Altadena Coalition of Neighborhood Associations (ACONA)

Let's keep Altadena

"The best neighborhood in LA County!"

November 16, 2022

Agenda for Tonight's Meeting
7:00 PM – 8:30 PM

- **7:00 PM – 7:02 PM Quick introductions and welcome**

- **7:02 PM – 7:22 PM Greywater**
  - **Josep Ferrer Communications Manager Greywater Corps**

  7:22 PM – 7:42 PM Mandate to cut back on electricity usage and use solar panels
  - **David Ford** SCE Local Public Affairs

- **7:42 PM – 8:30 PM Q&A**

- **8:30 PM Meeting end**

Your ACONA Team

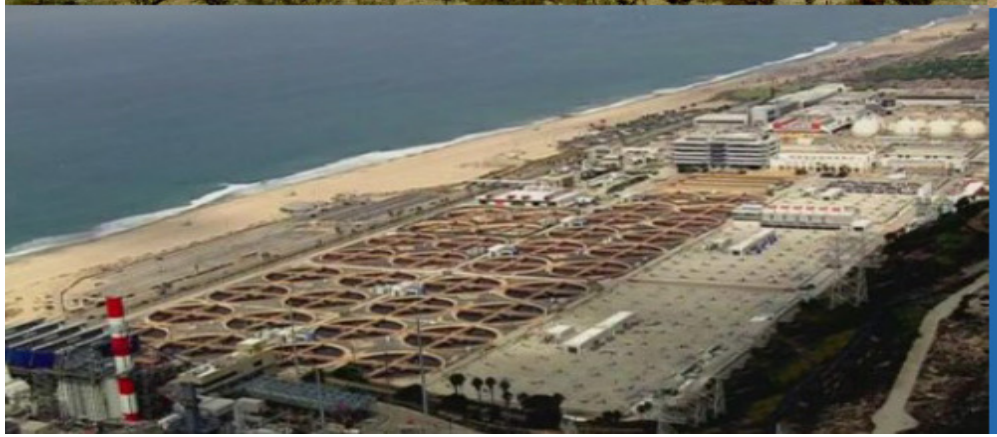
- Elliot Gold
- Nina Ehlig
- Ellen Walton
- Nicholaus Arnzen
- Holly Rundberg
- Carlotta Martin
- Sussy Nemer
- Captain Jabari Williams

Greywater

7:02 PM – 7:22 PM

Josep Ferrer
Communications Manager
Greywater Corps


GREYWATER CORPS
Greywater Irrigation
for Residential Gardens



Moving and treating water accounts for 20% of energy used in California*

https://www.ppic.org/wp-content/uploads/californias-water-energy-and-water-november-2018.pdf

Greywater

- All wastewater generated in the home - *except from toilets and kitchen sinks*
- Typically **50-80% of indoor water use**
- Best and easiest use of greywater is for irrigation
- Can be used for irrigation **untreated** or **treated**

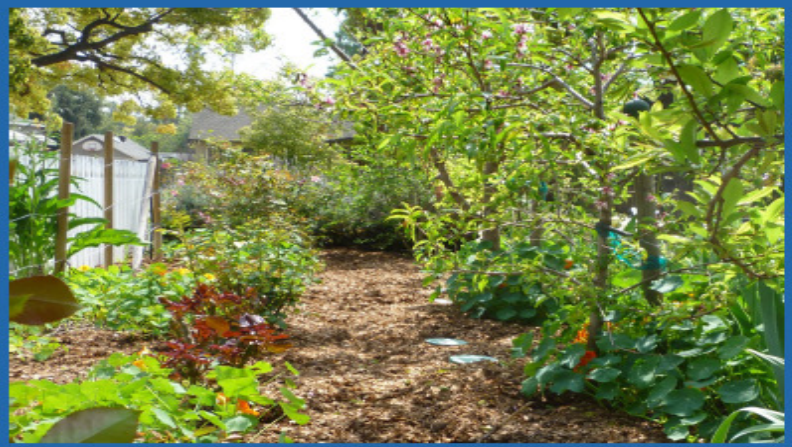
Benefits of Greywater

- Saves water
- Saves money
- Reduces your carbon footprint
- Reduces loads on sewage and septic systems
- Recharges local groundwater
- Protects the bay
- Sustains a beautiful and bountiful garden
- Ensures water security for your landscape

Greywater is a guaranteed source of irrigation in an era of increasing drought.

