

# Multifamily EV Charging Webinar

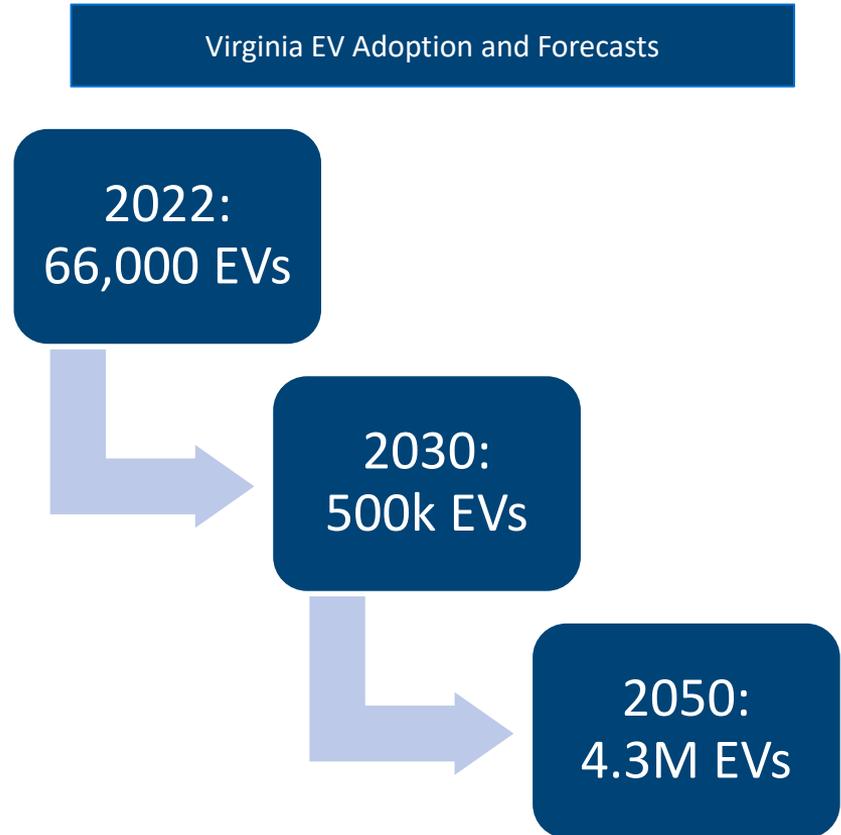
August 2023



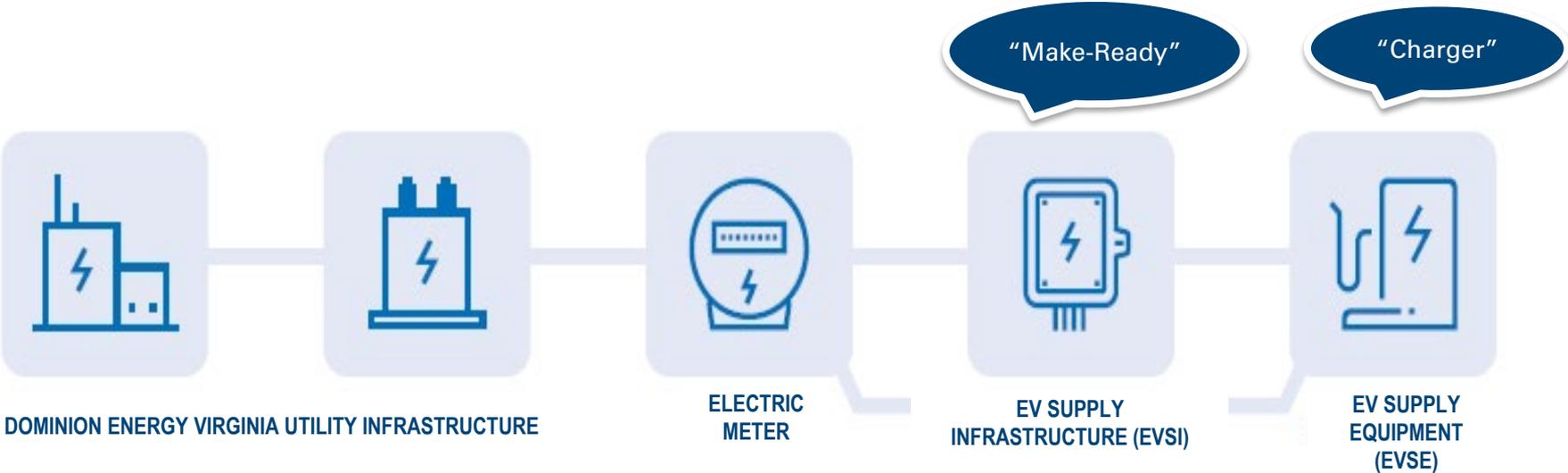
**Dominion  
Energy<sup>®</sup>**

# EV Market Trends

- Tipping point in **EV sales...**
  - National EV sales market share: 6%
  - Virginia EV sales market share: 8%
- Automakers are committing to more **EV models...**
  - Targeting up to 50% EV sales by 2030
  - Phasing out ICEV by 2035
- Federal policies provide **EV incentives...**
  - Infrastructure and vehicle tax incentives
  - Generational grant opportunities
- State policy will drive **EV adoption...**
  - More EV sales
  - ICEV phase out

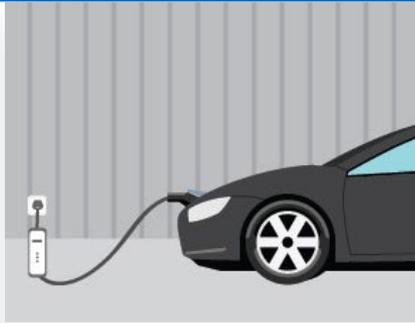


# Charging Infrastructure 101



# Charging Station 101

## Level 1



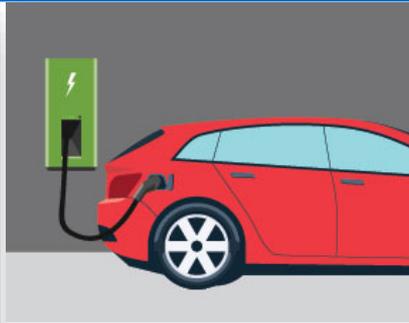
**VOLTAGE:**  
120V 1-Phase AC

**AMPS:**  
12-16 Amps

**CHARGING LOAD:**  
1.4-1.9 kW

**CHARGING TIME:**  
3-5 Miles per Hour

## Level 2



**VOLTAGE:**  
208V or 240V 1-Phase AC

**AMPS:**  
12-80 Amps

**CHARGING LOAD:**  
2.5-19.2 kW

**CHARGING TIME:**  
12-60 Miles per Hour

## DC Fast Charge



**VOLTAGE:**  
208V or 480V 3-Phase AC

**AMPS:**  
>100 Amps

**CHARGING LOAD:**  
50-350 kW

**CHARGING TIME:**  
10%-80% in ~30 Minutes

# Multi-Family Charging Benefits

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## Multi-Family Charging

- Attract and retain residents by providing a valuable amenity
- Differentiate your property
- Support clean transportation in your community

# Multi-Family Charging Challenges

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Education



Technical  
Complexity



Cost



Stakeholder  
Engagement



Parking

# Multi-Family EV Charging Steps

## Step 1: Decide on a location for your stations

- Parking scenarios at a multi-family community include on-street, garage, parking deck, parking lot, driveway, and carport.
