

Financing Options for a Climate-Resilient Gerlach

June 27, 2024



About the Nevada Clean Energy Fund

The Nevada Clean Energy Fund (NCEF) is a 501(c)3 nonprofit organization created by state legislation.

THE MISSION

Support a thriving, affordable, and accessible clean energy economy in Nevada



THE NEED

Nevadans lack the resources necessary to access clean energy opportunities, reduce energy costs, and live in a healthy environment and climate

THE SOLUTION

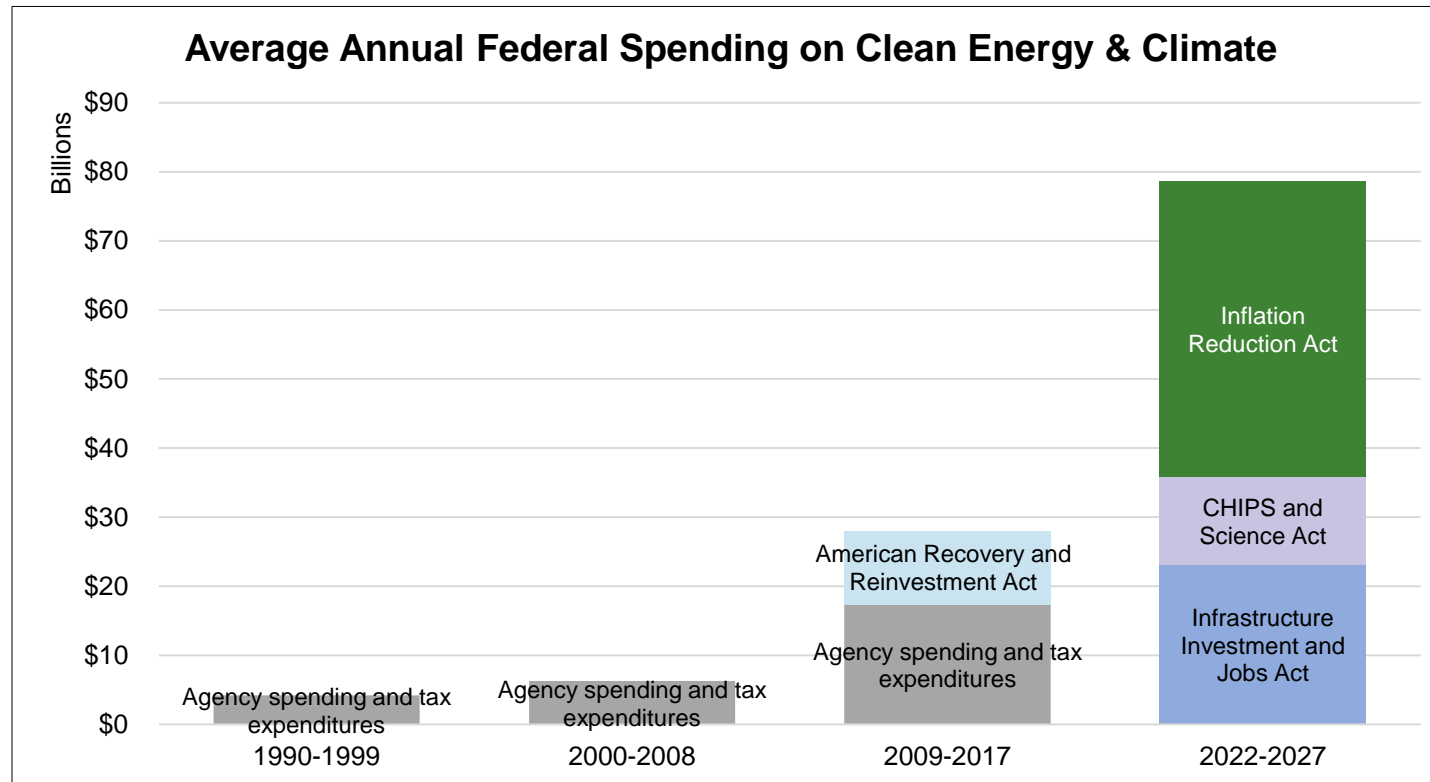
Provide access to capital and technical assistance to residents, affordable housing, schools, Tribes, local businesses, nonprofits, and others for building efficiency and electrification, clean vehicles, renewable energy, and storage

THE IMPACT

Tackle climate change
Reduce energy insecurity
Advance energy justice
Improve air quality & health
Create quality jobs

A Singular Opportunity

- The Inflation Reduction Act makes ~\$400 billion of federal funds available to advance clean energy and climate solutions—an unprecedented amount.
- The Justice40 Initiative set the goal of 40% of the benefits of certain federal funds flow to disadvantaged communities



Data Source: RMI. December 2022.