(Untreated) Greywater Basics

- You must be able to shut the system off
- Irrigation must be subsurface
- Avoid filters and storage tanks
- Use plenty of mulch



Mulch Basins

- Untreated greywater must be delivered into mulch basins
- Small trenches about 1 ft. deep, 1 ft. wide and 3-5 ft. long filled with wood chip mulch
- Greywater flows underneath the woodchips where it absorbs into the ground
- Avoids pooling, runoff

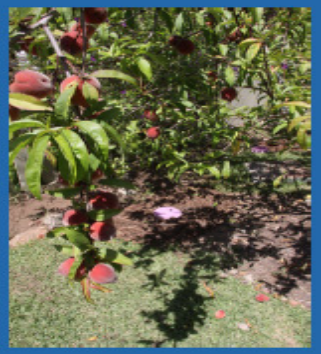
(Untreated) Greywater Emitters

Laundry-to-Landscape + Pumped System
Adjustable ball valve on ½ inch tubing

Branched Drain
Open ABS pipe

Plants that like (untreated) greywater

- Greywater provides deep root irrigation for large to medium plants
- Shade trees, fruit trees, shrubs and larger ornamentals
- Grass and groundcover are not compatible with (untreated) greywater
- Fruits and vegetables are ok as long the edible part of the plant is off of the ground:
  - YES: tomatoes, blackberries, fruit trees…
  - NO: carrots, potatoes, lettuce, strawberries…



Greywater System Types

Laundry-to-Landscape

Pumped System

Branched Drain

Untreated greywater – irrigation must be subsurface in mulch basins

Advanced System

Treated greywater

Branched Drain

<-Branched drain emitter

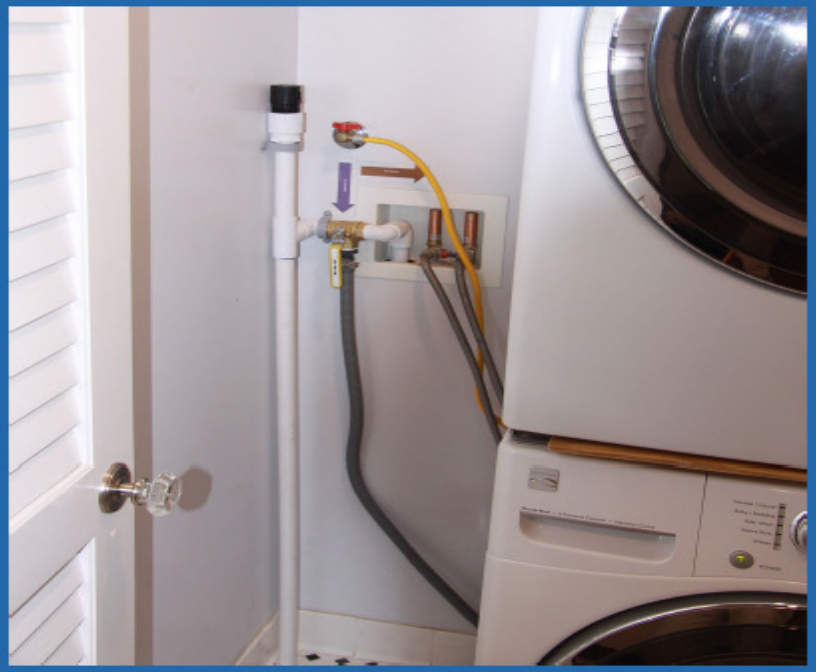
- Water flows only by gravity
- 4-8 emitter points per irrigation zone
- Water con only travel downhill

Branched drain system before, during and after installation

Laundry-to-landscape

- Water flows with assistance from the washing machine's internal pump
- 3-6 emitter points per irrigation zone
- Water can travel about 60 feet from the washer, slightly further downhill