  - Considerations:
    - How many chargers do I need?
    - Will the chargers be exposed to the elements?
    - Who has access?



# Multi-Family EV Charging Steps

## Step 2: Assess your electrical access

- Consult with the electric utility and electrician to determine existing capacity
  - Common area metering:
    - May be more cost effective
    - Property owner owns the charging station.
    - Difficult to allocate costs
    - Does not require assigned parking.
  - Dedicated metering:
    - EV-installed
    - EV-ready



# Multi-Family EV Charging Steps

## Step 3: Select your charging equipment

| <i>Level 1</i>                                                    | <i>Level 2 Ready</i>                                                      | <i>Level 2 Station Installed</i>                               |
|-------------------------------------------------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------|
| 120V/20A outlet with dedicated circuit                            | 240V/40A outlet with dedicated circuit                                    | 240V/40A service with dedicated circuit                        |
| Use existing outlets (cord and connectors provided with vehicles) | Resident buys and installs station and takes it with them when they leave | Hardwired charging station installed by property owner/manager |
| Slowest charge time (5 miles/hour of charging)                    | Faster charge time (10-20 miles/hour of charging)                         | Faster charge time (10-20 miles/hour of charging)              |
| \$                                                                | \$ \$                                                                     | \$ \$ \$                                                       |

- Considerations:
  - Data needs?
  - Cord management?
  - Wall or pedestal mounted?
  - Single or dual port?

