# Green Issues Standing Committee Meeting

January 23, 2023



## Agenda

- I. Public comment
- II. City Hall EV Charger Project Charger Fees
  - a. Recommendation Request
- III. Sustainable Community Network Participation
  - a. Recommendation Request
- IV. Reach Code and Building Electrification
  - a. Recommendation Request
- V. Program Updates



# ITEM II: CITY HALL EV CHARGER PROJECT — RATES FOR CHARGERS

Presentation to the Energy Green Issues Standing Commitee January 23, 2023

Presentation by:

Dana Murray, Sustainability Manager

Stephanie Holmes, CivicSpark Fellow



## Electric Vehicle Charger User Fees



 The City Hall EV Charger project's EV charger software can collect fees from the public.

 The EV vendor is requesting information on how much the City intends to charge as energy fees at the chargers.



## Cities and EV charger user fees



- Many fees are determined to recoup electricity costs, or as a discount:
  - Santa Barbara
    - \$0.20 \$0.35 per Kilowatt Hour
  - Santa Monica
    - \$0.30 per Kilowatt Hour
  - Santa Cruz
    - \$0.35 per Kilowatt Hour
  - Alameda County
    - \$0.15 per Kilowatt Hour

- Some California cities provide free charging:
  - Sacramento
    - free EV charging at City-owned garages
  - Los Angeles
    - hundreds of free charging stations
  - West Hollywood
    - free 2-hour parking for EVs charging in municipal garages
  - Manhattan Beach
    - ~20 free chargers for staff and public
  - Carpinteria
    - proposed free charging for City employees



Los Angeles County's Clean Transportation Team User Fee Analysis

- LA County has a method of determining optimal charging station user fee
- Analyzed data from the County's EV charging station network to propose a fee that meets the needs of the community while recouping operational expenses.
- Staff can use the same analysis to determine our own fees





## Recommendation Request

- Staff recommends that the Committee consider a fee structure for Cityowned EV chargers for the three types of user-groups: public/visitors, City employees, and fleet.
  - 1. Should the public be charged fees to use the City's Level 2 EV chargers?
  - 2. Should municipal staff be charged fees to use the City's Level 2 EV chargers for personal vehicles?
  - 3. Should the EV chargers only have a fee charged during peak use hours (typically 4:00-9:00 PM when electricity is the most expensive)?
  - 4. Should the EV chargers have fees that differ during off-peak and peak use hours?

## Recommendation Request: Vendor Options

- Option 1: [NO FEES TO USER FREE CHARGING]
  - During the Term, the City has elected to provide free charging to Project end-users and has directed Contractor not to collect any Base Fees during the Term.
- Option 2: [SINGLE RATE]
  - During the Term, Client has directed Contractor to collect Base Fees from Project end-users via the app at a rate of \$[0.XX] per kWh.
- Option 3: [TIME OF USE RATE]
  - During the Term, Subscriber has directed Company to collect Base Fees from Project end-users via the app at different rates depending on the time of use.
- Option 4: [ACCESS RATE SPECIAL RATES FOR NAMED USERS]
  - During the Term, Client has directed Contractor to collect Base Fees from Project end-users via the app at different rates for specified usernames determined by the Client than for all other users.



### Staff Recommendation

- Staff recommends utilizing a time-of-use (TOU) fee with EV charging rates (Option 3) and free or discounted charging during City Hall hours for employee parking (Option 4).
- Based on the L.A. County model, a sample structure for public charging:
  - super-off-peak price of 25 cents per kWh (8am-4pm)
  - peak price of 45 cents per kWh (4pm-9pm)
  - off-peak price of 30 cents per kWh (9pm-8am)
- This rate structure is predicted to increase EV charger utilization, while helping to cover operation and maintenance costs for the City.
- These rates are similar to those found in other jurisdictions.
- Staff has acquired L.A. County's EVSE User Fee Calculator, and can use it to calculate utilization, electricity, networking, and maintenance costs, as well as projected revenue for 1 and 10 years.



