



Building Electrification Benefitting Local Non-Profits

Cupertino Rotary Club Climate Action Committee Seema Lindskog Dino Sakkas Rod Sinks Rotary 5170 District Conference April 23, 2022





- Do our part to move the needle on climate change
- Help worthy non-profits electrify their buildings, reducing their carbon footprint and utility costs
- Leverage a small amount of your club's charitable funds to bring in foundation grants & rebates
- Provide hands-on projects for club members and prospective members
- Enhance your club's public image
- Attract new & younger members
- Give your club an opportunity to grow and do more





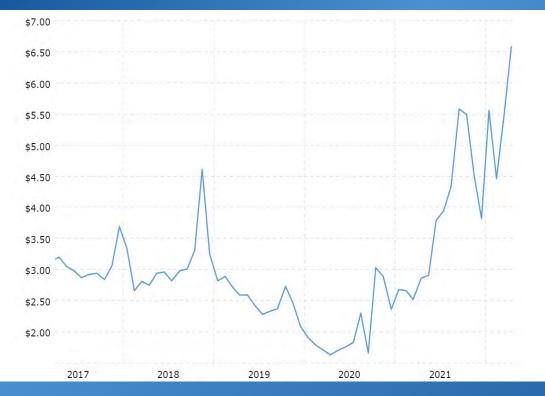




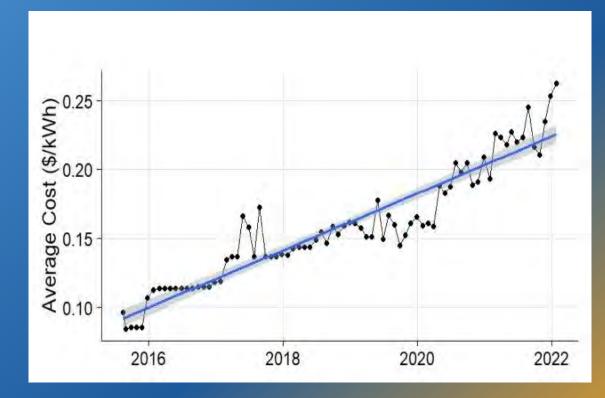
Energy Costs Continue to Rise



Natural Gas US Wholesale Prices (Henry Hub)



Northern California Average Electricity Rates



Non-Profit Challenges



- Building electrification would reduce their carbon footprint and utility costs, but...
 - They are not eligible for tax credits and certain rebate programs
 - They may not have reasonable payback or adequate capital without our help (funding + volunteer labor)
- Examples:

Rooftop Solar	
Payback time for typical residential installation with tax credit	6 years
Payback time for typical non-profit installation without tax credit	10 years
Payback time for a non-profit's investment with our help	2 years

Heat Pump Water Heater	Net Cost after rebates
Residential	\$1500
Residential low-income household	\$0
Non-profit facility (other than residential – no rebates available)	\$7500
Non-profit facility with our help	\$2500





Rooftop Solar



Multi-Family Low-Income Housing



- 9.1kW PV Solar (26 panels) + tree trimming
- Four homes & common area in Cupertino
- Offsets 100% of demand in common area & 40% in households
- Owned by West Valley Community Services (WVCS)
- Installation: August 21-22, 2021





Multi-Family Low-Income Housing



Funding \$ 4,000 Cupertino Rotary \$ 3,400 WVCS (owner) \$14,600 Hammond Climate Solutions \$ 8,000 Volunteer Labor Contribution \$30,000 Total System Value





Multi-Family Low-Income Housing



The Alercury News





The Newspaper of Silicon Vallev LOCAL NEWS

South Bay volunteers help affordable housing complex go solar



nd Dino Sakkas, members of the Cupertino Rotary Climate Action Committee, prep the roof at an affordable apartment complex on Greenwood Court for solar panel installation on Aug. 21. The committee worked with Milpitas-based SunWork Renewable Energy Projects, among others, to install the solar panel array.

By ANNE GELHAUS | agelhaus@bayareanewsgroup.com | Bay Area News Group PUBLISHED: August 29, 2021 at 7:21 a.m. | UPDATED: August 29, 2021 at 7:22 a.m.

Volunteers from Cupertino Rotary and West Valley Community Services partnered for some energizing activities Aug. 21 at an affordable housing complex on Greenwood Court in Cupertino.

The Rotary Climate Action Committee project, led by Seema Lindskog, worked with Milpitas-based SunWork Renewable Energy Projects, along with Hammond Climate Solutions and the Left Coast Fund—both based in San Diego—to install a solar panel array on the roof of the Greenwood Court property, owned by West Valley Community Services. Rotarians worked side by side with staff from SunWork to install racking, run conduit and mount the solar panels on the rooftop.

The array is designed to provide all the power for the apartment complex's common area and about 40% of residents' electricity use. The project should enable West Valley Community Services to transition to renewable energy and long-term lower utility costs while increasing household stability and self-sufficiency for residents.

While some Rotarians were on the roof, members of the Cupertino Rotary Community Services Committee helped with cleanup and maintenance around the property under the leadership of club member Lloyd Holmes, president of De Anza College.