# Multi-Family EV Charging Steps

## Step 4: Prepare for installation

### Using an existing outlet (Level 1)

- ✓ Confirm electrical capacity and safety
- ✓ Contact your electric utility
- ✓ Purchase outlet-compatible equipment (if needed)
- ✓ Plug in and start charging

### Installing a station or outlet (Level 1 or 2)

- ✓ Contact electrician or contractor
- ✓ Develop installation plan (includes developing site plan and contacting electric utility)
- ✓ Obtain necessary permits
- ✓ Install equipment

# Multi-Family EV Charging Steps

## Step 5: Develop policies and etiquette guidelines

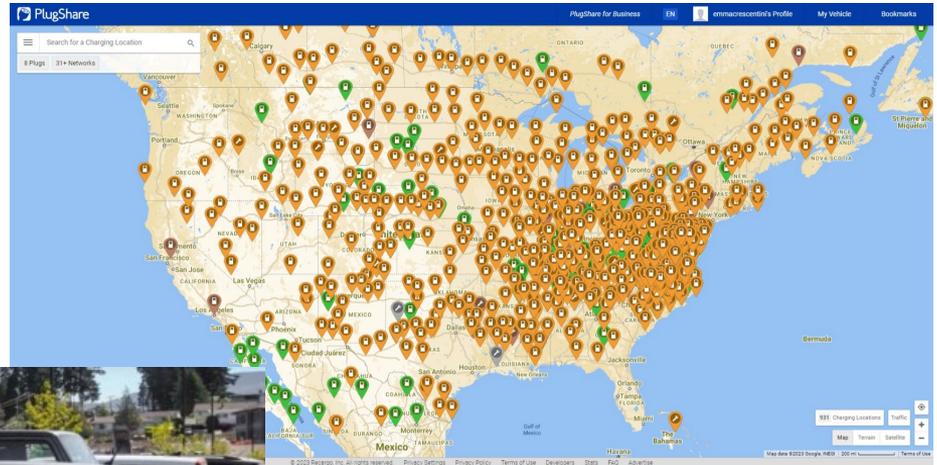
- Develop Policies and etiquette guidelines:
  - Rules are needed to ensure the charging stations are properly used by residents and guests.
- Considerations
  - Who has access to the chargers?
  - What if non-EV drivers use the space?
  - Parking duration?
  - Are drivers allowed to unplug other vehicles?
  - Stations notifications?



# Multi-Family EV Charging Steps

## Step 6: Promote the stations

- Promote the stations and educate residents:
  - Advertise the new amenity
  - Give live demos and workshops
  - Publish charging etiquette, ground rules, and pricing online
  - Add stations to PlugShare (www.plugshare.com)



# Dominion Energy Can Help You Lead the Charge

**We're paving the way for electric vehicles and charging possibilities in your area including easy options, expanded access, and trusted expertise along the way.**

## **Experience**

- Expert **education and guidance** for EV charging
- **Smart charging** programs and incentives
- **300+ charging stations** for our **workplaces and fleet**
- Nation's largest **electric school bus program with DCFC charging**



**Solutions to make it easier to charge at home, at work, and on the go**

# Dominion Energy *Level 2 Charging Program*

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## **Smart**

Guides, interactive tools, calculators, programs, and **incentives** to support electrification



## **Convenient**

Monthly on-bill payments reduce upfront costs for EV charging infrastructure



## **Equitable**

No-cost charging solutions available to eligible customers in underserved areas



## **Flexible**

EV charging hardware and software options to meet specific customer needs

# Resources

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- [Multifamily EV Charging Guide](#)
- [Resident EV Interest Polls](#)
- [Federal Incentives & Tax Credits](#)
  
- **DE Program Resources**
  - [Charging on the Go website](#)
  - [Charging on the Go handout](#)
  - [Participation Guide](#)
  - [EV Interest Form](#)

