



A smart energy network

ZipP[®]ower

powered by



OSIsoft[®]



IMAGINE SAN LEANDRO

a low carbon city.

A landscape featuring a solar farm in the foreground and a wind farm in the background under a clear sky. The solar panels are arranged in neat rows, and the wind turbines are scattered across the horizon. The sky transitions from a deep blue on the left to a warm orange on the right.

IMAGINE SAN LEANDRO

a clean energy
power plant.



IMAGINE SAN LEANDRO

a smart city.

IN THE FUTURE, WE WILL SAY

How we *made* power.



An aerial photograph showing a large, dark blue reservoir in the foreground, surrounded by a dry, brown landscape. In the background, a city is visible, and further back, a range of mountains is partially obscured by a layer of white clouds under a clear blue sky.

IN THE FUTURE, WE WILL SAY

We were **proactive** rather
reactive during climate change.

An aerial photograph of a large-scale clean energy project. The image shows a vast array of solar panels installed on a flat roof or industrial site. In the foreground, several wind turbines are visible, their blades extending upwards. The scene is set against a backdrop of a clear sky with some clouds. The overall color palette is dominated by the blue and white of the solar panels and the green of the wind turbine blades, with a warm, golden light on the left side of the image.

IN THE FUTURE, WE WILL SAY

We led the
clean energy revolution.



Though,
The *door-to-door*
solar sales model is still
our **barrier to scale.**



Meanwhile,

We have become
mindless **consumers**
in the hidden industry
of energy.

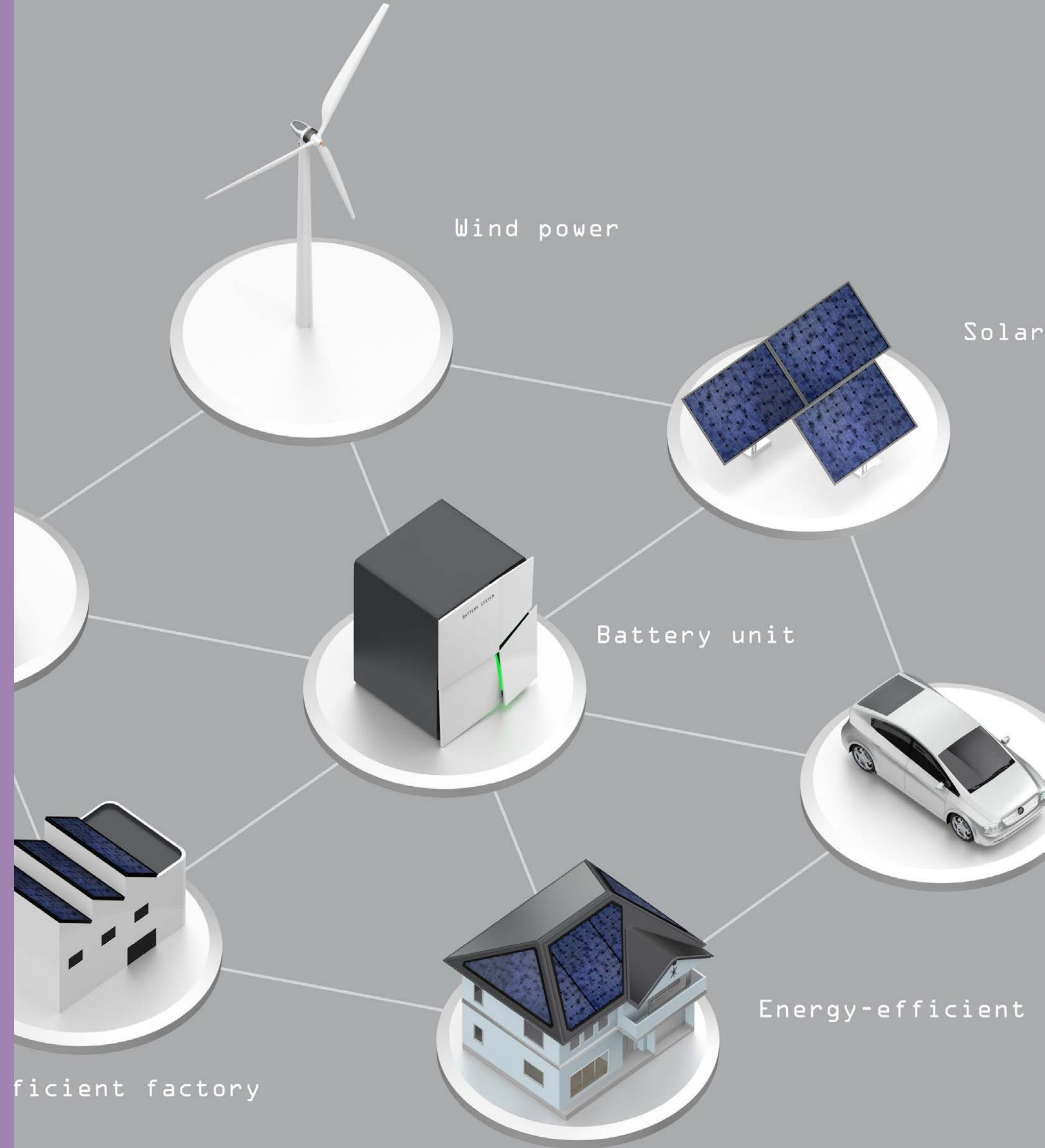


*This is **Utility 1.0**,*
An energy service that
is opaque, centralized
and dated.