Video – Mountain View Project



Non-Profit Center - Downtown Mountain View



- 27kW PV Solar (60 panels)
- Offsets up to 80% of demand
- Owned by Los Altos United Methodist Church
- Installation: 6 work days in March 2022; 30 volunteers





Non-Profit Center - Downtown Mountain View



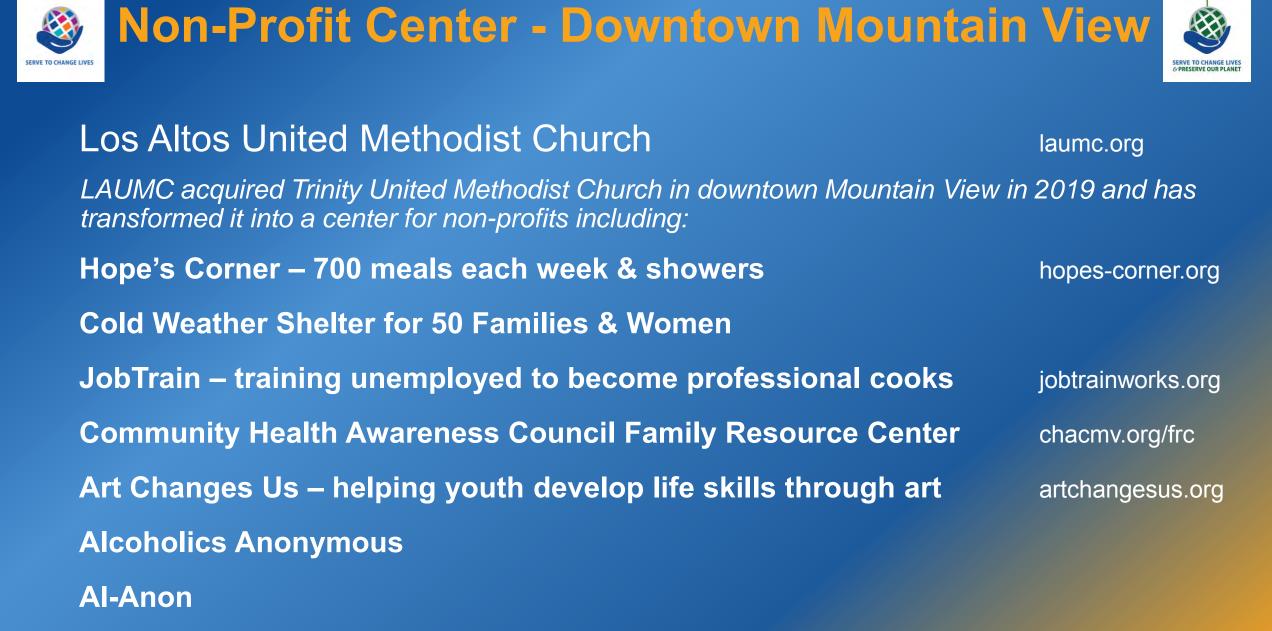
Funding:

- \$ 6,000 Cupertino Rotary
- \$ 2,500 Sunnyvale Rotary Club
- \$ 2,000 Mountain View Rotary Club

\$ 1,500 Los Gatos Morning Rotary Club

\$ 1,000 Los Altos Rotary Club
\$21,500 LAUMC (owner)
\$25,000 Hammond Climate Solutions
\$25,000 Volunteer Labor Contribution
\$84,500 Total System Value







Our Partners Hammond Climate Solutions Foundation



Expediting positive change for a just and livable future.

- The HCSF team works tirelessly to heal the planet and ensure that an equitable and survivable future prevails.
- We partner with local philanthropists, nonprofit organizations, advocates and elected officials to implement effective solutions towards stopping the climate crisis.

More information: hammondclimatesolutions.com







Our Partners Solar Moonshot Program

- Administered by Hammond
- \$1 million annual budget to to help nonprofits afford the switch to solar
 - Solar savings are reinvested into the community
 - Green jobs are supported
- Up to \$25,000 grants are given to nonprofit organizations across the U.S.
- Grants can support solar and storage
- Schools, cities and Indigenous nations can partner with a nonprofit to receive the grant

More information: solarmoonshot.org







Our Partners SunWork Renewable Energy Projects



SunWork's nonprofit model helps make solar and heat pump water heaters up to 1/3 more affordable with the help of trained volunteers. The heart of SunWork's mission is to give environmentallyconcerned people a way to do something to make a difference. SunWork is pushing to change the shape of our energy landscape, and to change the feeling that the environmental problems humankind faces are too big to be within the ability of individuals to meaningfully impact.