## Questions & Input

January 23, 2023 Green Issues Standing Committee Meeting

# ITEM III: SUSTAINABLE COMMUNITY NETWORK PARTICIPATION

Presentation to the Energy Green Issues Standing Commitee

January 23, 2023

Presentation by:

Dana Murray, Sustainability Manager

Stephen Honikman, Electriq Power



### Purpose

- Provide an overview of a new program launched in Santa Barbara County, the Sustainable Community Network (SCN) Home Solar & Battery Energy Storage Program, offered by Electriq Power, Inc.
- Seek a recommendation from the Committee on Goleta's participation.



## Background

- Participation in the new SCN program is closely aligned with the City's Sustainability goals.
  - Investing in the development and installation of clean energy infrastructure.
  - Promoting environmental vitality and transition to a clean energy future.
  - Advancing community towards 100% renewable energy by 2030.
  - Expands equitable community access to renewable energy and improves energy resilience.
- The program's focus is providing access to clean energy technology at no upfront cost, and without the hurdles that often prevent disadvantaged or otherwise underserved community members from accessing the financing instruments (e.g., credit) typically required to acquire a solar microgrid.

### **About Electriq Power**





Smart Energy Storage System solutions company

- Founded in 2014
- Hardware (batteries) + Software (energy management)
- Comprehensive turnkey programs
  - Resilient Cities Program
- Company Mission
  - Panoramic
  - Prudent
  - Parity

"Everyone included in clean energy transition"

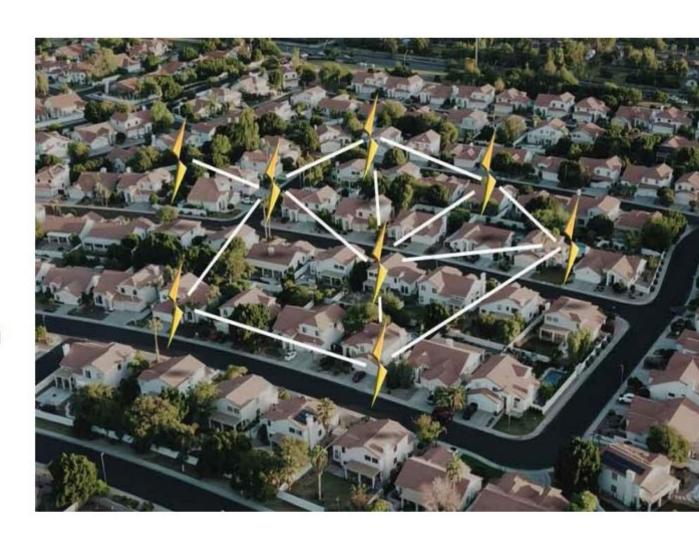


## Sustainable and Resilient Cities Program Affordable, Sustainable and Resilient Power for All



#### PROGRAM OVERVIEW:

- NO Credit Check
- NO Property Liens
- Energy priced below utility rates
- Easy purchase or transfer of contract
- Workforce training/Economic Development
- Revenue share to the city
- System sized to include future electrification
- "Turn-Key" System
- Full Warranty, Operation & Maintenance



## Sustainable and Resilient Cities Program Affordable, Sustainable and Resilient Power for All



#### **CUSTOMER BENEFITS:**

- Everyone is eligible
- Immediate bill savings increasing over time
- Resiliency for their family
- Clean Energy for their community



## Sustainable and Resilient Cities Program Affordable, Sustainable and Resilient Power for All



#### **CITY ROLE & BENEFITS:**

- Ensures transparency by validating customer contract
- Community engagement
- Meet sustainability and resiliency initiatives
- Revenue share



### SCN Launch in SB County – "Santa Barbara Home Power"

- Launched October 3<sup>rd</sup>
- 350 leads in 45 days
- Over 30 PPA's executed
- First installs expected in January.



#### GET THE POWER YOU WANT - WHEN YOU WANT IT.

Now Residents of Santa Barbara County Have a Great Way to Power Their Homes. It's time to take control of your power with sustainable, resilient, and affordable power generated by you.

for the Senta Barbara Home Power Program. The Program covers the costs of a complete and customized solar power and o system, including installation and maintenance. There is no credit check, no financing, and no lien on your property.

#### Sustainable, Resilient and Affordable Power.

As a Santa Barbara Home Power Program customes you can personate and store your own clean, effortable power and protect your home from power outages and rolling blackouts. So take

#### WITH THE HOME SOLAR PROGRAM YOU GET:

- √ Complete Solar Power & Smart Battery System at No.
- No Credit Check, Financing or Property Lien
- √ Protection Against Grid Outages & Rolling Blackouts
- √ 199% Clean, Renewable Energy



TODOS LOS PROPIETARIOS DE VIVIENDAS EN EL CONDADO DE SANTA BÁRBARA SON ELEGIBLES!