Simultaneously,
We have become **prosumers** who are producers as well as consumers with the advent of the shared economy.

Welcoming Utility 2.0,
An integrated social,
digital and physical
smart energy network
that is accessible,
distributed and shared.





Hayward



Fremont



Union City



Oakland



San Leandro



Alameda



Berkeley



Emeryville



Richmond

Lets break the barrier to our low carbon future.

Together, with our cities.

Together

we will
create our
clean
energy
future.





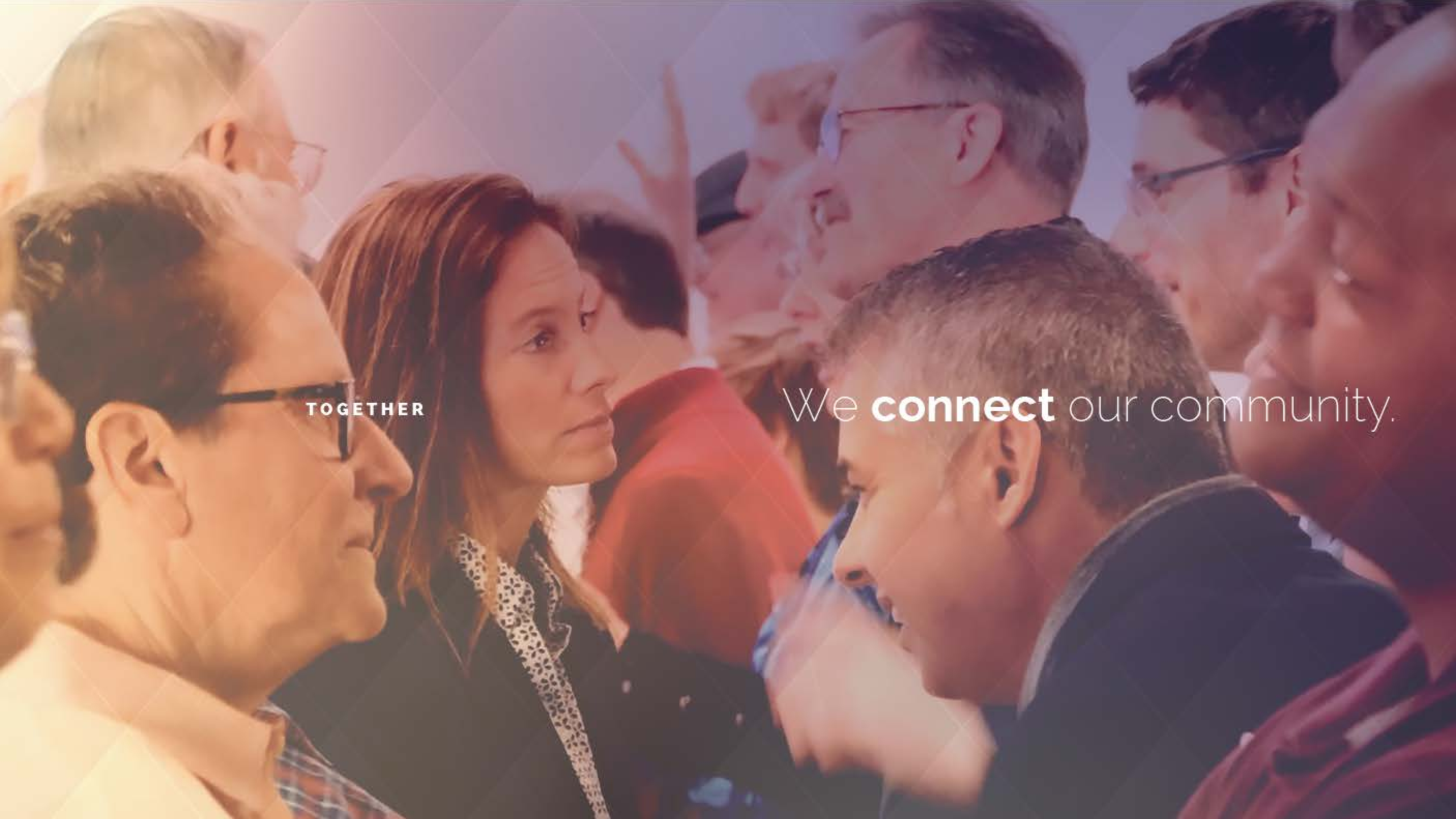
TOGETHER

We **engage** our learners.



TOGETHER

We **upgrade** our ecosystem.



TOGETHER

We **connect** our community.



Together

We will **power** our future.

Del

ZipP[Ⓜ]ower

Smart
Energy
Network

San Leandro.

POPULATION IS POWER[®]

Government

Industry

People

Education

Citizens





Climate Action Plan

GoLowSanLeandro

2005

Total Electricity Consumption (2005)

