• CNG or EV heavy-duty service vehicles
Plug-in Electric Vehicles

- 22-33% total emissions of gasoline vehicles
- 20-25% less maintenance costs
- 40-50% less fuel cost
- Rebates/incentives available

Alternative Fuel Vehicle Procurement Guide

Includes guidance for capturing tax credits and procurement options
Purchase Alternative Fuel Vehicles

NJDEP It Pay$ to Plug In
• Public, Workplace, Multi-Unit Housing charging stations
  – $750 per Level 1 charging station
  – $4,000 per port Level 2 charging
  – $200,000 per location for public DC Fast Chargers along major roads

www.drivegreen.nj.gov/plugin.html

NJBPU Clean Fleet Electric Vehicle Incentive Program
• $4,000 grant toward the purchase of a municipal EV
• $1,500 toward the purchase of a dual-port Level 2 EV charging station

<table>
<thead>
<tr>
<th>Model</th>
<th>Year</th>
<th>Type</th>
<th>Price</th>
<th>Discount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020 Chevrolet Bolt EV</td>
<td>Hatchback</td>
<td>2020</td>
<td>$32,190</td>
<td>7% Discount</td>
</tr>
<tr>
<td>2019 Nissan Leaf</td>
<td>Hatchback</td>
<td>2019</td>
<td>$26,894</td>
<td>11% Discount</td>
</tr>
<tr>
<td>2020 Ford Fusion Energi Titanium</td>
<td>Sedan</td>
<td>2020</td>
<td>$29,912</td>
<td>6% Discount</td>
</tr>
<tr>
<td>2020 Toyota Prius Prime</td>
<td>Hatchback</td>
<td>2020</td>
<td>$24,690</td>
<td>11% Discount</td>
</tr>
<tr>
<td>2019 Chrysler Pacifica Hybrid</td>
<td>7-person</td>
<td>2019</td>
<td>$39,238</td>
<td>5% Discount</td>
</tr>
</tbody>
</table>
SJS Sustainable Fleet

5-15 points

Vehicles eligible for points:
• Plug-in hybrid electric vehicle
• Plug-in electric vehicle
• Propane or EV school buses
• CNG or EV heavy-duty service vehicles

Electric School Buses
• Zero tailpipe emissions/ significant overall emissions reduction
• Quiet
• Cost Effective

Meet Targets for Green Fleets

30 points

Average fuel efficiency of 35/MPG for all light duty vehicles

OR

20% reduction in fuel usage

Fleet Fuel Reduction Strategies

- Fleet Management
  - Replace vehicles
  - Fleet right sizing
  - Share vehicles
  - Driver training: save 5% on fuel
  - Maintenance
- Fleet Route Optimization
- Telematics
- Hybridize vehicles with Idle Reduction Technology
- Convert vehicles to alternative fuels

Idling Reduction Technologies in Woodbridge Firetruck
Image Source: Woodbridge
Make Your Town EV Friendly

15 points

Zoning Ordinance —
EV charging stations as accessory use

Plug-in Electric Vehicle (PEV) Ordinance —
design standards for EV charging parking spaces

• Required spaces (e.g. ratio, percentage)
• Signage
• Protection around EV chargers, e.g. bollards
• Lighting
• ADA accessibility

First responder training

Additional activities from list
Make Your Town EV Friendly

Additional activities

• EV Awareness Event
• Incentive for EV Charging Pre-Wiring
• EV Charging at the Workplace
• Multi-Family Housing EV Charging

Ribbon Cutting Ceremony: Burlington City unveils new EV charging station

Participating in National Drive Electric Week is a great way to support EV Adoption
https://driveelectricweek.org/index.php
15 points

Guidance on **installation** and **outreach** for municipally supported public charging infrastructure

Funding and procurement guidance in **Alternative Fuel Vehicle Procurement Guide**
Effective Parking Management

10 points

Adopt or revise parking policies and or code provisions in a way that:

• uses existing parking more efficiently
• reduces future parking demand
• enhances walkability

Action includes guidance for understanding parking needs and parking management strategies.
Adding EVs to Your Municipal Fleet & Community

Sustainable Jersey Virtual Summit

June 24, 2020
Electric Vehicle Programs in New Jersey
• EMP’s first strategy and goal is “Reduce Consumption and Emissions from the Transportation Section”
• Goal of 330,000 light duty electric vehicles by 2025
• Charging infrastructure
• State light-duty fleet
• Increase transportation options, encourage new options
• Decrease “Vehicle Miles Traveled”
• Port emissions
Electric Vehicle (EV) Overview