Ahora puede tener la energía que desea, cuando la desea, con un sistema de almacenamiento de bateria y energía solar para el hogar personalizado de Santa Barbara Home Power, Nunca volverà a preocuparse por los cortes de energía de los servicios públicos, inesperados. Además, ahorrará dinero en costos de electricidad y reducirá las emisiones de carbono con

Como propietario de una vivienda en el condado de Santa Bárbara, no hay costos iniciales, ni financiamiento, ni costos de mantenimiento ni gravámenes sobre su vivienda.

los precios máximos o los aumentos de tarifas

energía 100% renovable.

El Programa de Energia para el Hogar de Santa Bárbara brinda una forma limpia, resiliente y económica de energía para el hogar. Así que tome el control de su electricidad - por usted, por su familia, v por su comunidad.

Este programa especial es traido a usted en colaboración con Santa Bárbara Clean Energy y la Ciudad de Santa Bárbara y cubre todos los costos del sistema de energía splar y de almacenamiento en batería inteligente.

Obtenga sustentabilidad, ahorros y seguridad con el Programa de energía para el hogar de Santa Bárbara:

- ✓ Sistema completo sin costos iniciales, sin verificación de crédito. sin financiación ni gravamen sobre la propiedad.
- ✓ Energía solar limpia y asequible.
- ✓ Controle sus costos de energía.
- ✓ Proteja su hogar contra apagones.
- Totalmente garantizado.
- Aprobado por Santa Barbara Clean Energy y la Ciudad de Santa Barbara.

Descubra cómo puede controlar sus costos de energía con el Programa de Energía para el Hogar de Santa Bárbara.



Solicite su estimado GRATUITO y sonalizado de ahorro de energia para el hogar hoy mismol el hogar hoy mismo! Llame al (805) POWER-CA.





ALL HOMEOWNERS IN SANTA BARBARA COUNTY ARE ELIGIBLE!

Now you can have the power you want - when you want it, with a customized home solar and battery storage system from Santa Barbara Home Power. You'll never worry about utility power outages, peak pricing or unexpected rate increases again. Plus, you'll save money on electricity costs and reduce carbon emissions with 100% renewable

As a homeowner in Santa Barbara County there are no up-front costs, no financing, no maintenance costs and no lien on your home.

The Santa Barbara Home Power Program provides a clean, resilient, and affordable way for you to power your home. So take control of your power for you, for your family, and for your community.

This special program has been brought to you in partnership with Santa Barbara Clean Energy and the City of Santa Barbara, and covers all costs of the solar and smart battery system.

Security with the Santa Barbara Home Power Program:

Get Sustainability, Savings &

- Complete system at no upfront costs, no credit check, nothing to finance or property lien.
- Generate & store clean, affordable solar power.
- ✓ Control your power costs.
- ✓ Protect your home from power
- ✓ Fully warrantied.
- Approved by Santa Barbara Clean Energy and the City of Santa Barbara.

Find out how you can take control of your energy costs with the SANTA BARBARA HOME POWER PROGRAM.



Request Your FREE Customized Home Energy Savings Estimate Today! Call (805) POWER-CA, (805) 769-3722, or visit us at SBHomePower.com



Website and Direct Mail materials developed for each participant...

We are ready for Goleta!

## Program Participation Agreement and Terms

- Local government partners enter into a "Muni-Resi Program Participation Agreement" (MRPPA) with SCN:
  - The City would not need to commit any funds to the program and would instead earn a share of revenue (typically 5%) from all PPAs under the program within the City, once a specified minimum threshold balance in the revenue sharing escrow account is reached and maintained.
  - This escrow account threshold balance serves as a financial security against risk of customer late payment or default and allows the program to do away with any FICO requirement or property-specific lien.
  - Use of this financial structure enables the PPA to be offered to the entire community, regardless of access to credit and traditional financial instruments, thereby unlocking participation in the clean energy transition to all.
  - The City of Goleta would agree to support the program through public outreach, etc.
  - A model PPA is attached to the MRPPA to ensure transparency and consistency,

## Recommendation & Next Steps

 Staff requests that the Green Committee recommend City participation in the SCN program.