<-L2L emitter



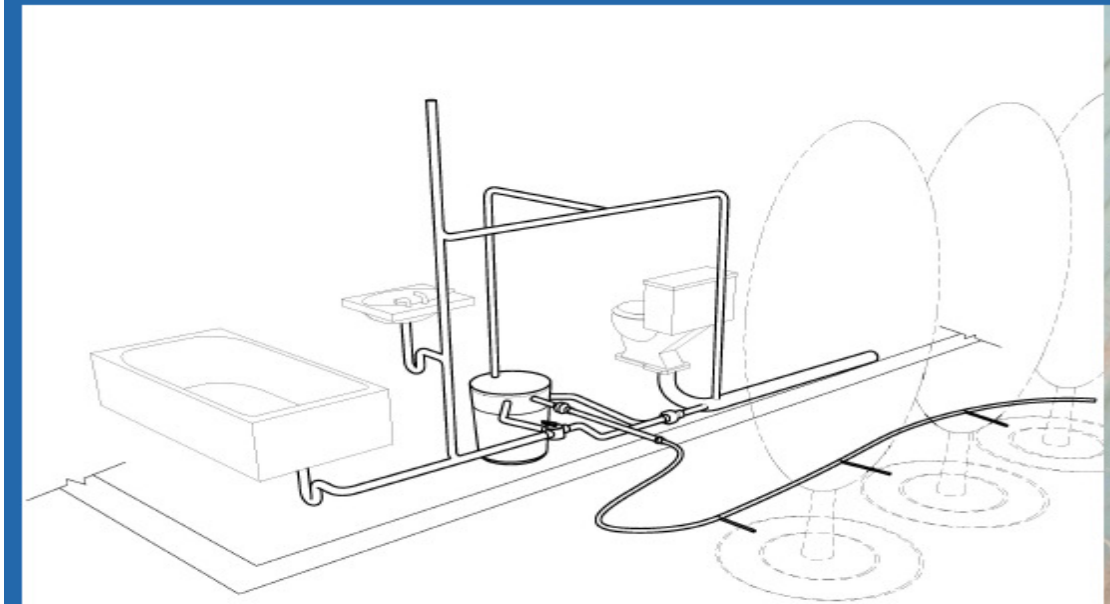
Pumped System

- Sump pump sends greywater out to the landscape
- 8-16 emitter points per irrigation zone
- Unlimited distance

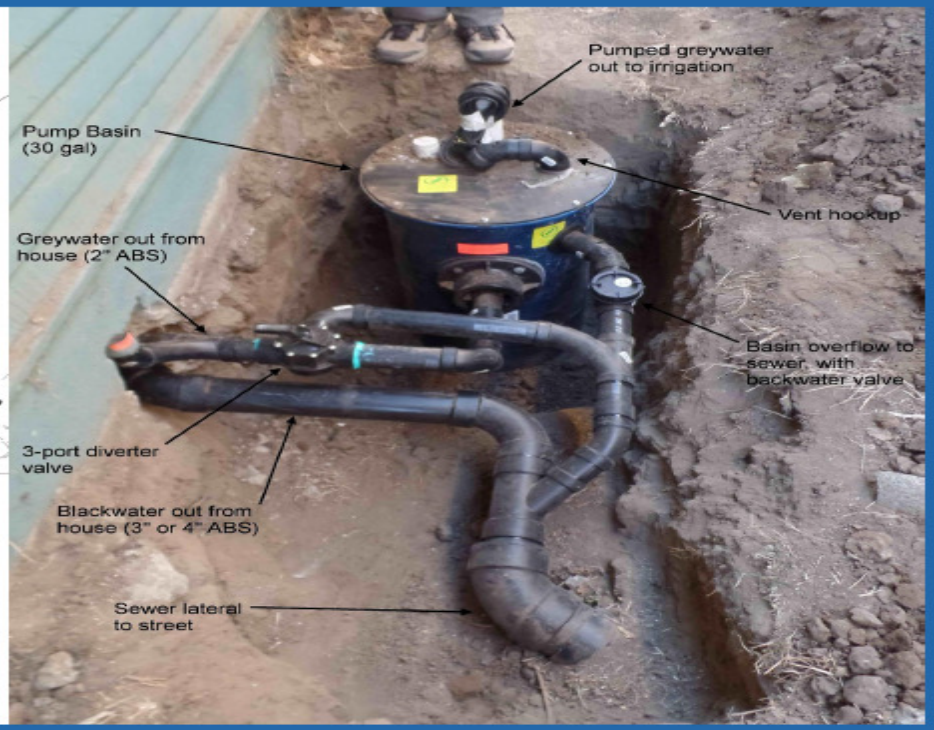
Pumped System emitter
(same as L2L) ->

Pump Basin (does not store greywater)

Pump basin and plumbing (does not store greywater)



PUMPED SYSTEM



Advanced Systems

- Compatible with any existing irrigation – sprinklers, drip, etc…
- Automatic makeup water
- 3' x 6’ footprint

Rainwater basics

- Collected from rooftop gutters
- Rainwater can be pumped and filtered to make it compatible with existing irrigation systems
- How much rainwater you can use depends on how much you can store
- Ideal for vegetable gardens
- Emergency use in case of fire or earthquake
- Satisfies city L.I.D. requirements

Filtration + UV sterilization bank

Rainwater systems

Small and Slimline tanks

250-2000 gallons

Large above ground tanks

2,000-10,000+ gallons

Underground tanks

2,000-20,000+ gallons

Thank you!