NCEF's Programs Make Clean Energy Accessible to Nevadans

- NCEF's programs provide clean energy financial and technical assistance to residents, Tribes, affordable housing developers, local businesses, schools, governments, and others in Nevada, with a priority focus on historically underserved communities.
- These programs support clean energy measures such as building efficiency and electrification, clean vehicles, and solar and energy storage.



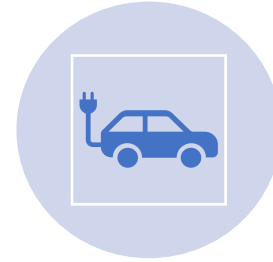
Single-Family
Homes



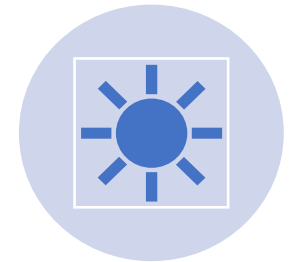
Multifamily
Homes



Commercial
Buildings



Vehicle
Fleets



Rural & Tribal
Solar + Storage

Nevada's \$156 Million Solar for All Award

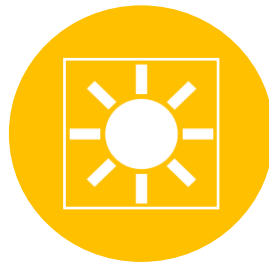
- Solar for All is a \$7 billion federal grant program administered by the Environmental Protection Agency (EPA) to support solar programs that benefit low-income households (<80% AMI or in a disadvantaged community).
- NCEF was awarded \$156 million to launch Solar for All programs in Nevada.
- EPA made 60 awards, including one for almost every state and territory.
- Nevada received the highest award amount per capita of any state in terms of eligible (disadvantaged) population.



Single-Family
Homes



Affordable
Housing



Community
Solar

GOALS

Involve & Benefit Communities
Reduce Energy Burdens
Build Diverse Workforce
Catalyze Private Capital
Transform Markets

Home Energy Upgrades & Unlocking Significant Savings



Source: NREL ResStock (2017)



Disclaimer

The following is intended to provide a summary of selected provisions in the Inflation Reduction Act, and should not be interpreted as tax, legal, or investment advice. Please consult a tax, legal, and/or investment professional, and federal/state/utility guidance for additional information.

Federal Clean Energy Tax Credits

- Available NOW!
- You must have taxable income to offset in the amount of the tax credit.
- You can claim these post-installation when you file your annual taxes.

Selected Federal Tax Credits Available for Households	Tax Credit Amount – up to
Rooftop solar, battery storage, or geothermal heat (§25D)	30% of cost
Weatherization (§25C)	\$1,200
Heat Pump Air Conditioner/Heater (§25C)	30% of cost / up to \$2,000
Heat Pump Water Heater (§25C)	\$2,000
Electrical Panel (§25C)	\$600
Energy Audit (§25C)	\$150
New Electric Vehicle (§30D)	\$7,500
Used Electric Vehicle (§25E)	\$4,000
Electric Vehicle Charger (§30C)	\$1,000

The above is intended to provide a summary of selected federal clean energy tax credits and should not be interpreted as tax or legal advice. Federal and state agencies will be issuing final guidance and regulations related to these provisions. Note that non-heat pump measures under the 25C tax credit are limited to a max of up to \$1,200 per year.

Federal Home Energy Rebates

- To be implemented by the Nevada Governor’s Office of Energy, anticipated in 2025!
- Electrification rebates for equipment (income-qualifying) and efficiency rebates for home retrofits.

Federal High-Efficiency Electric Home Rebate (HEEHR)	Max Rebate Amount for Households <80% AMI	Max Rebate Amount for Households <150% AMI
Heat Pump Water Heater	\$1,750	\$875
Heat Pump for HVAC	\$8,000	\$4,000
Electric Stove, cooktop, range, oven, or heat pump clothes dryer	\$840	\$420
Electric load service center	\$4,000	\$2,000
Insulation, air sealing, and ventilation	\$1,600	\$800
Electric wiring	\$2,500	\$1,250
Maximum total amount	\$14,000	\$7,000