 Should the Committee recommend participation, the next step would be to review and negotiate the MRPPA before bringing to the City Council for approval.





## Questions & Input

January 23, 2023 Green Issues Standing Committee Meeting

# ITEM IV: REACH CODE AND BUILDING ELECTRIFICATION

Presentation to the Energy Green Issues Standing Commitee January 23, 2023

Presentation by:

Angeline Foshay, Sustainability Management Assistant

Dana Murray, Sustainability Manager



## Overview







## Purpose: Reach Codes & Building Electrification

- Purpose of item discussion:
  - 1. Receive update on Reach Code process and regional collaboration.
  - 2. Provide input on exemption options, clauses, and considerations.
- Significance of an All-Electric Reach Code:
  - Catalyze the electrification of new buildings
  - Reduce the use of fossil fuels in buildings
  - Improve indoor air quality
  - Decrease hazards to public safety in buildings



## Purpose: Alignment with City Plans

- 2021-23 Goleta Strategic Plan
  - 1.1.4. Explore adoption of a "Reach" Building Code
  - 1.1.5. Continue to work with the Santa Barbara County Regional Climate Collaborative to share resources to address climate change
- "Reach Codes" identified by Council as the top priority for Sustainability's upcoming projects during the 2022-23 PER Annual Work Program process





## Regional Collaboration

Jurisdictions Developing Policy







Technical Assistance

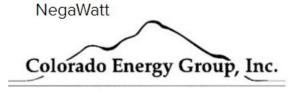














### State Law



- Senate Bill 32: California set targets to reduce statewide GHG emissions to:
  - 40% below 1990 levels by 2030
  - 80% below 1990 levels by 2050
- California Air Resources Board's 2022 Scoping Plan provides an implementation pathway to meet the State's carbon reduction goals
  - Recommends all-electric buildings for residential construction starting in 2026 and non-residential construction starting in 2029



## **Building Emissions**

- Buildings are responsible for ~25% of CA's GHG emissions; 40% of Goleta's community-wide emissions
- CA cities rapidly implementing plans to cut pollution from homes and buildings to meet the State's energy targets for new construction, aiming to achieve zero-net-energy (ZNE) for all:
  - New residential and municipal buildings by 2025
  - New non-residential buildings by 2030
- ZNE is netting out a building's annual energy usage to zero by providing offsetting renewable energy and energy efficient buildings.
- Policy mechanism to achieve ZNE:
  - California Energy Code energy efficiency and renewable energy requirements
  - California Green Building Standards Code requires that builders use energy-efficient technologies and construction practices.

### Reach Codes

- A local building energy code that "reaches" beyond state minimum requirements for energy use in building design and construction
- Designed to encourage low-cost all-electric new construction of healthier, efficient, safer, and zero emission buildings.













### Benefits of Electrification

- Significantly reduced GHG emissions
  - Compounded further by the greening of state electricity systems
- Improved indoor air quality
  - 60% of homes in the state that cook at least once a week with a gas stove produce toxic levels of nitrogen dioxide, formaldehyde, and carbon monoxide, which would exceed even outdoor air quality standards.
- Reduced hazards in the event of natural disasters
- Reduced construction costs





## Pathway Chosen: All-Electric Policy via Municipal Health & Safety Amendment

- Utilizes jurisdictional authority to amend Goleta Municipal Code Chapter 8 Health & Safety to prohibit any new gas infrastructure (hookups or piping) for new construction
  - Longest lasting option, would not require renewal and can be adjusted over time
  - Would not require CEC submission and approval
  - Would create regional consistency with City of Santa Barbara (adopted), County of Santa Barbara (pathway recommended), and City of Carpinteria (pathway recommended)



## Draft Ordinance

## Core Components & Clauses

- Prohibition of fuel gas infrastructure in newly constructed buildings
- Inactive fuel gas infrastructure shall not be activated, have a meter installed, or otherwise operated
- Does not apply to the use of portable propane appliances for outdoor cooking or heating
- Revisitation of the ordinance every 18 months by staff for implementation evaluation and potential updates