608,822,401 kWh

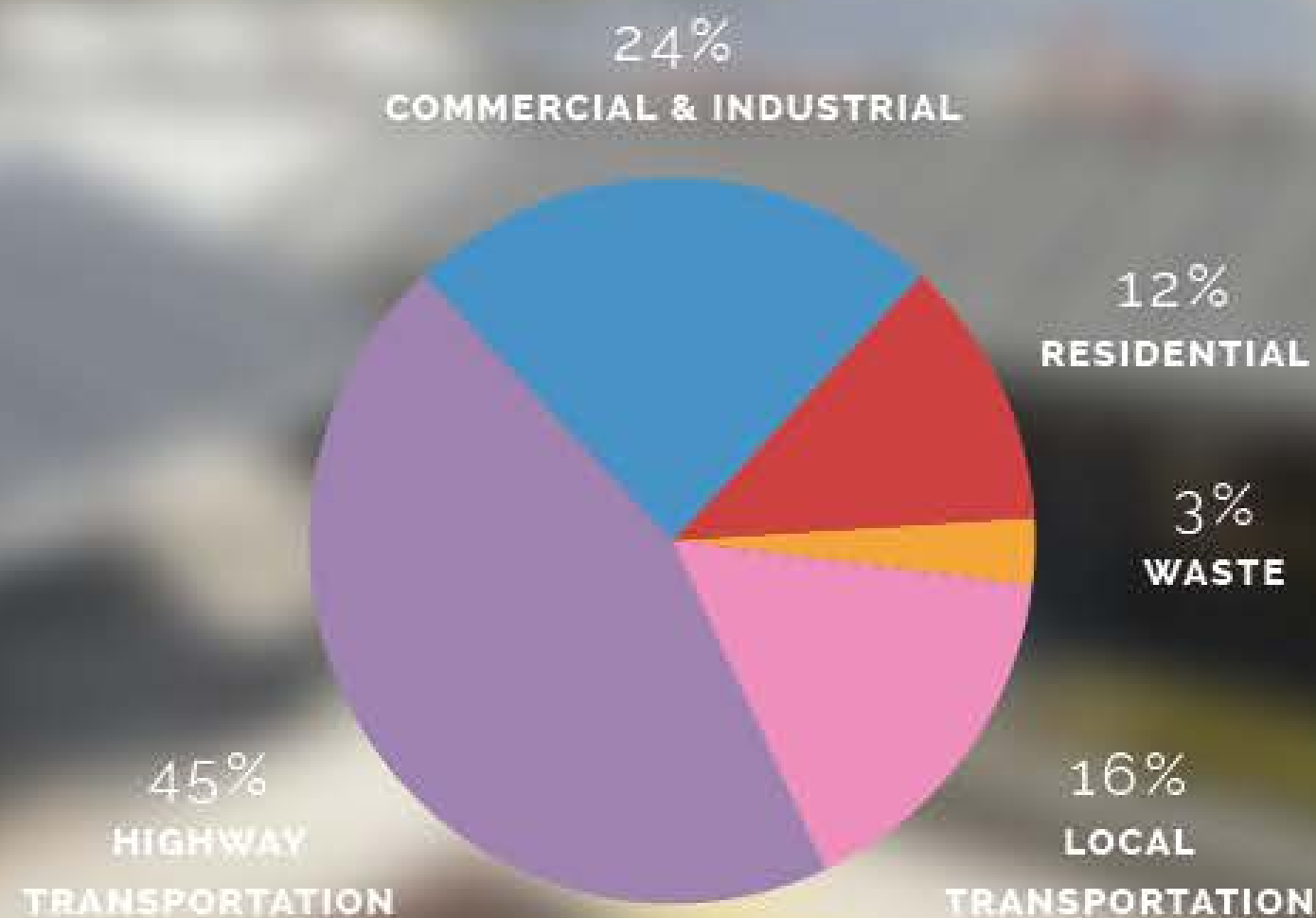
Total Carbon Emissions (2005)

957,169 Tons

Goal to Reduce Emissions by 2020

-336,140 Tons

City Emissions by Sector (2005)



2020

100-Megawatts Powers

45% of Entire City

100-Megawatts Reduces

-7% of Emissions

100-Megawatts Achieves 2020 Goal By

-21% of Emissions



Community Choice Aggregation

AlamedaTogether

Choose

Alameda Clean Energy



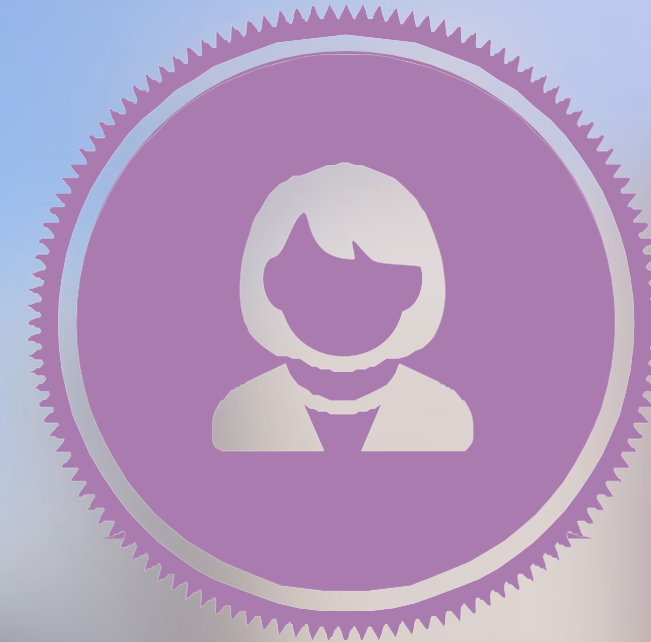
Deliver

PG&E Utility



Prosume

Customer User



Example Monthly Electric Charges

Power Generation All Customers
PG&E Power Delivery All Customers
Additional CCA Fees ACE Customers Only