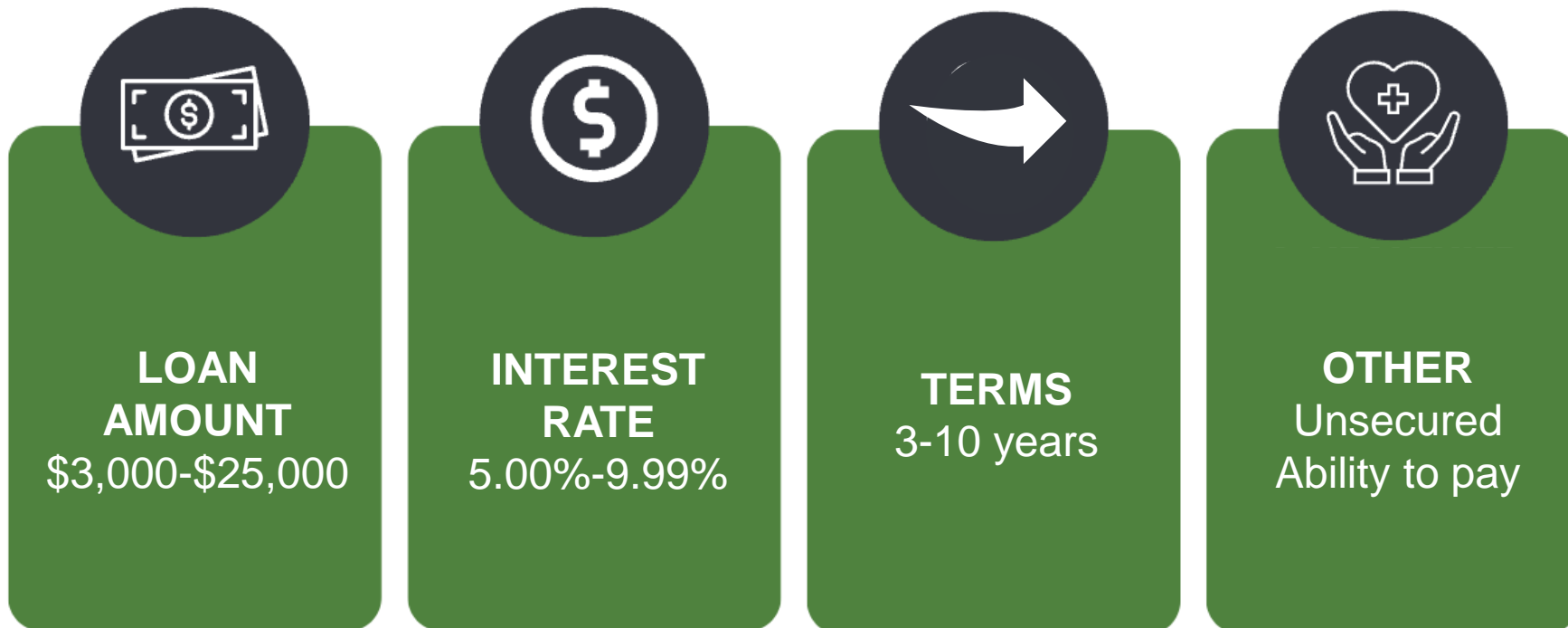
Home Owner Managing Energy Savings Rebate

- **Retrofits with modeled energy savings of >35%**
 - Standard: \$4,000 or 50% of project costs, whichever is less
 - Low-Income: \$8,000 or 80% of project costs, whichever is less
- **Retrofits with modeled energy savings of 20-34%**
 - Standard: \$2,000 or 50% of project costs, whichever is less
 - Low-Income: \$4,000 or 80% of project costs, whichever is less

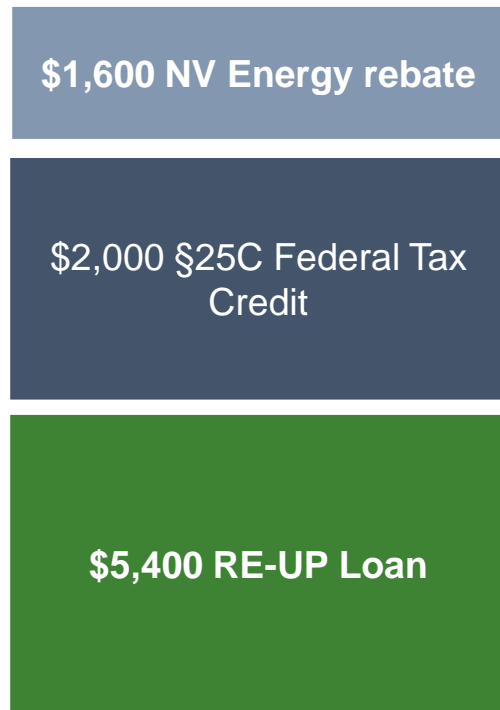
The above is intended to provide a summary of selected federal clean energy rebates and should not be interpreted as tax or legal advice. Federal and state agencies will be issuing final guidance and regulations related to these provisions. Federal Home Energy Rebates are not yet available and will be administered by the Nevada Governor’s Office of Energy.