- In June 2019, Gov. Murphy signed an MOU outlining NJBPU’s role in encouraging electric vehicle use in New Jersey

- Under this MOU, NJBPU will:
  - Consider how to utilize Clean Energy Program funds to finance Zero Emission Vehicles (ZEV) charging infrastructure deployment and mapping
  - Consider how to dedicate funds to create an incentive program to encourage NJ consumers to buy and lease new and used ZEVs
  - Track usage and electric consumption from charging infrastructure
• Grant from the U.S. Department of Energy
• Focused on how to enhance EV adoption in urban areas and in underserved communities
• Look at EV car-sharing options and Plug-in Electric Vehicle (PEV)-based ride hailing
Electric vehicles are now included in the State Purchasing Contract

New NJBPU Grant Program

- Designed to encourage local governments to add EVs to their fleet
  - $4,000 per battery electric vehicle
  - $1,500 for one Level-Two EV charging station
- Grants awarded on rolling basis or until funding expended

Questions? EV.programs@bpu.nj.gov
Charge Up New Jersey

• Receive an incentive of up to $5,000 when you purchase or lease a new electric vehicle
• Online portal for post-purchase incentive launched on May 27
• Time-of-purchase incentive coming soon

www.ChargeUp.NJcleanenergy.com
Program Requirements

• To apply for the Charge Up New Jersey incentive, your purchase or lease must meet the following requirements:
  • Vehicle must have a purchase/lease agreement of January 17, 2020 or later;
  • Vehicle must be registered to you in the State of New Jersey;
  • Your name must be on the purchase or lease agreement;
  • Purchase or lease agreement must be from a New Jersey dealership or showroom;
  • You must provide proof of New Jersey residency by providing a state ID or other acceptable documentation.
Additionally, your vehicle must:

• Be a new battery electric or plug-in hybrid electric vehicle
• Have an MSRP* of less than $55,000

*MSRP cap refers to the final Manufacturer’s Suggested Retail Price of the vehicle.
On May 18 NJBPU released a straw proposal aimed at furthering EV adoption in New Jersey by setting minimum utility filing guidelines.

It requested feedback on:
- Who should construct, own, operate, and pay for publicly accessible chargers
- How rates should be structured
- How to encourage charging infrastructure at Multi-Unit Dwellings
- Barriers to EV adoption in LMI and EJ communities, and solutions to overcoming those obstacles
Community Energy Plans

Localizing the Energy Master Plan Goals

- Energy Use
- Transportation Planning
- Land Use
- Water Management
- Waste Management
CATHLEEN LEWIS
Outreach Coordinator
Cathleen.lewis@bpu.nj.gov

VISIT
NJCleanEnergy.com

NEWSLETTER
NJCleanEnergy.com/NEWSLETTER

LISTSERVS
NJCleanEnergy.com/LISTSERVS

@NJCleanEnergy
THANK YOU
KNOWING WHERE YOU ARE IN ORDER TO MOVE FORWARD
KNOWLEDGE = INFORMED DECISIONS

- Fleet Management Software
- Fleet Telematics
- EV Fleet Conversion Analysis
- Internal Pilot Programs
FLEET MANAGEMENT SYSTEM
Fleet Summary

Generated on: 04/13/2020  Vehicles: 18
Observation Period: 09/30/2019 - 04/02/2020  Recommended EVs: 11

The Top 10 best EV candidates for your fleet are listed below.

<table>
<thead>
<tr>
<th>Asset ID</th>
<th>Model</th>
<th>Recommendation</th>
<th>ezEV Overall Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>188</td>
<td>2016 FORD EXPLORER</td>
<td>2020 Nissan Leaf S BEV</td>
<td>100</td>
</tr>
<tr>
<td>185</td>
<td>2016 FORD EXPLORER</td>
<td>2020 Nissan Leaf S BEV</td>
<td>99</td>
</tr>
<tr>
<td>172</td>
<td>2002 FORD EXPLORER</td>
<td>2020 Nissan Leaf S BEV</td>
<td>98</td>
</tr>
<tr>
<td>24</td>
<td>2016 FORD EXPLORER</td>
<td>2020 Nissan Leaf S BEV</td>
<td>98</td>
</tr>
<tr>
<td>2685</td>
<td>2006 FORD CROWN VIC</td>
<td>2020 Nissan Leaf S BEV</td>
<td>98</td>
</tr>
<tr>
<td>302</td>
<td>2018 FORD FUSION</td>
<td>2020 Nissan Leaf S BEV</td>
<td>97</td>
</tr>
<tr>
<td>303</td>
<td>2018 FORD FUSION</td>
<td>2020 Nissan Leaf S BEV</td>
<td>97</td>
</tr>
<tr>
<td>175</td>
<td>2004 CHEVROLET BLAZER - S10</td>
<td>2020 Nissan Leaf S BEV</td>
<td>97</td>
</tr>
<tr>
<td>199</td>
<td>2004 CHEVROLET IMPALA</td>
<td>2020 Nissan Leaf S BEV</td>
<td>96</td>
</tr>
<tr>
<td>301</td>
<td>2018 FORD FUSION</td>
<td>2020 Nissan Leaf S BEV</td>
<td>96</td>
</tr>
</tbody>
</table>
Fleet Impact
Estimated lifetime impact of replacing Top 11 EV Candidates:

<table>
<thead>
<tr>
<th>TCO</th>
<th>Operational Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost parity</td>
<td>-$35,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GHG Emissions</th>
<th>Fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td>48%</td>
<td>45,510 gal</td>
</tr>
</tbody>
</table>
Suitability Assessment
175 - 2004 CHEVROLET BLAZER - S10

Recommended Replacement:
2020 Nissan Leaf S BEV

Client: cherry_hill
Observation: 9/30/2019 - 2/26/2020
Days tracked: 150 days
Trips tracked: 273 trips
Last trip: 2/26/2020
VIN: 1GNDT13X34K159832

Estimated Operational Metrics in a 2020 Nissan Leaf S BEV
This table shows the estimated usage metrics if the trips driven by your 2004 CHEVROLET BLAZER - S10 had been driven in a 2020 Nissan Leaf S BEV.

<table>
<thead>
<tr>
<th>VMT</th>
<th>GHG Reduction</th>
<th>Operational Cost Difference (Lifetime)*</th>
<th>TCO* (Lifetime)</th>
<th>TCO** (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,960</td>
<td>98%</td>
<td>-3,000-6,000</td>
<td>Cost parity</td>
<td>0%</td>
</tr>
</tbody>
</table>

*Total Cost of Ownership (TCO) Change and Operational Savings reflect the financial savings over the lifetime of the vehicle.
**TCO Change takes into account the purchase price of the recommended vehicle, Operational Savings does not.

Top Parking Locations
The table shows the 3 most frequent extended period parking locations for this vehicle.

<table>
<thead>
<tr>
<th>Address</th>
<th>Dwell Time (avg. hours)*</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Perina Blvd, Cherry Hill, New Jersey, 08003</td>
<td>16</td>
<td>94%</td>
</tr>
<tr>
<td>08003, Cherry Hill, New Jersey</td>
<td>16</td>
<td>5%</td>
</tr>
<tr>
<td>1197 Marlkress Rd, Cherry Hill, New Jersey, 08003</td>
<td>16</td>
<td>1%</td>
</tr>
</tbody>
</table>

To view results of all 3 parking locations and other detailed information for 175, please visit the ezEV dashboard.
*For the purpose of calculating average dwell time, long parking instances are capped at a duration of 16 hours.
Ari Messinger
Operations Manager
Cherry Hill Township
856-432-8760
amessinger@chtownship.com
POLL TIME!
POLICY

PRACTICE
2019 Township Ordinances

#2971-19
- Multifamily buildings with five or more units shall have electric vehicle charging stations as 10% of the approved parking spaces.

#2972-19
- An Electric Vehicle Charging Station is a permitted accessory use in all zones.
DCH Audi donated the charging unit. The electrical wiring and installation costs were provided as a prize for Maplewood's second place finish in the state-wide Solar Challenge, sponsored by Sustainable Jersey and the Gardinier Environmental Fund.
Maplewood Police Department acquired a Hybrid Ford Responder pursuit class patrol vehicle in 2018

+ **Plus**
  - Estimated 60% reduction in gasoline usage compared to non-hybrid patrol cars
  - Ability to use temperature controls and communication devices without idling
  - Safety feature that allows officers to exit without putting car into park during emergency situations

- **Minus**
  - Reduced back size of back seat does not allow for detainees to be transport in the vehicle
  - Slightly less acceleration of the car purchased although can order different engine size
TOWNSHIP OF MAPLEWOOD

RESOLUTION NO. 148-20

RESOLUTION
AUTHORIZING THE TOWNSHIP OF MAPLEWOOD
TO APPLY FOR A GRANT
FROM THE
NATIONAL VOLKSWAGEN SETTLEMENT PROGRAM
On the Horizon

• Add more EV public charging stations around town
• Establish an EV Car Share Program in an area of town with high apartment density
• Convert municipal fleet from hybrid vehicles to electric vehicles once infrastructure is in place
• Continued community outreach to bolster support for EVs
DIVISION OF AIR QUALITY
AIR QUALITY, ENERGY, AND SUSTAINABILITY