Josep Ferrer
Communications Manager
http://www.greywatercorps.com
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Mandate to cut back on electricity usage and use solar panels

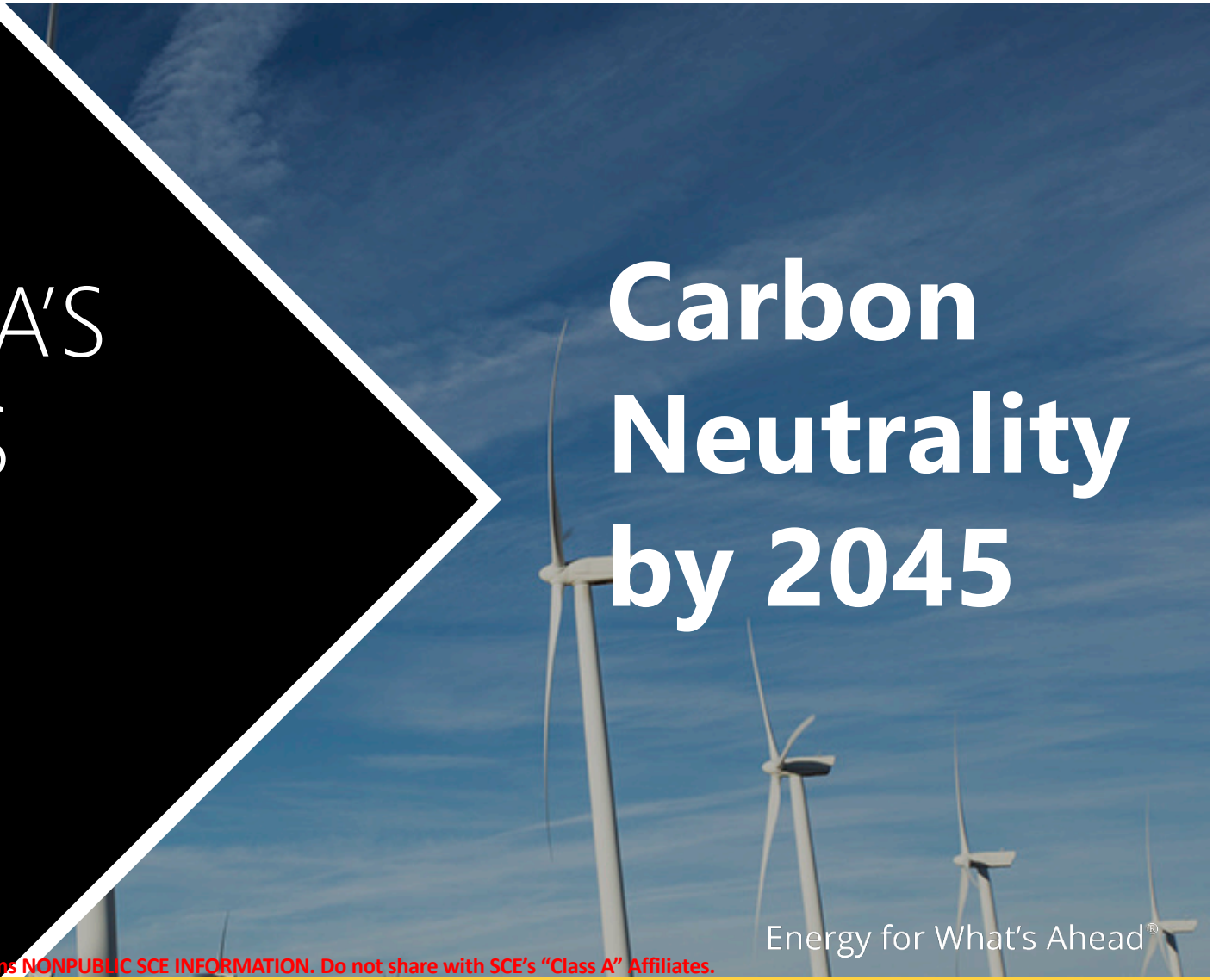
David Ford SCE Local Public Affairs

CALIFORNIA'S CLEAN ENERGY FUTURE

ACONA

Energy for What's Ahead®

CALIFORNIA'S AMBITIOUS GOAL



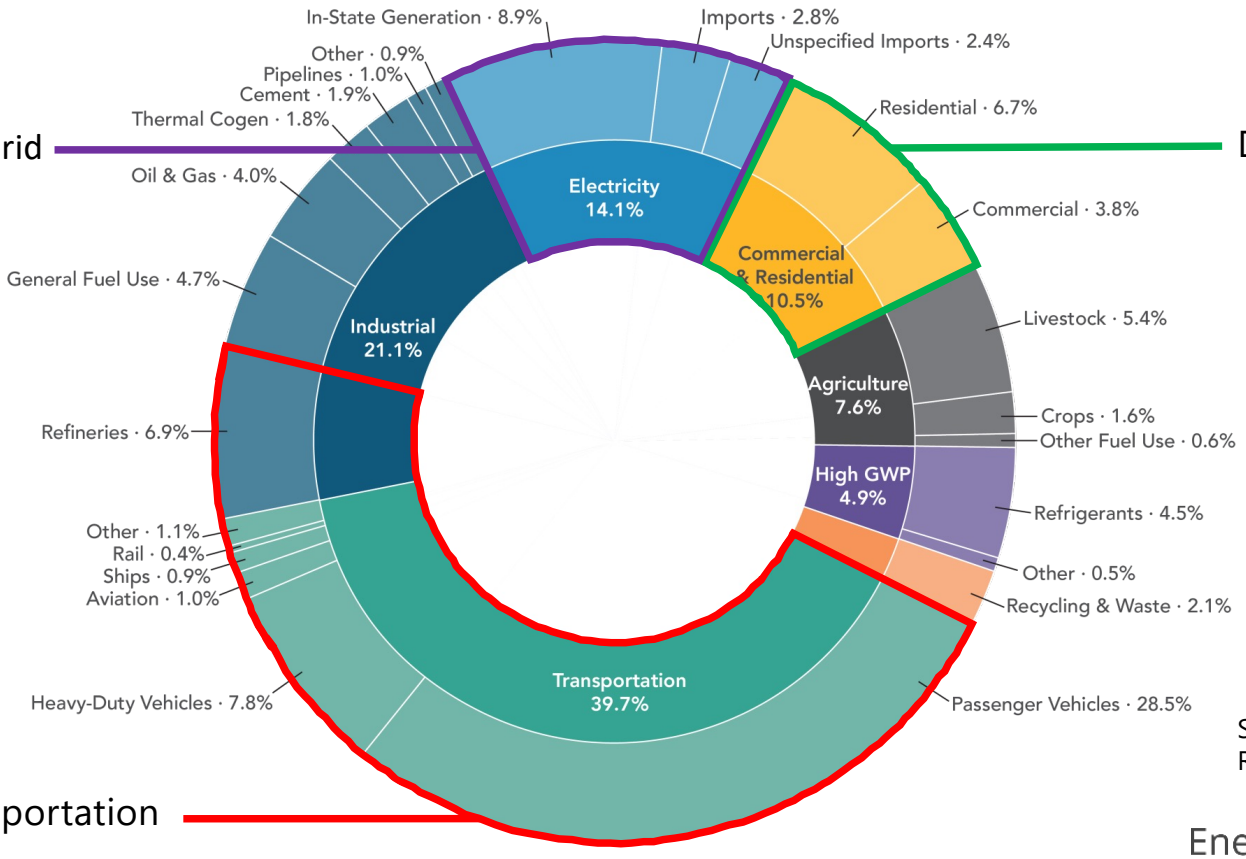
Carbon Neutrality by 2045

Energy for What's Ahead®

Where Emissions Are Located

