

# Going Solar

What you need to know



**ROBCO ELECTRIC**



Electrical • Solar • Low Voltage



# Solar Built On Trust

Robco Electric, Inc. is a locally owned and operated C-2 Electrical Contractor with over 150 employees, proudly serving Southern Nevada for more than 25 years. Our Solar Division has completed over 3,500 residential and commercial installations, earning top ratings on Google, Yelp!, Nextdoor, and more.

We handle everything — sales, design, installation, and service — without relying on subcontractors. Plus, we take care of all permitting and inspections for you.

Your solar consultant is your personal guide throughout the entire process, from sales to installation to ongoing service. They're here to help with every step, including helping handle your HOA application.



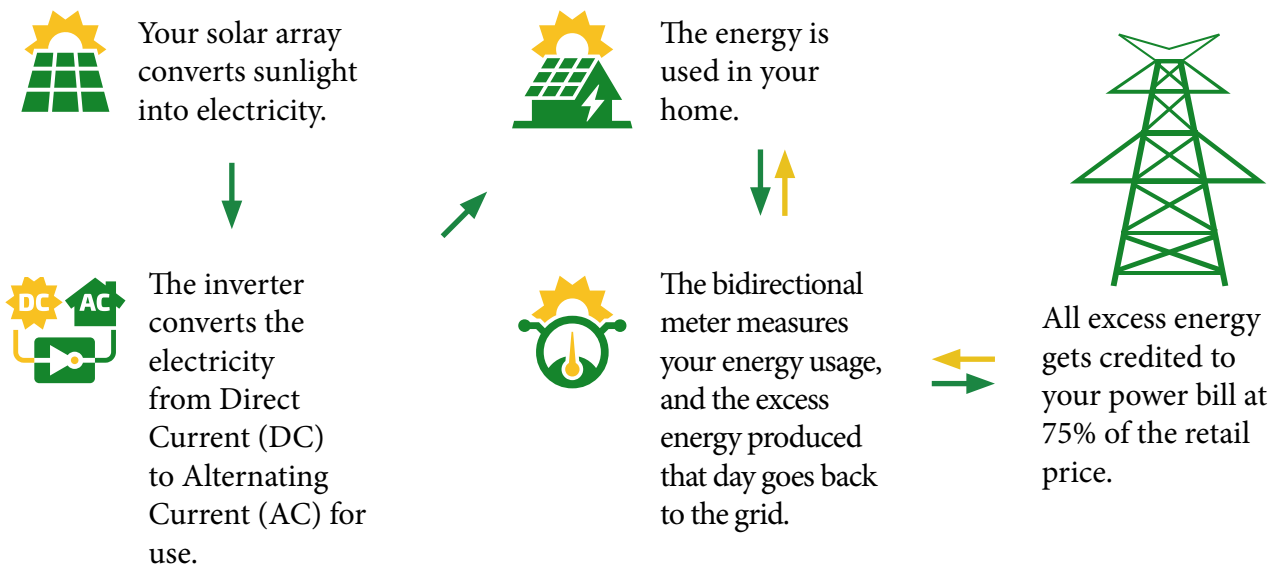
**Got questions? Call Or Visit**  
**(702) 614-4900**  
**[www.robcoelectriclv.com](http://www.robcoelectriclv.com)**