Electric Vehicle Resources for Local Governments & Schools

SUSTAINABLE JERSEY JUNE 24, 2020

Andrea Friedman, Supervisor – Electric Vehicle Programs
NJDEP Division of Air Quality
Electric vehicles are 70% – 80% cleaner than gasoline vehicles. Including power plant emissions.
Final Solicitation - Volkswagen Settlement

$45 Million in grant funding for:

1. Heavy duty electric vehicles/equipment
2. EV charging stations (priority: public fast chargers)
3. Electric shared mobility programs

DEADLINE EXTENDED TO JULY 22!
Electric Heavy Duty Vehicles/Equipment

$37 million available to replace diesel vehicles & equipment

Examples: school buses, garbage trucks, delivery trucks, transit buses, port trucks and equipment, marine vessels, airport ground support equipment

Includes associated charging equipment

Overburdened communities will be prioritized

Details and application materials at www.state.nj.us/dep/vw/
It Pay$ to Plug In
NJDEP’s Grant Program for EV Charging Stations

Level 1 and Level 2 chargers at public places, workplaces (including fleets), and multi-family homes.

Applications considered on a first-come first-served basis.

NEW!!!
Public fast chargers along major roadways.

Competitive solicitation.
Deadline to apply: July 22, 2020

Apply online at www.drivegreen.nj.gov/plugin.html
It Pay$ to Plug In
Important program changes – Level 1, & 2 chargers

- **Maximum grant amount**
  - Level 1: $750 per port (↑)
  - Level 2: $4,000 per port (↑ for dual port, ↓ for single port)

- **Networked chargers required** for Level 2 (new)

- **Eligible costs**: 5 year network costs (new), and 5 year maintenance agreement (↑ from 3)

- **Quarterly data sharing** with NJDEP (new)

- **Number of ports per location** (new)
  - Level 1: minimum 5 ports
  - Level 2: minimum 2 ports, maximum 20

- **Leasing is eligible** (new)

- **Installation deadline**: 9 months (↓ from 12)
It Pay$ to Plug In
New public fast charger grants
For high-powered public fast chargers along major roadways
Reimbursement Amounts and Eligible Costs

- Maximum grant is $200,000 per location
  - On government-owned property: 100% up to maximum
  - On private property: 80% up to maximum
- Eligible costs: purchase, installation, maintenance agreement (up to 5 years), network costs (up to 5 years)
Eligible Locations

• Located along a designated major travel corridors
  Toll roads   US highway
  Interstates  NJ state highway

• Within 1 mile driving distance from an exit or intersection
Eligible Projects

• Must install at least 2 Direct Current Fast Charging (DCFC) stations at same location
  • You can install more, but we’ll only incentivize two.

• At least 150 kilowatts (kW) per charging station simultaneously

• Each charging station must have a CCS connector and a CHAdeMO connector (aka “dual standard”)

• User friendly and available exclusively to the general public.
Interactive mapping tool

Helps you evaluate potential locations for public fast chargers

www.drivegreen.nj.gov/dg-partnership-to-plugin.html
Grant Process

- Meet public procurement requirements (3 quotes)
  - Exception: If purchased from a cooperative purchasing organization (example: Sourcewell)

- Apply online at [www.drivegreen.nj.gov/plugin.html](http://www.drivegreen.nj.gov/plugin.html)

- Receive an approval letter from NJDEP.

- Execute a grant agreement with NJDEP. **Do not purchase or install equipment before your grant agreement has been executed.**

- Install charging stations within 9 months of the grant agreement (Level 1 & 2) or 12 months (DC Fast Charger).

- Submit paid invoices to NJDEP. Receive reimbursement.

Electric Shared Mobility Programs

Funding for electric shared mobility projects like electric car sharing and ride hailing services.

Programs that benefit overburdened communities will be prioritized.

Rolling deadline.

Apply at [www.state.nj.us/dep/vw/eMobility%20project%20proposal.pdf](http://www.state.nj.us/dep/vw/eMobility%20project%20proposal.pdf)
Stay Tuned for Future Solicitations

“Community” Fast Chargers: Funding for lower-powered DC Fast Chargers where people live and work

Solicitation for RGGI funding: Proceeds from the Regional Greenhouse Gas Initiative (RGGI) to catalyze clean, equitable transportation
Visit our Website

Your choice to drive electric improves New Jersey’s air quality and helps slow climate change.