Decarbonize the Grid

Decarbonize Buildings

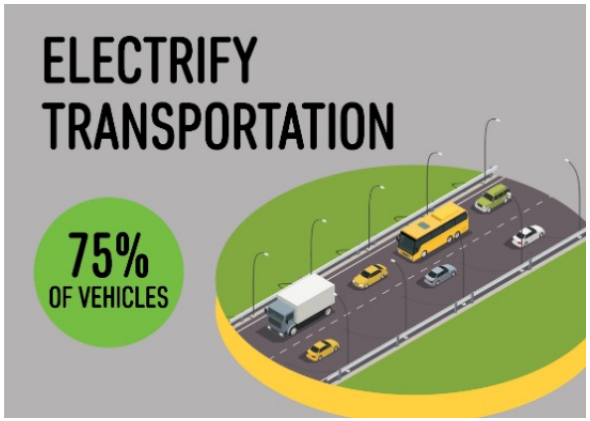


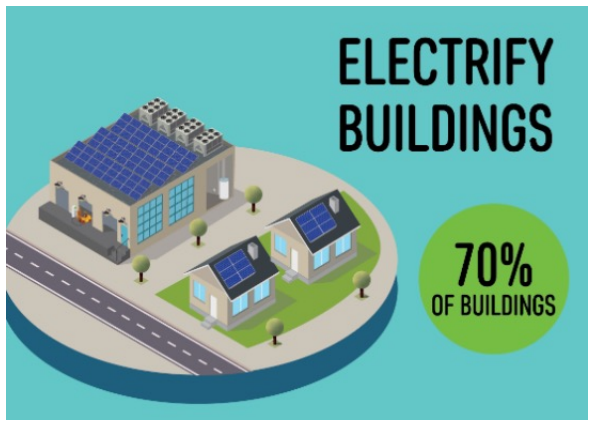
Source: 2019 California Air Resource Board GHG Inventory

Decarbonize Transportation

Energy for What's Ahead®

OUR PATHWAY 2045

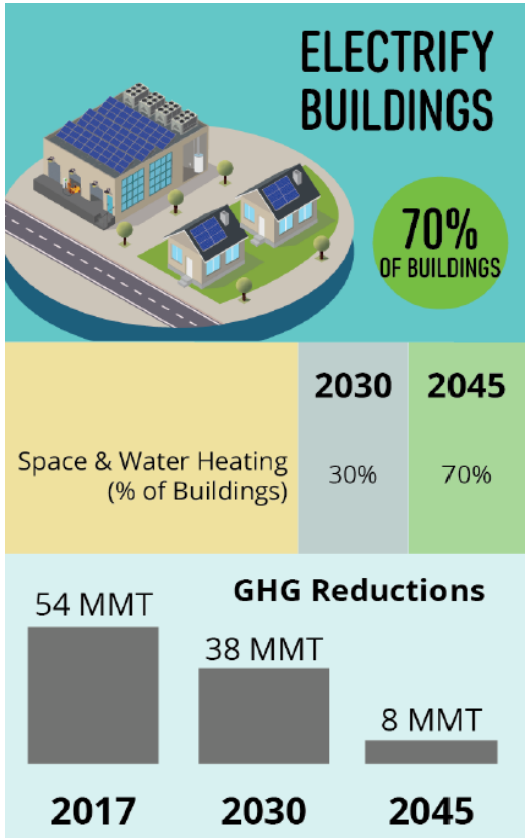




Clean the power grid. And electrify.

Energy for What's Ahead®

SCE's Building Electrification Pathway to 2045