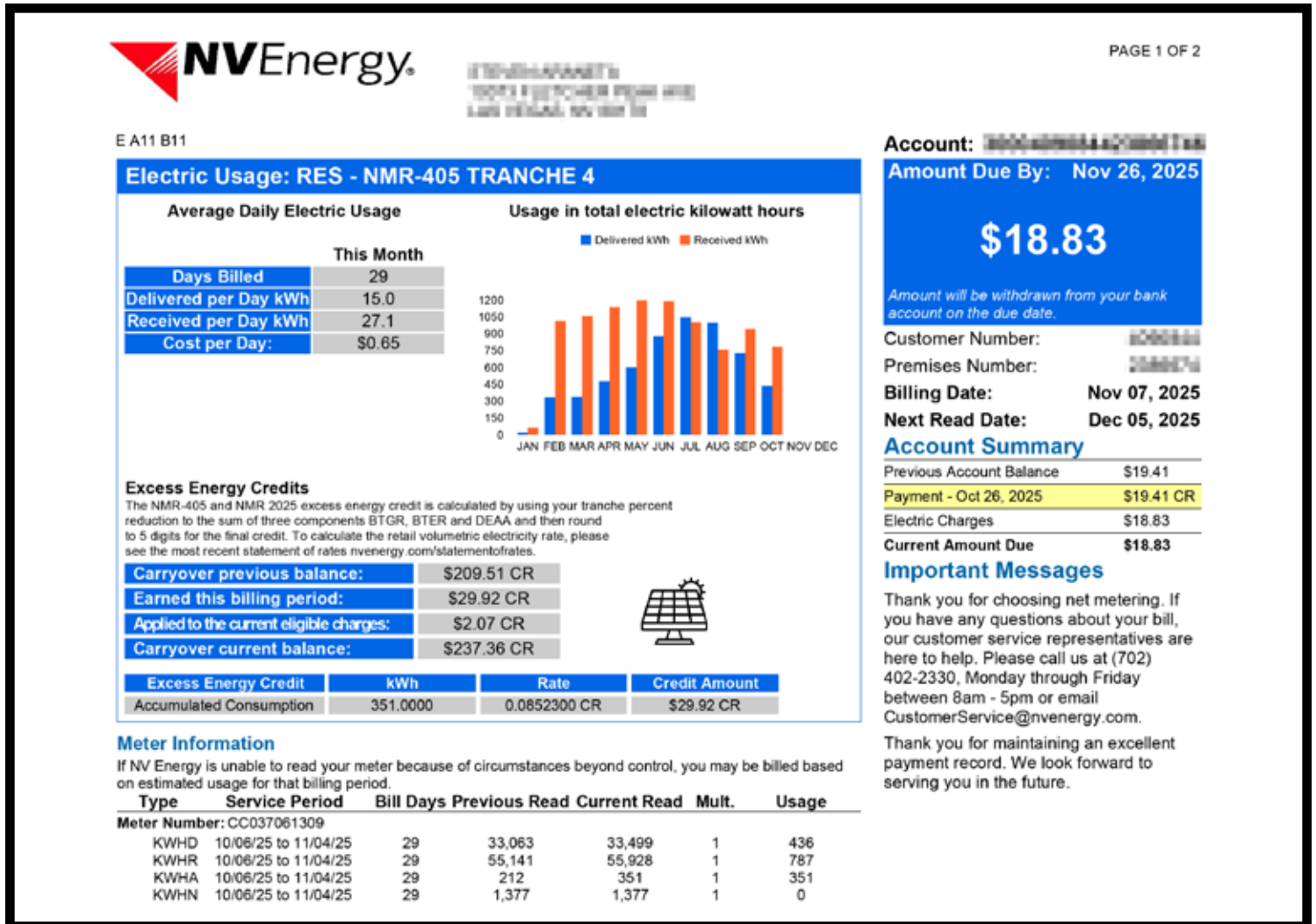
# Why Go Solar?



## How Solar Works with the Grid



# How you can get a Smaller Bill with Net Metering



With **net metering**, NV Energy credits your power bill for the excess energy produced. What you send back (KWhR) wipes out what you use (KWhD) at 100% — a 1-for-1 ratio.

Any **EXTRA** production for the month (KWhA) is banked at 75% of the retail price.

You'll use that credit to pay for any power you need from the grid (at night or during the summer).

**It works just like rollover minutes used to work on cell phones.** You will always pay the basic connection charge, taxes, and fees. The roll over kilowatt credits never expire and will automatically apply to your bill when needed.