PG&E

27% Renewable Energy
\$45.12
\$37.30
-
Average Total Cost
\$82.42

ACE Light Green

56% Renewable Energy
\$30.97
\$37.30
\$5.71
Average Total Cost
\$73.98

ACE Deep Green

100% Renewable Energy
\$34.60
\$37.30
\$5.71
Average Total Cost
\$77.61

ACE ZipP@wer

100% Local Solar
\$37.75
\$37.30
\$5.71
Average Total Cost
\$80.76



Energy Program Investment Charge

LowCarbonCalifornia

Grant Information

Awarder **California Energy Commission**

Awardee **ZipPower San Leandro**

Grant Code **GFO-15-312**

Grant Name **The EPIC Challenge**

Grant Subtitle **Accelerating the Deployment of
Advanced Energy Communities**

Category **Group 1: Northern California**

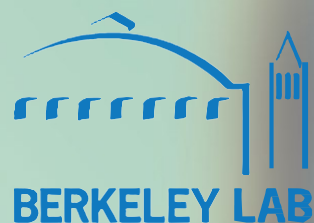
Rank Number **2nd Place**

Awarded Funds **\$1,495,338**

Grant Goals

- ✓ Minimize Infrastructure Costs
- ✓ Energy Savings Via Zero Net Status
- ✓ Grid Reliability and Resilience Via Storage
- ✓ Easier Grid Integration
- ✓ Drive Down Costs By Scalability
- ✓ Market Attractiveness for Adoption
- ✓ Affordable Access
- ✓ Community Smart Grid Technology
- ✓ Align with Local Policy Goals
- ✓ Drought Executive Order B-29-15

Letters of Committments:



SLTC
SAN LEANDRO TECH CAMPUS



WESTLAKE
URBAN

stök

Lit San Leandro

OSIsoft

BERKELEY LAB



ASSEMBLY MEMBER
Rob Bonta
DISTRICT 18



CLEAN
TECH
OPEN

SOLSYSTEMS



PG&E

California ISO

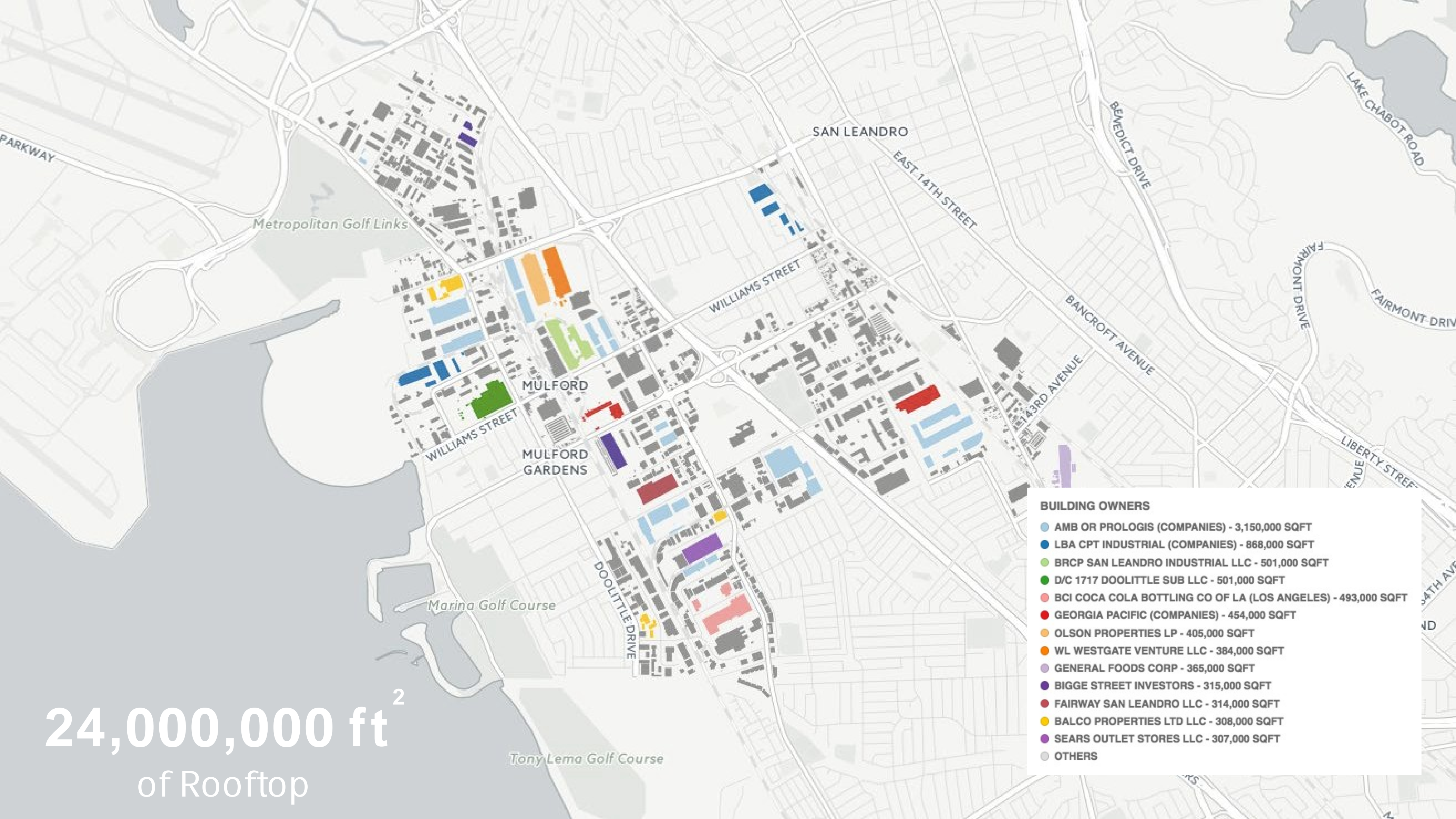
CCCI

Srinerger
Link Smart. Join Green.