By **2030**, almost **one-third** of space and water heating needs to be electric and almost **three-quarters** by **2045**.

GHG emissions from the building sector today are dominated by natural gas.

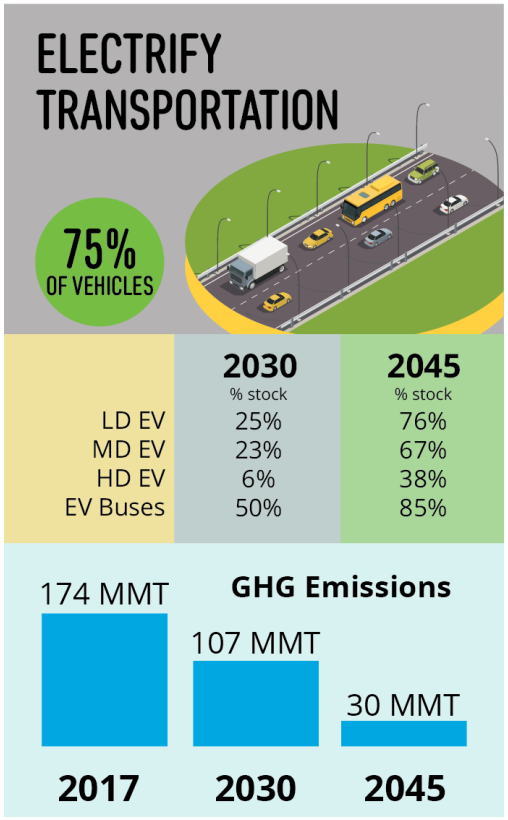
Building electrification today **reduces emissions** in single-family homes by **30-60%** relative to a mixed fuel home. This is estimated to **increase to 90% by 2050** as the electric grid gets cleaner.

Cost-effective building electrification is enabled by **heat pump** technologies.