More information: <u>sunwork.org</u>







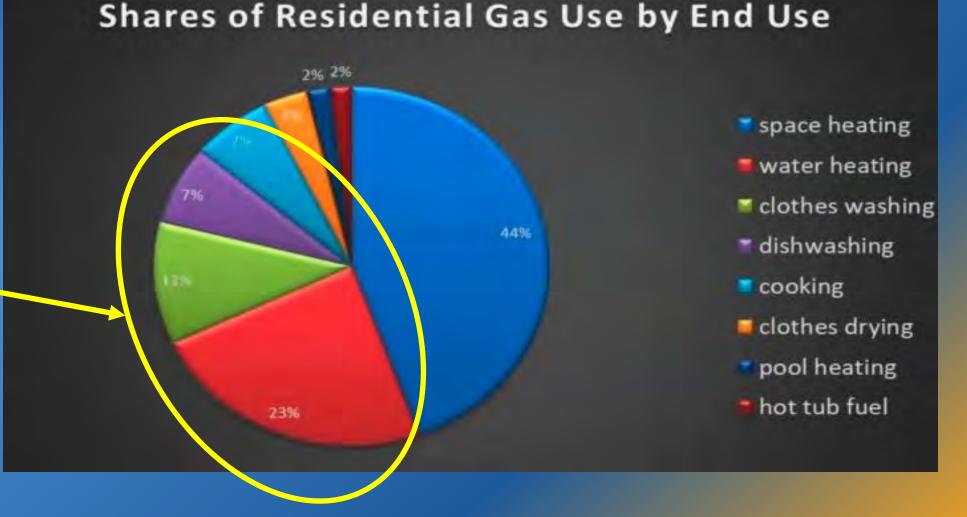
Heat Pump Water Heaters



Heating Water with Gas is a Major Contributor to Home Carbon Emissions



Potential for 41% Reduction in Home Carbon Emissions





Heat Pump Water Heaters (HPWH) can significantly reduce carbon emissions





- Replacing gas with HPWH is the most cost-effective way to reduce household carbon emissions
- Super efficient
- Operating costs similar to gas
- Allows time shifting to reduce cost and carbon footprint
- Significant rebates available especially for low-income households



Great Rebates Available Now



- Technology and Equipment for Clean Heating (TECH) and Building Initiative rebates
 - Up to \$4,000
- Community Choice Energy Provider (CCE) rebates
 - Up to \$3,500
- More info:
 - switchison.org/



Your Local CCE A Source of Many Electrification Rebates



Community Choice Energy agencies (CCEs) serving Rotary District 5170

- Silicon Valley Clean Energy (SVCE)
 - Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Saratoga, Sunnyvale and Unincorporated Santa Clara County
- Peninsula Clean Energy
 - San Mateo County
- San Jose Clean Energy
 - City of San Jose
- East Bay Community Energy
 - Alameda County
- Central Coast Community Energy
 - Santa Cruz, San Benito, Monterey Counties



Example of a Non-Profit Home Location: Sunnyvale / Contractor: SunWork with volunteers



New Heat Pump Heater including installation (replacing gas)+\$7,000TECH Clean California Incentive and/or SVCE Rebate-\$4,000Low Income Household Rebate from SVCE*-\$1,500SunWork volunteer labor contribution-\$1,500Final Cost\$ 0

* For CARE (California Alternate Rates for Energy Program) and FERA (Family Electric Rate Assistance Program) customers

- Additional incentives for panel upgrades if required
- No out-of-pocket expenses until FERA Rebate is issued per contractor policy
- Cost to operate approximately the same as gas (even better with solar panels)



Typical Installations





Garage Installation (Simplest)



Interior Installation (Less Simple)

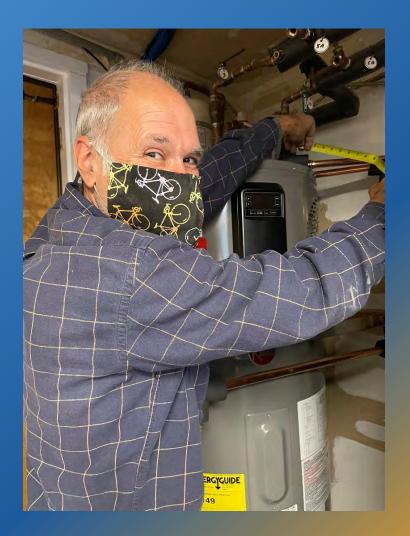


The Perfect Project For Your Rotary Club



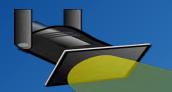
Whether in members' homes, lowincome homes, or non-profit facilities

- 1. Locate a 5+ year old gas water heater
- 2. Get a quote from a contractor like SunWork
- 3. Recruit two volunteers for one day
- 4. Replace the water heater
- 5. Take pictures









Coming Attraction







- Do our part to move the needle on climate change
- Help worthy non-profits electrify their buildings, reducing their carbon footprint and utility costs
- Leverage a small amount of your club's charitable funds to bring in foundation grants & rebates
- Provide hands-on projects for club members and prospective members
- Enhance your club's public image
- Attract new & younger members
- Give your club an opportunity to grow and do more









SERVE TO CHANGE LIVES



SERVE TO CHANGE LIVES & PRESERVE OUR PLANET



Building Electrification Benefitting Local Non-Profits



Questions?

Cupertino Rotary ClubClimate Action CommitteeSeema Lindskogseema3366@gmail.comDino Sakkasdinosaddr@gmail.comRod Sinksrodsinks@gmail.com