NCEF's Residential Energy Upgrade Program (RE-UP)

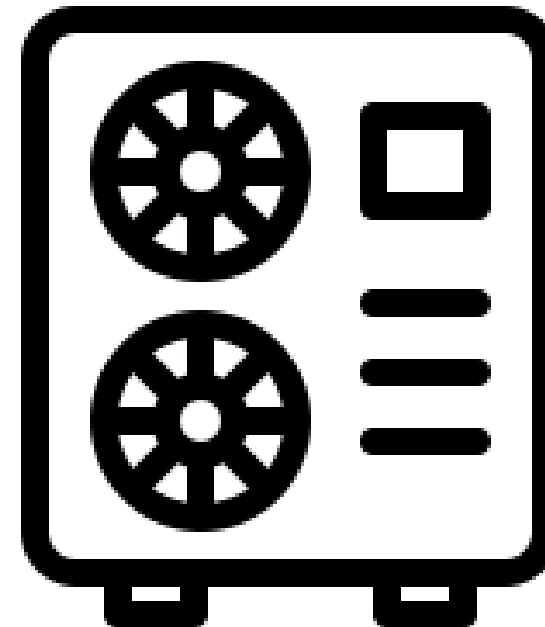
- RE-UP connects Nevada homeowners with financial and technical assistance for energy efficiency and clean energy upgrades in their homes.
- RE-UP provides affordable loans on the basis of ability to pay rather than credit score; no property encumbrance.
- As part of RE-UP, NCEF vets licensed contractors who perform the work.
- NCEF also provides education and support to homeowners in accessing federal and utility incentives.



Access to Affordable Financing is Key to Unlocking Federal Tax Credits, Rebates



**Illustrative \$10,000
Ductless Heat Pump**



The above is intended to provide illustrative upfront economics for selected residential energy measures with certain federal tax credits. It should not be interpreted as tax or legal advice. For tax credits and utility rebates, the incentive is delivered after expenditures are made so the RE-UP loan may need to initially be for the full amount of the project. The Rooftop Solar example does not include potential future federal Solar for All incentives.

Solar for All and Incentive Stacking for Rooftop Solar

- NCEF's Solar for All program offers rebates and zero- or low-interest loans for rooftop solar installations
- Terms are structured so that participating households will experience meaningful savings on their utility bill
- NCEF vets contractors to weed out historical poor performers in the rooftop solar industry



\$20,000 Rooftop Solar

What's Next?

- **May-October 2024:** Award negotiations + program design
- **November 2024:** Anticipated release of application portal for affordable housing developers, community solar project hosts
- **Spring 2025:** Anticipated release of application portal for single-family households
- **May 2024-April 2029:** Five-year performance period



Nevada Solar for All Interest Form

COMING SOON

The Nevada Clean Energy Fund (NCEF) is gearing up to implement solar programs that benefit low-income households using a \$156 million federal award from the Inflation Reduction Act's Solar for All program. The Nevada Solar for All (NSFA) program will help Nevada households access savings through solar and related energy upgrades. NCEF will administer programs that fund (1) rooftop solar for single-family homeowners, (2) solar for affordable multifamily buildings, and (3) community solar projects that benefit low-income households (including renters).

Interested households, affordable housing owners, contractors, community solar project hosts, and other stakeholders should fill out this survey to receive NSFA program updates via email.