Geli

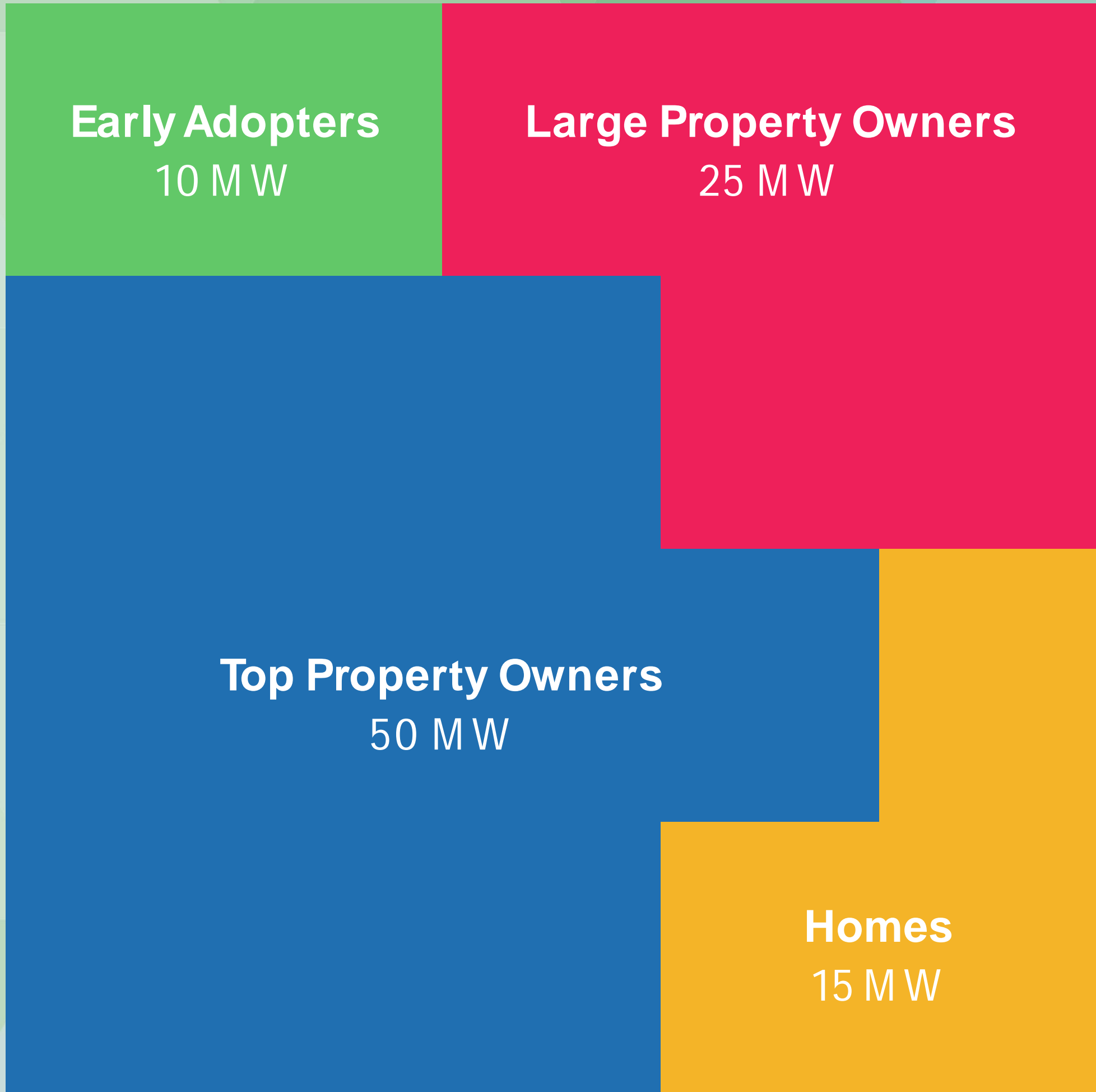
PDE
Total Energy Solutions
Electrical Contractors





24,000,000 ft²
of Rooftop

- BUILDING OWNERS**
- AMB OR PROLOGIS (COMPANIES) - 3,150,000 SQFT
 - LBA CPT INDUSTRIAL (COMPANIES) - 868,000 SQFT
 - BRCP SAN LEANDRO INDUSTRIAL LLC - 501,000 SQFT
 - D/C 1717 DOOLITTLE SUB LLC - 501,000 SQFT
 - BCI COCA COLA BOTTLING CO OF LA (LOS ANGELES) - 493,000 SQFT
 - GEORGIA PACIFIC (COMPANIES) - 454,000 SQFT
 - OLSON PROPERTIES LP - 405,000 SQFT
 - WL WESTGATE VENTURE LLC - 384,000 SQFT
 - GENERAL FOODS CORP - 365,000 SQFT
 - BIGGE STREET INVESTORS - 315,000 SQFT
 - FAIRWAY SAN LEANDRO LLC - 314,000 SQFT
 - BALCO PROPERTIES LTD LLC - 308,000 SQFT
 - SEARS OUTLET STORES LLC - 307,000 SQFT
 - OTHERS