POLICY DRIVERS

- CEC Title 24
- Local Government Reach Codes
- CEC Integrated Energy Policy Report – 6 Million Heat Pump Goal
- CPUC Update to Three Prong Test
- CPUC Approved Incentives for Gas Appliances & Line Extensions
- State Budget
- Inflation Reduction Act
- SCAQMD Air Quality Management Plan

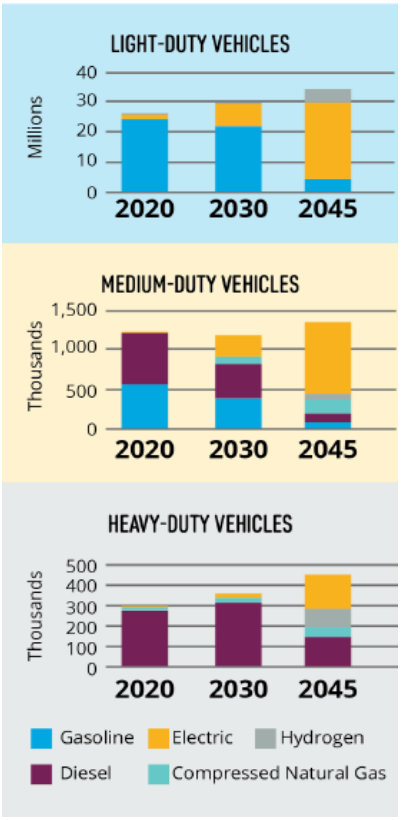
SCE's Transportation Electrification Pathway to 2045



By **2045, 26 million** passenger vehicles on the road need to be electric, which equals **three-quarters of all cars**.

For **medium-duty vehicles two-thirds**, or **900,000** need to be electric and for **heavy-duty** the number of vehicles needed is **one-third** or **170,000**.

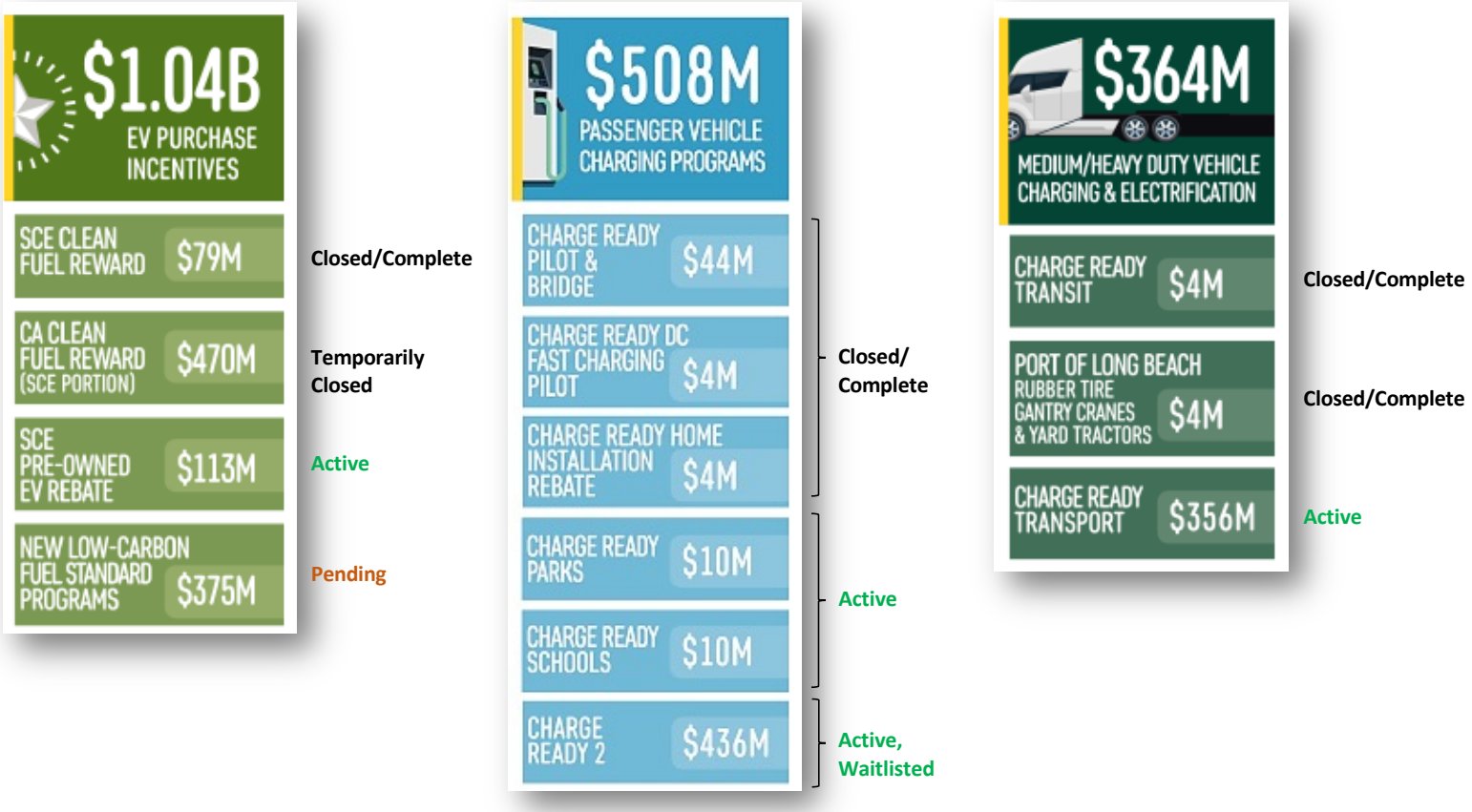
- Low-carbon fuels play a significant role for heavy-duty vehicles and remove more than half of the carbon emissions in this segment