Name *(Required)*

First

Last

Email *(Required)*

Zip Code *(Required)*

Why go electric? Economic benefits

UP
TO **50%**

maintenance cost

UP
TO **80%**

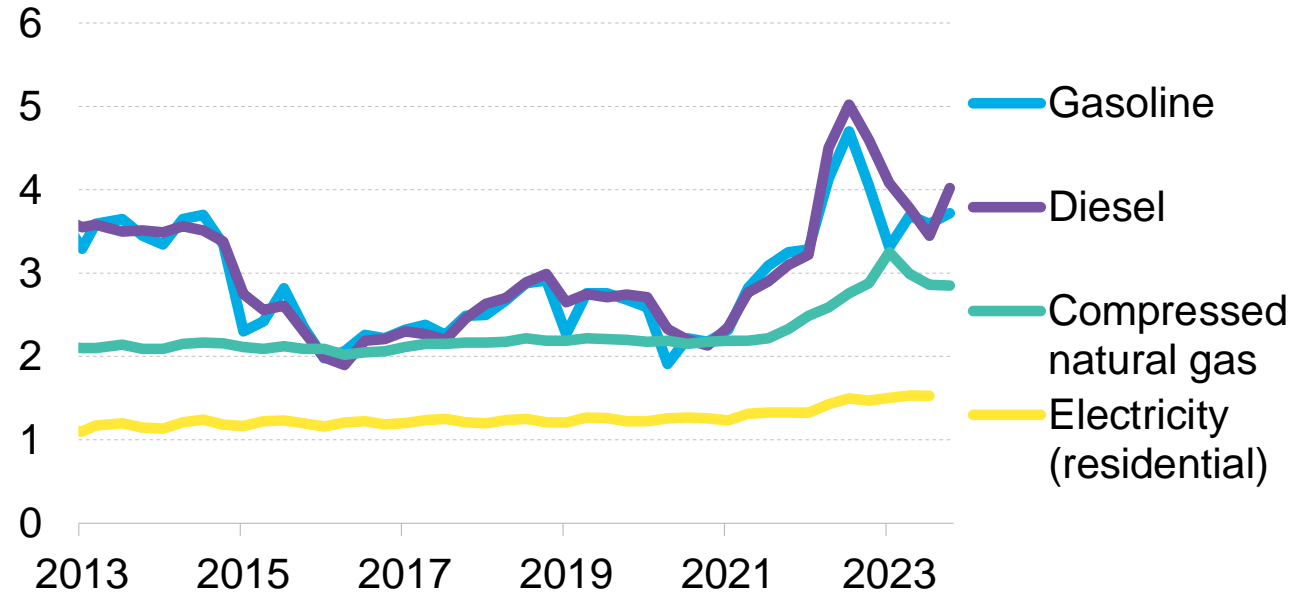
fuel cost savings

\$4k+

federal tax credits for EVs

Average vehicle fuel prices

\$ per gasoline gallon equivalent (GGE)



Source: Bloomberg New Energy Finance. Sustainable Energy in America Factbook (2024)

Educational & Technical Resources from NCEF

- NCEF plans to provide education and technical assistance to enable beneficiaries to stack Solar for All with other funding sources, such as federal tax credits, utility incentives, USDA-RD programs, etc.
- This stacking approach enables households to take additional efficiency and electrification measures that provide greater benefits and deeper energy cost savings.

Federal Incentives <p>The Inflation Reduction Act includes significant federal tax credits and rebates for measures such as heat pumps, insulation, solar, electric vehicles (EVs), and more.</p> <p>FIND OUT MORE</p>	RE-UP Loans <p>RE-UP offers unsecured loans at affordable rates to homeowners of all income levels. RE-UP considers factors other than credit score when assessing a homeowner's eligibility for a loan.</p> <p>FIND OUT MORE</p>	Find Contractors <p>RE-UP vets licensed HVAC, solar, and other energy contractors. Be sure to use a contractor certified by the Nevada State Contractors Board for the measure the contractor is installing.</p> <p>FIND OUT MORE</p>	Solar Consumer Protections <p>If you are considering installing solar on your home, or if you have issues with your existing rooftop solar, learn about your rights in Nevada and solar consumer protections.</p> <p>FIND OUT MORE</p>
Weatherization Assistance <p>The Weatherization Assistance Program provides homeowners and renters at or</p>	NV Energy <p>NV Energy offers residents a free home energy assessment & smart thermostat, incentives for efficient A/C units, and</p>	Rebuilding Together <p>Rebuilding Together Southern Nevada and Northern Nevada are nonprofit organizations</p>	Rural Support from USDA <p>US Department of Agriculture (USDA) Rural Development offers grants and loans for</p>