\$250 Million
Financing Secured
To Make it Come True

Early Adopters Invites



500 Kilowatt System



SAN LEANDRO **TECH** CAMPUS

Customer Benefits



Save Money



Reliable and Secure Energy



Increased Property Values



Lower Carbon Footprint

City Benefits



Lower Costs by Aggregation



City Resilience and Security



Economic Development



Achieving Climate Action Plan

Business Model | A scalable solution for impact



10% Vendor Transaction Fee



No Charge to Customers and Cities



Utility Grid Services

Customer Options | Going clean comes with options

Power Purchase Agreement (PPA)

Contract between two parties to sell and buy electricity

Lease

Flat monthly fee to lease from provider

Property Assessed Clean Energy (PACE)

Upgrading properties by embedding costs into property taxes

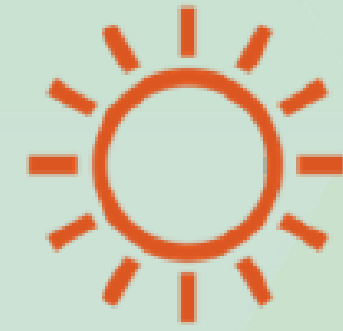
Buy

Outright purchase and operation of system

Community Solar

Multiple parties share energy generated from one clean energy power plant asset.

Platform



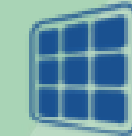
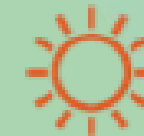
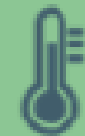
02 MICROGRID

01 SOLAR

03 EFFICIENCY

05 GRID SERVICES

04 NETWORKING
WITH GIGABIT INTERNET



Platform

ZIP 10

First 10 kw

Members: 4
Properties: 22
Membership: open

Capacity Goal

100 mW

Target Close Date:
10/31/2016 23:59

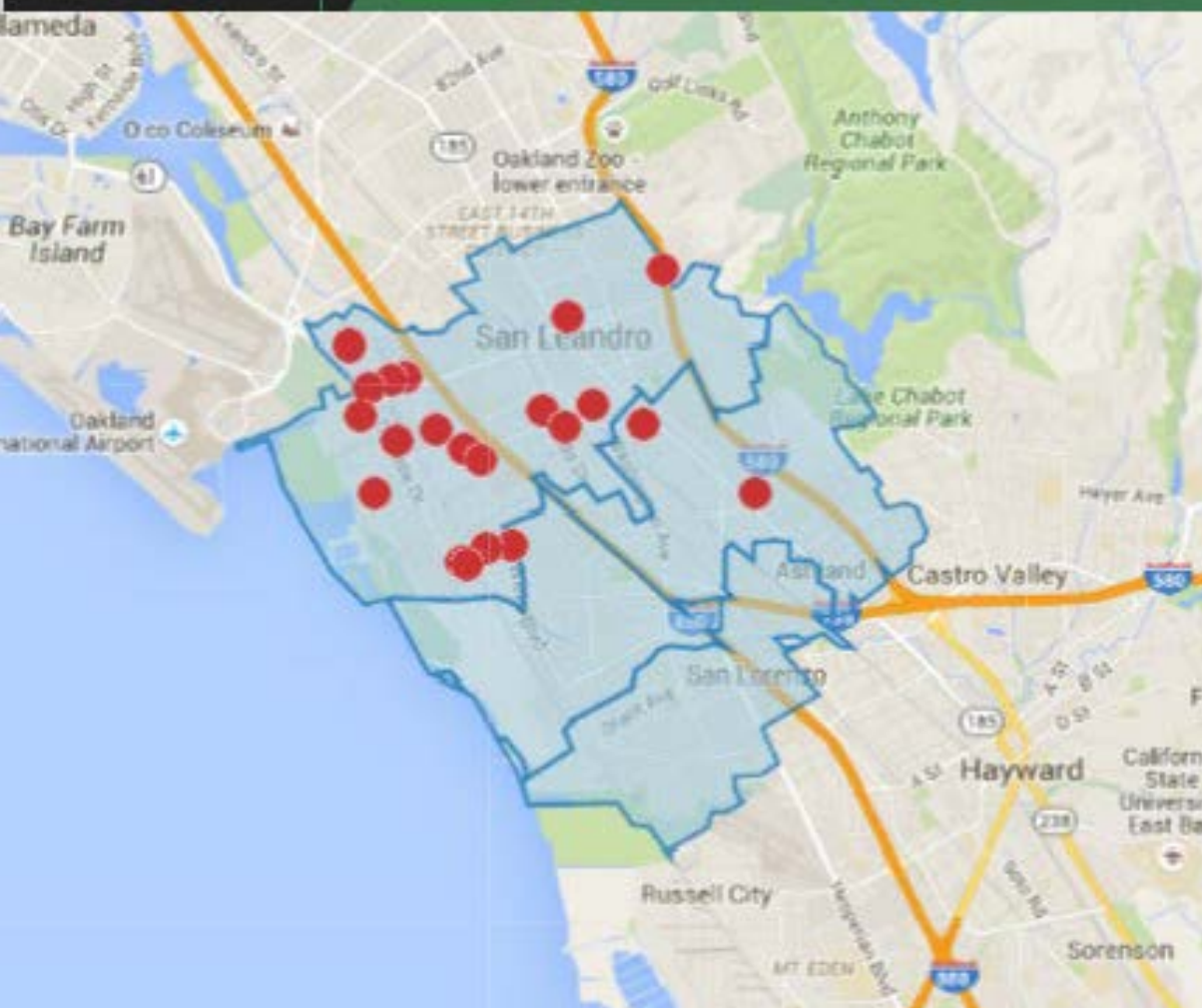
Members

1. Peterson CAT
2. Preferred Freezer
3. Scandic Springs
4. PilotCity

[Join this ZipNet](#)