## Newly Constructed Building Definition

- Current proposed definition provided by CCCE
  - A building that has never before been used or occupied for any purpose
  - A construction alteration that include replacement or addition of over 50 percent of the existing foundation for purposes other than a repair or reinforcement
  - When over 50 percent of the existing framing above the sill plate is removed or replaced for purposes other than repair
  - If any of the above criteria are met within a three-year period, measured from the date of the most recent previously obtained permit final date, that structure is considered new construction
- New construction in existing buildings, such as minor alterations, additions, and tenant improvements not included
- 50% trigger points adopted by Belmont, Burlingame, Daly City, Dublin, Los Gatos, Milpitas, Pleasanton, San Carlos, and Sunnyvale
- Captures broader number of reconstruction projects while exempting minor remodels
- Staff recommends inclusion



## Newly Constructed Building Definition

- Santa Barbara definition
  - A new structure that has never before been used or occupied for any purpose or removal and replacement of an existing structure
  - Triggered when a building is completely demolished and replaced with a new structure
  - It is partially removed and replaced and the removal and replacement involves any two of the following
    - More than 75% of the structural elements of the roof or roof framing are removed
    - More than 75% of the structural exterior walls (or vertical supports such as posts or columns when a structure has no walls) of a structure are removed or are no longer a necessary and integral structural component of the overall building
    - More than 75% of the foundation system is removed, or is no longer a necessary and integral structural component of the overall structure
- Regional consistency

## Termination of Fuel Gas Usage

- Proposed optional clause:
  - No later than January 1, 2045, all buildings within Goleta shall not be served by fuel gas infrastructure.
- Addresses existing building emissions
- Would need extensive research and plan development for implementation
- Adopted by Half Moon Bay
- Staff recommends revisiting at a later date



## Electric Readiness for Qualifying Exceptions

- Would ensure sufficient electrical capacity for new buildings with approved fuel gas infrastructure exemptions
- Eases future conversion to all-electric where possible
- Staff recommends inclusion





### **Exemption Considerations**

- Availability of alternatives to fuel gas technology
- Flexibility and feasibility for implementation
- Emissions and health impacts
- Develop simple application for applicants to request exemption



- Physical Infeasibility
  - Standard inclusion
  - Staff recommends inclusion
- Public Interest
  - Allows for flexibility on case by case basis
  - Still requires prewiring for electrification
  - Staff recommends inclusion



- Commercial Cooking Equipment
  - Common inclusion for reach codes
  - Indoor air quality considerations
  - Electric alternatives are widely available
  - If included in exemptions, staff recommends an expiration date.







- Emergency Generators
  - Included in County of Ventura, City of San Luis Obispo and Corte Madera
  - Alternatives available
  - Can be covered by public interest exemption
  - Staff recommends not including



- ADUs & JADUs
  - Included in ~25% of reach codes examples in Oakland, Santa Monica, San Luis Obispo
  - Feasibility
  - Detached, Attached, Junior ADUs
  - Staff recommends consideration for an exemption application for water and space heating in attached JADUs where the existing building's gas serves the JADU.



- Pool & Spa Equipment
  - Ventura County (residential and nonresidential), San Luis Obispo (public), San Bruno (residential), and Los Altos Hills (residential)
  - Alternatives widely available
  - Staff recommends not including



- Fire Pits & Fireplaces
  - Ventura County (residential and non-residential), San Carlos (residential), Millbrae
  - Alternatives for indoor heating and outdoor firepits available
  - Staff recommends not including



- Commercial Clothes Drying
  - Included in Daly City, Atherton and Cupertino
  - Applies for hotels and motels with 80+ guestrooms
  - Alternatives widely available
  - Staff recommends not including





## Recommendations Needed

- Green Committee provide recommendations on Reach Codes, specifically:
  - 1. Ordinance Clause Inclusions

2. Exemption Options Proposed

3. Readiness for City Council review and discussion





# Questions & Input

January 23, 2023 Green Issues Standing Committee Meeting

# ITEM V: PROGRAM UPDATES - PLASTIC FREE GOLETA OUTREACH

Presentation to the Energy Green Issues Standing Commitee January 23, 2023

Presentation by:

Dana Murray, Sustainability Manager

Stephanie Holmes, CivicSpark Fellow













## Questions & Input

January 23, 2023 Green Issues Standing Committee Meeting