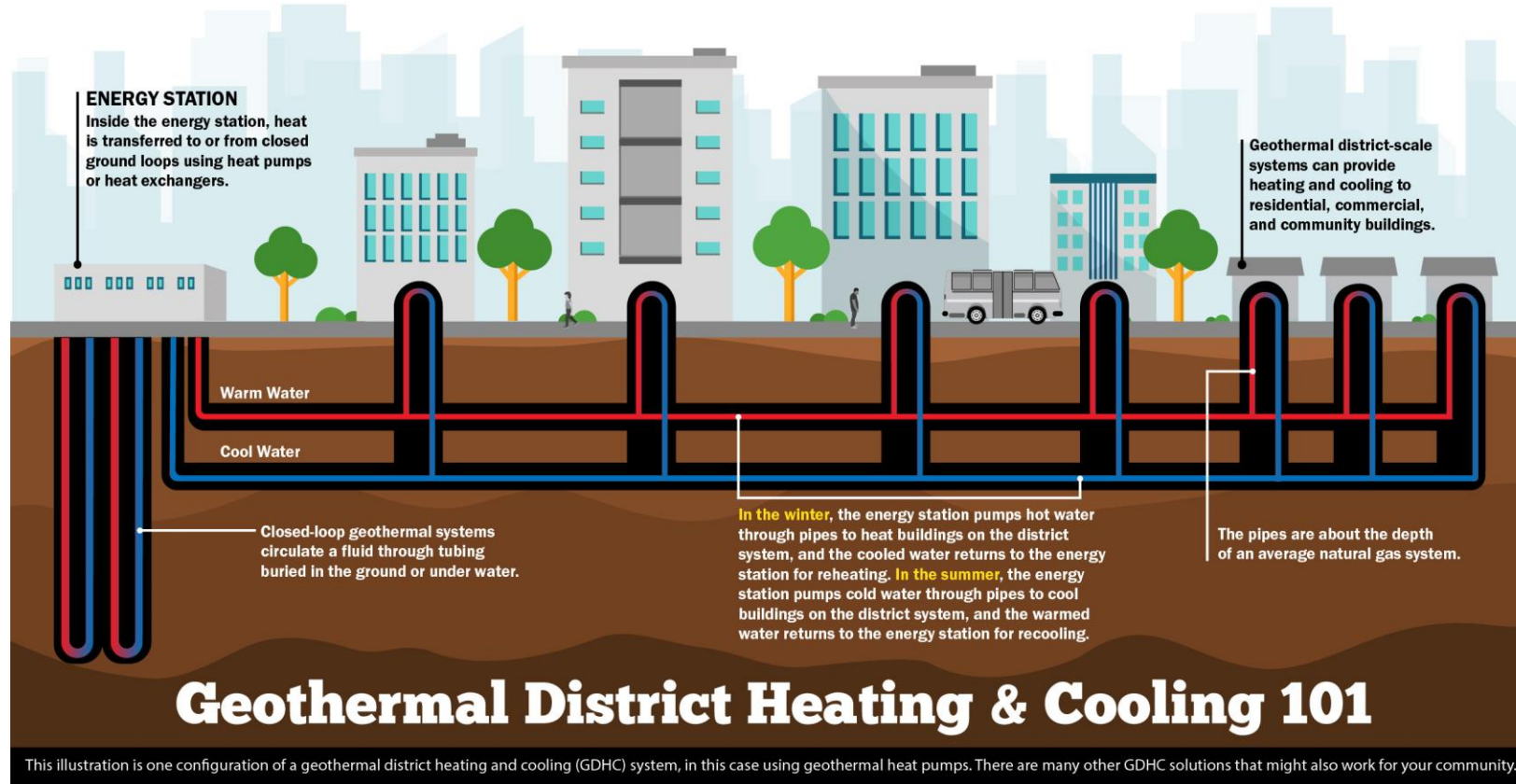
Options for Commercial Buildings

- The amount of funds available for tax credits is uncapped, so how much flows to Nevada is based purely on adoption rates.
- Tax credits can reduce the upfront cost of installed measures *and* ongoing energy costs for Nevadans.
- Many commercial tax credits are now available to governmental entities, Tribes, tax-exempt organizations, and rural cooperatives through a cash reimbursement from the IRS.

Commercial Measure	Tax Credit Amount (up to)
Energy Efficiency (§179D)	\$5/square foot
Solar, battery storage, or geothermal heating (§48)	30%-\$70% of cost
Electric Vehicle <14,000 lbs (§45W)	\$7,500
Electric Vehicle >14,000lbs (§45W)	\$40,000
Electric Vehicle Charger (§30C)	30% of cost, not to exceed \$100k

Geothermal District Heating

- Eligible for 30% Investment Tax Credit with 10% bonus if domestic content requirements are met, with option for direct cash reimbursement to local government (or other tax-exempt entity sponsoring the project)
- Can reduce energy consumed and emissions by up to 72% compared to traditional air conditioning equipment



Source: Department of Energy

Community Solar and Storage

- Community solar + storage projects are eligible for rebates and low-interest financing from Solar for All
 - Access 30% Investment Tax Credit with 10% bonus if domestic content requirements are met
- Provides microgrid and resilience benefits
- Systems with <1 MW capacity can be deployed quickly and participate in NV Energy's existing net metering program
- An alternate, slower option is to deploy a system with 1.5+ MW capacity
 - Requires working with NV Energy for the utility to support a bigger >1 MW project.



Contractor Workforce & Ongoing Operations & Maintenance

- Gerlach will need to be strategic about identifying quality workforce to implement clean energy measures
- Community-scale projects may need training for local staff/individuals on operations & maintenance



Think Creatively About Incentive Stacking

- Don't be afraid of financing to unlock this opportunity
 - Bridge loans can fill the gap between project installation and tax credit receipt
- Federal tax credits for EVs and home energy upgrades are available NOW!
 - Residents must have a tax liability (taxable income) to access the benefits of tax credits directly.
- NV Energy rebates (both income-qualifying and not income qualifying) are available NOW!
- Federal electrification, efficiency, and solar rebates are largely income-qualifying and will not be available until 2025.