San Leandro, CA (4 ZipNets)

View a Zipnet: ZIP 10 Founders Cohort Always Prepared Zip40




Goals

Goal 1 [Progress bar] [X] Goal

Goal 2 [Progress bar] [X] Goal

Goal 3 [Progress bar] [X] Goal

ZipNet Goals



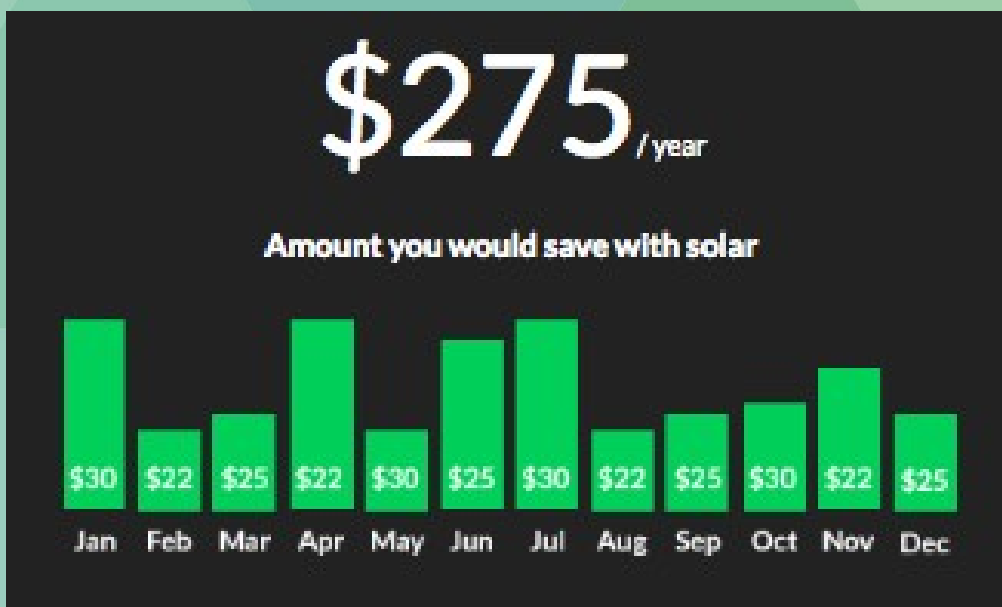
36

Trees planted with your carbon offset

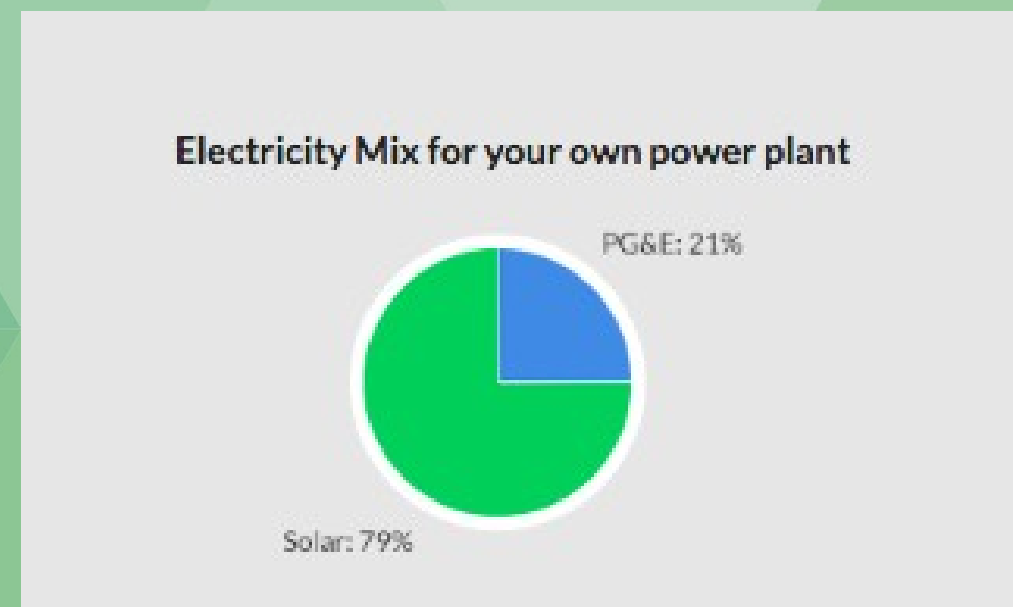
ZipNet Overview

ZipNet

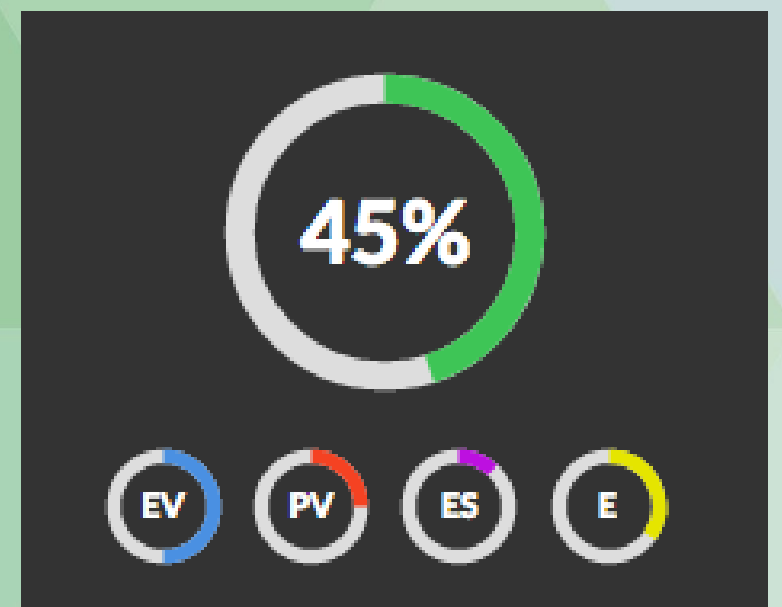
Environmental Benefits



Savings



Energy Mix



Low Carbon Lifestyle



OSIsoft®



Lit San Leandro



San Leandro