STATE POLICY DRIVERS

- Governor Newsom's Executive Order N-79-20
- CARB Advanced Clean Cars II Rule
- State Budget
- CARB Innovative Clean Transit Rule
- CARB Advanced Clean Trucks Rule
- CARB Advanced Clean Fleets Rule
- SCAQMD Warehouse Indirect Source Rule
- CPUC Transportation Electrification Framework
- CPUC Rule 29

SCE is supporting the electrification of more than 550,000 vehicles over the next 5 years



Charge Ready programs provide infrastructure for growing EV adoption

Charge Ready Light Duty

- $432M program to support electric vehicle (EV) **charging infrastructure** for **light duty vehicles**
- Make-ready Infrastructure, Rebate, Multifamily Turnkey, & New Construction program offerings
- Targeting to install over **30,000 charging ports**
- Provide financial and technical assistance to install charging stations
- Launched July 2021

Charge Ready Transport

- $356.4M program to support the installation of EV charging equipment for **medium- and heavy-duty (MDHD)** EVs or **non-road** EVs for fleet applications at **low or no cost** to program participants.
- Targeting infrastructure installations to support **8,490 electric vehicles** procured or converted
- Charging station rebates available for transit/school buses and sites in **disadvantaged communities**
- Launched May 2019

Charge Ready Schools

- **No-cost** or **utility owned infrastructure** to serve 250 L1/L2 ports
- Available to **K-12 Schools**
- 40% located in Disadvantaged Communities

Charge Ready Parks

- **Utility owned** infrastructure (for existing or new construction) to serve 130 L2 and 10 DCFC ports
- Available to **California State parks and beaches**
- 25% of sites located in Disadvantaged Communities

SCE tackling EV affordability challenge for consumers through innovative rate design and vehicle rebates

California Clean Fuel Reward Formerly $750 point of sale rebate for people who purchase or lease an eligible new Battery Electric (BEV) or Plug-in Hybrid (PHEV) vehicle at participating automotive retailers. Temporarily reduced to $0 as of 9/1/22.

Pre-Owned EV Rebate
$1000 rebate for the purchase or lease of a pre-owned EV.
$4000 rebate for income-qualified applicants for the purchase or lease of a pre-owned EV.

EV Rate Design
Residential and commercial dedicated EV rates

Away from home charging
Focus to serve multi-family and disadvantaged community residential customers

Successful transportation electrification deployment depends on early and frequent engagement with industry partners

Enablers to EV Adoption	*Key Partners*	*Role*
Funding	❖ **Regulators** ❖ **Utilities** ❖ **Industry advocates**	❑ Funding providers and utilities should collaborate on **complementary programs, timeframes, and eligibility requirements**
Infrastructure	❖ **Fleet owner** ❖ **Utilities** ❖ **State & Local Gov't** ❖ **Electrical contractors**	❑ Fleets should **reach out to utilities early and often** to discuss electrification options, scenarios, infrastructure funding and support ❑ **Streamlining the permitting process** can help reduce the timeline for design and construction
Customer Support & Education	❖ **Utilities** ❖ **OEMs** ❖ **EVSPs**	❑ Fleet owners and operators need support from utilities and subject matter experts to ensure their **EV fleet deployments meet operational needs** ❑ Utilities can help their customers understand how special **EV rate design and demand response programs** can compliment their charging needs and help them manage their total energy costs

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Questions?

Next ACONA Meeting

- January 24, 2023 Tuesday