Check your household's eligibility for federal and utility incentives at nevadacef.org/residents

Your household info Reset

We're dedicated to safeguarding your privacy. [Learn more.](#)

PROJECTS YOU'RE MOST INTERESTED IN RENT OR OWN ?

Solar Homeowner

ZIP ?

89412

HOUSEHOLD INCOME ?

\$70,000

HOUSEHOLD SIZE ?

3 people

Other incentives available to you

[Clothes dryer](#) [Electrical](#) [EV](#) [Water heater](#)

\$400 off a heat pump water heater Learn how to apply

NV Energy Heat Pump Water Heating

\$400 rebate for ENERGY STAR certified heat pump water heaters. Redeemable at Lowe's. Limit 1 per customer.

UPFRONT DISCOUNT

\$2,000 off a heat pump water heater Learn more

Federal Energy Efficient Home Improvement Credit (25C)

30% tax credit (up to \$2,000) for heat pumps and heat pump water heaters. Yearly reset.

TAX CREDIT

Discount off a heat pump water heater Learn more

Federal Home Electrification and Appliance Rebates (HEAR)

The federal guidelines allow for a discount of up to \$1,750. However, rebates will be implemented differently in each state, so we cannot guarantee final amounts, eligibility, or timeline.

UPFRONT DISCOUNT EXPECTED IN 2024-2025

Questions

- Resiliency needs? Frequency of blackouts?
- Community buildings that need energy upgrades?
- The City's appetite and capabilities to implement larger, community-scale projects? Cash reserves? Entering into financing agreements?
- Access to energy contractors?
 - Are there contractors in the community or that the community already trusts?
 - Is this a gap where coordination and aggregation of demand is necessary?
- Long-term operations and maintenance plan?
 - Does Gerlach have the capacity/appetite to train its own staff on maintenance?



Thank You

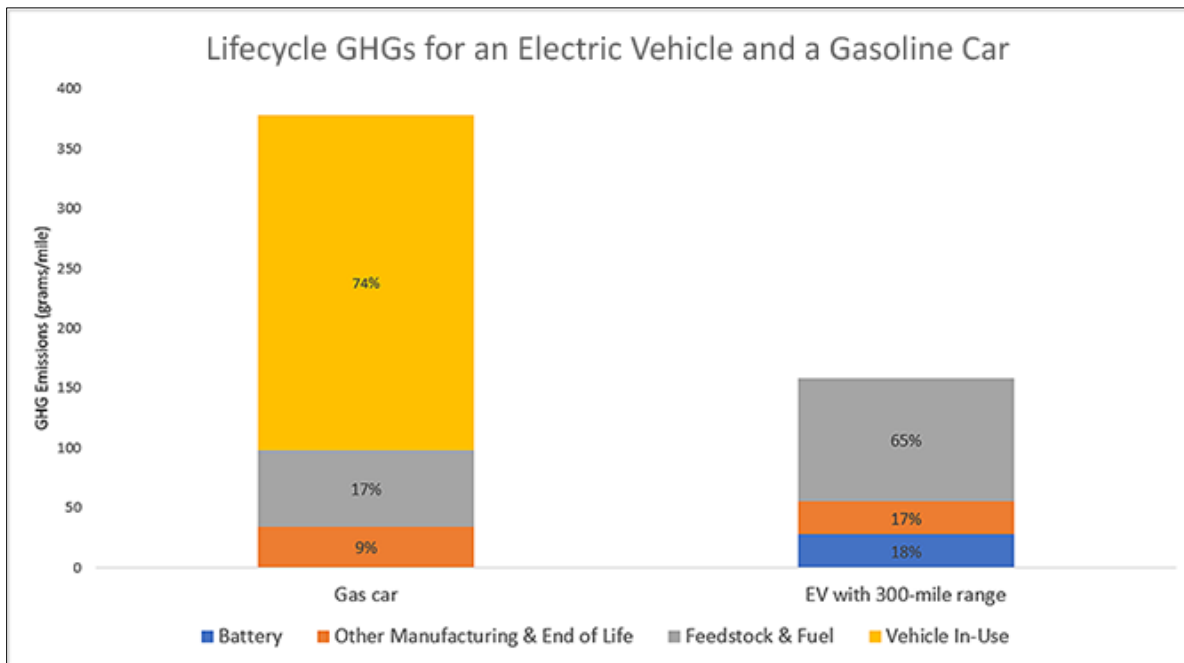
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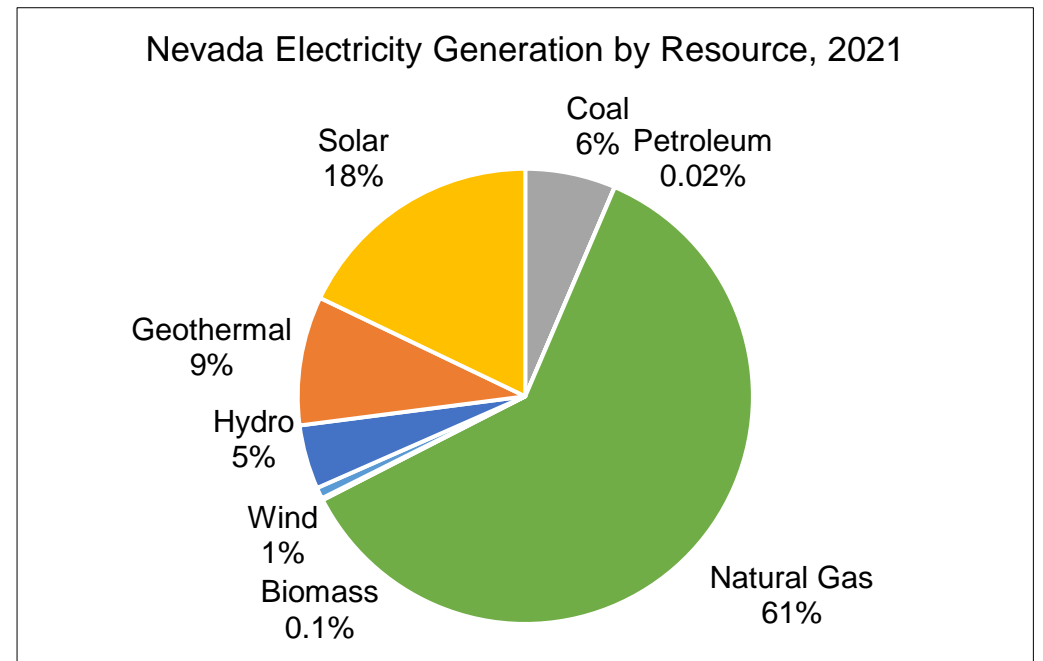
kirsten@nevadacef.org