Electric vehicle basics
All about charging
Charging station locator

How much will I save?
Choosing an EV

Grants & incentives
Maps and data
Multistate initiatives
Join our listserv

www.drivegreen.nj.gov
NEW FLYER!
EV Resources for Local Government

Includes:
Incentives
Procurement Tools
Policy & Planning Support
Sustainable Jersey Resources
Resources For Residents

Download from www.drivegreen.nj.gov
Links to everything in this presentation

Volksawagen Settlement Grants for Electric Heavy Duty Vehicles & Equipment

It Pay$ to Plug In – NJ’s Electric Vehicle Charging Grants

Maps, eligible roads, suitability scores for public fast chargers

Grants for Electric Shared Mobility Projects

Regional Greenhouse Gas Initiative (RGGI) Strategic Funding Plan 2020-2022

Drive Green New Jersey

Follow us on Social Media!

Instagram  drivecleannj
Twitter      @NewJerseyDEP
Facebook    www.facebook.com/NJDEPAQES
Contact me at:

Andrea Friedman
Supervisor, Electric Vehicle Programs
New Jersey Department of Environmental Protection
Andrea.Friedman@dep.nj.gov

www.drivegreen.nj.gov
Minimizing EVSE Costs

EVSE Unit Selection

Location

Long Term Planning
Minimizing EVSE Costs

EVSE Unit Selection

• Select EVSE unit with the minimum level of features needed
  – Level 1 vs. level 2
  – Networked vs. non-networked
• Wall mounted EVSE minimizes cost
• Dual port EVSE unit minimizes cost per port
• Size EVSE unit to fit available electrical capacity

List adapted from the U.S. Department of Energy’s Report, Costs Associated With Non-Residential Electric Vehicle Supply Equipment

Additional resource on EVSE costs
Rocky Mountain Institute, 2019
Reducing EV Charging Infrastructure Costs
https://rmi.org/insight/reducing-ev-charging-infrastructure-costs/
Minimizing EVSE Costs

Location

- Select meter first, then parking spaces
- Locate EVSE unit near electrical service
- Minimize the trenching distance


Additional resource on EVSE costs
Rocky Mountain Institute, 2019 Reducing EV Charging Infrastructure Costs https://rmi.org/insight/reducing-ev-charging-infrastructure-costs/

Minimizing EVSE Costs

Long Term Planning

- Contact utility early in process to discuss electricity consumption and demand charges
- Avoid utility demand charges by balancing charging times
- Consider EVSE that you plan to install over 10-20 years
- When doing electrical work, consider possible EVSE infrastructure
- Plan electricity infrastructure for EVSE for new facilities

List adapted from the U.S. Department of Energy’s Report,
Costs Associated With Non-Residential Electric Vehicle Supply Equipment

Additional resource on EVSE costs
Rocky Mountain Institute, 2019
Reducing EV Charging Infrastructure Costs
https://rmi.org/insight/reducing-ev-charging-infrastructure-costs/
Case Study - Glen Rock

Level 2 Charger/Tesla Charger donated by Tesla

Installation/siting paid for with
It Pays to Plug in Grant

Chargers are free to public
Case Study - Maplewood

Non-networked dual port charger donated by local car dealership

Installation (electrical work, parking meters, trenching) cost covered by a grant, $5000

Parking meters set at $1/hour used to offset cost of electricity
Case Study - Denville

Total cost of project $14,000 ($10,000 provided via Sustainable Jersey Gardinier Grant)

Dual Port networked charger, accepts credit cards

Charging fee $0.50/hour for first four hours, then $3/hour
Upcoming Events

**Going for Energy Gold Happy Hour**

June 30, 2020, 3:30 PM to 5:00 PM
Sustainable Jersey Opportunities

**Sustainable Communities Grant Program**

Two categories: Resiliency or Environmental Stewardship

Municipalities in Atlantic City Electric (ACE) territory

Applications accepted until **July 16, 2020**

**Local Public Information & Engagement (PIE) Planning Opportunity**

Applications are due **August 9, 2020**

**Energy Efficiency Outreach Support for NJNG Municipalities**

Partnering with green team students at Montclair State University’s PSEG Institute for Sustainable Studies

Contact Susan Ellman - [SEllman@njng.com](mailto:SEllman@njng.com)
Sustainable Jersey Supporters & Sponsors

Program Underwriters

- The Geraldine R. Dodge Foundation
- New Jersey's Cleanenergy Program
- PSEG Foundation
- Robert Wood Johnson Foundation

Grants Program

- PSEG Foundation
- Gardinier Environmental Fund

Corporate Sponsors

PLATINUM
- New Jersey Natural Gas
- PSEG

GOLD
- ELIZABETHTOWN GAS

SILVER
- Atlantic Health System
- Horizon
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