Smart City Operational Intelligence

BIG DATA SOLUTIONS WITH OSISOFT PI SOFTWARE



Low Carbon City Clean Energy Power Plant

100-MEGAWATTS OF SMART ENERGY



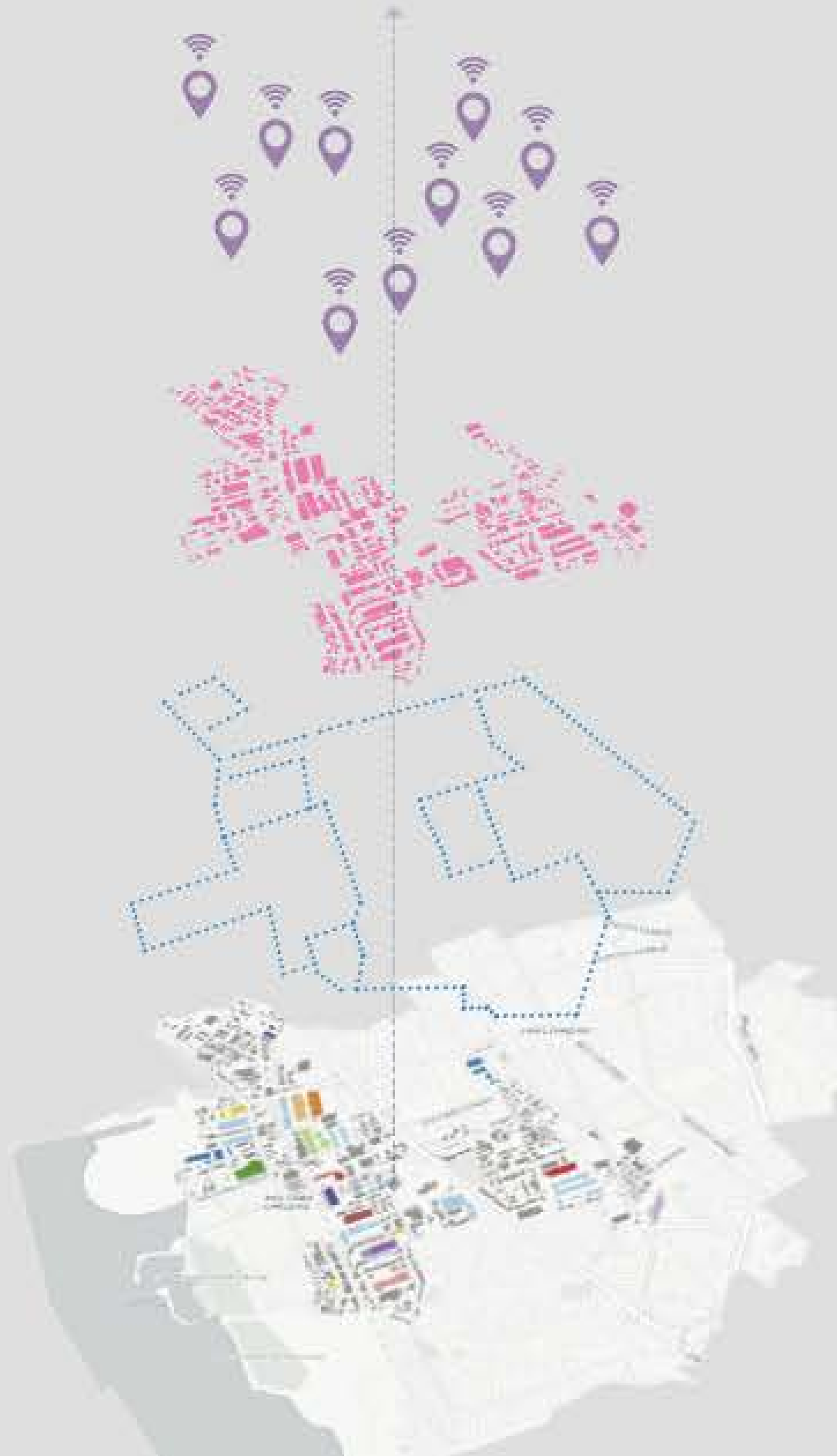
Gigabit City Fiber Optic Broadband Network

18-MILE LOOP OF LIGHTNING FAST INTERNET



Maker City Commercial and Industrial Base

24,000,000 SQ. FT. OF ROOFTOP ASSETS



ZipP[Ⓢ]ower

A San Leandro Company



Learn

Transform

Connect

Engage

SAN LEANDRO

Together.

Build

Act

Access

Share

Develop

Lead

Innovate

Upgrade

Choose

Accelerate