

### Electrification of Transportation

John Shipman Charging Forward Conference Washington, DC June 27th, 2019



## EV STRATEGY Goals and approaches to EV initiatives

## Increase electric vehicle adoption

- Identify and target high potential use cases
- Test concepts and business models

 Form strategic partnerships

 Raise awareness and education about electric vehicle options

### Support public charging

- Incentives for public quick charging
- Public quick charge hubs
- MTA buses
- Curbside charging

### Encourage off-peak charging

- SmartCharge NY incentive program
- Residential EV time of use rates

### Enhance awareness and education

- NY Auto Show presence for 11 years
- Marketplace



### SUPPORT FOR PUBLIC CHARGING

## Incentives for public fast charging

- CECONY Business Incentive Rate (BIR)
- Proposal for additional per plug incentives
- Proposal to invest in "make ready" costs for quick charging
- Almost 2/3 of capital costs on the interconnection in underground network systems



Quick charging station Capital costs (200kW)

# SUPPORT FOR PUBLIC CHARGING Public quick charge hubs

- Goal: 50 NYC fast charge hubs by 2020
- State plan for Thruway and Airports
- Con Edison considering demonstration of quick charging hub
  - Con Edison non-utility property
  - Co-locate charging providers to optimize site use and share costs



## SUPPORT FOR PUBLIC CHARGING **MTA bus electrification**





### SUPPORT FOR PUBLIC CHARGING

## **Curbside electric vehicle charging**

- Con Edison and partners to deploy ~120 charging ports available for NYC fleet vehicles and public
- The project will test feasibility of siting and operating electric vehicle at street parking
- Will yield data on
  - charging sessions
  - neighborhood acceptance
  - charger utilization
  - installation process
  - hardware durability
- Design must satisfy NYC Public Design Commission and Community Boards
- Plan to file proposal with regulator and deploy in 2019





#### **ENCOURAGE OFF-PEAK CHARGING**

### Level 1 and Level 2 incentives and rates

- Smart Charge NY rewards off-peak charging
  - Available for light, medium, and heavy duty vehicles
  - Provides \$0.10/kWh incentive for off peak charging (12AM 8AM), plus bonus incentives for avoiding 2-6pm during summer period
  - Collects key data on charging sessions and driver behavior
  - 93% of the charging is off peak
- EV tariffs available for residential charging
  - EV stand-alone voluntary time of use rate (VTOU)
  - Whole house VTOU with one year price guarantee for EV owners



## AWARENESS AND EDUCATION Vehicle-to-grid school bus

- Con Edison, National Express, and NYSERDA collaborate on five electric school buses in White Plains
- Con Edison will use bus batteries for grid services in summer, when they are unused by schools
- First mass-market electric school buses in region
- Market potential:
  - 8,000 school buses operating in Westchester and New York City
  - Summertime battery capacity about 450 MWh





### AWARENESS AND EDUCATION Marketplace demonstration

#### How much can you save with your next car?

Easily compare your favorite car models based on fuel efficiency, available incentives and total cost of ownership.