Why go electric? Health, climate, & environmental benefits

- The transportation sector is the largest source of GHG and NOx emissions in the US, and also contributes to VOC, PM, and SO2 emissions. Exposure to NOx, VOCs, PM, and SO2 can cause severe asthma and other negative health impacts.
- EVs have no tailpipe emissions and emit half the GHG emissions of a gas car over its lifetime.
- Renewables make up ~33% of Nevada's electricity mix, and Nevada has a state-mandated goal of sourcing all of its electricity from zero-carbon sources by 2050.



Source: Argonne National Laboratory. GREET 2 (2021). Assumptions: 300-mile range EV;; 30.7 MPG gas car; vehicle lifetime of 173,151 miles; U.S. average grid emissions.



Source: Energy Information Administration (EIA). 2022

Sedan Unsubsidized Economics – An Example

EV vs. Gasoline Sedan Costs

Vehicle	Base MSRP	Annual Gasoline or Electricity Cost	Annual Maintenance Cost
2024 Honda Accord Gasoline	\$27,895	\$1,448	\$3,705
2024 Hyundai Kona EV	\$33,550	\$399	\$2,504
Delta (Gasoline minus EV costs)	-\$5,655	\$1,049	\$1,201

ANNUAL ESTIMATED SAVINGS FOR THE EV: \$2,250

Source: US DOE Alternative Fuels Data Center – Vehicle Cost Calculator. Assumes Nevada average retail electricity price and \$3.90/gal gasoline; 11,926 miles/year, 45% highway. Cost and economic information are based on hypothetical assumptions and are presented for illustrative purposes only. Actual economics will vary.

Light-Duty Truck Unsubsidized Economics – An Example

EV vs. Gasoline Light-Duty Vehicle Costs

Vehicle	Base MSRP	Annual Gasoline or Electricity Cost	Annual Maintenance Cost
2023 Ford F150 4WD Gasoline	\$39,600	\$2,415	\$4,672
2023 Ford F150 Lightning 4WD EV	\$39,974	\$639	\$2,744
Delta (Gasoline minus EV costs)	(\$374)	\$1,776	\$1,928

ANNUAL ESTIMATED SAVINGS FOR THE EV: \$3,704

Source: US DOE Alternative Fuels Data Center – Vehicle Cost Calculator. Assumes Nevada average retail electricity price and \$3.90/gal gasoline; 11,926 miles/year, 45% highway. Cost and economic information are based on hypothetical assumptions and are presented for illustrative purposes only. Actual economics will vary.