## Understanding your bill

**kWhD** (Kilowatt–Hours Delivered): This is the amount of energy NVEnergy delivered to you.

**kWhR** (Kilowatt–Hours Received): This is the amount of you energy generated in excess of your needs and sent back to the grid.

**kWhA** (Kilowatt–Hours Accumulated): You sent back more energy than you used. Your solar earned credits for you to use later. Credits can never be “cashed out.”

**kWhN** (Kilowatt–Hours Net): You sent back less energy than you used. NV Energy will apply your credits to pay for power.

# Solar Cost Worksheet

Looking at the system price from different installers can be difficult. It can be hard to figure out if you are comparing apples-to-apples.

What to Compare:

### Equipment

Panels, Inverters

### Cost Per Watt

(Lower is better)

Las Vegas Average = \$2.85/watt\*

### KWH produced

(In first year)

(higher is better)

### Payback Years

(Shorter is better)

NV Average = 6-12 years

Does this company have a NV C2 or C2G License?

Does their license have any disciplinary action?

Have you read their reviews?

(Yelp!, Facebook, Google, Nextdoor, BBB, etc)

Is there a Power Production Guarantee included?

Is pigeon proofing included at no charge?

Is production and consumption monitoring included at no charge?

Are there any added fees for warranty extensions?

Example	Installer A	Installer B
YES NO	YES NO	YES NO
YES NO	YES NO	YES NO
YES NO	YES NO	YES NO
YES NO	YES NO	YES NO
YES NO	YES NO	YES NO
YES NO	YES NO	YES NO
YES NO	YES NO	YES NO

## Your Annual KWH Demand

\_\_\_\_\_ KWH

Panels – Mono or Poly

Inverter – Central or Micro

Watts per Panel

SYSTEM SIZE (DC watts)

System Cost – CASH

Cost Per Watt

First Year KWH produced

Annual Value of Power Produced (KWH x .11334)

### PAYBACK YEARS

Net Cost/Annual Value of Power Produced  
= Payback Years at Today's Price for Power

MONO		
MICRO		
435		
8.7kw/8,700 watts		
\$24,258.00		
\$2.79		
16,006 kwh		
\$1,814.12		
years		

\* Information current as of 5/2025 Please refer to NV Energy's website for updated rates.



# Sizing Your System

## The Balancing Act

The goal is to match your energy production to your energy consumption. Systems are built from historical usage (at least 12 months) or square footage. Every system is custom designed for your house and your needs.

- If you want a bigger system than historical usage or square footage allow, then NV Energy has to approve it.
- If you need more power in a few years, you can add panels if there is available space on your roof and in your main electrical panel.

# Solar Savings

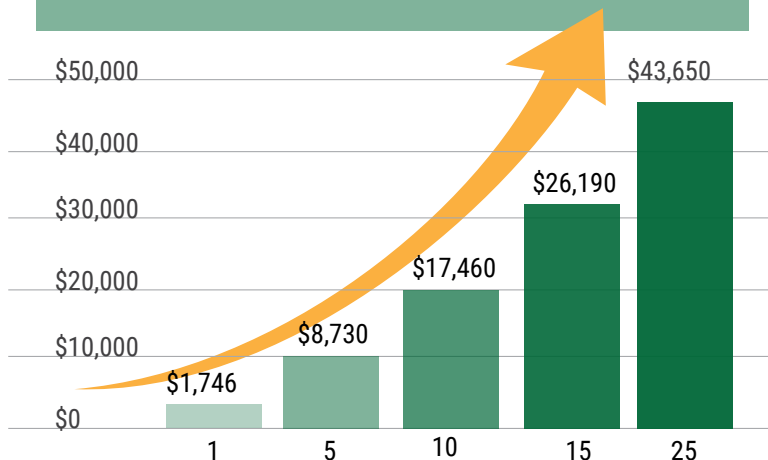
## Using “Sun Savings”

When you invest in solar, you’re essentially banking the power of the sun. Every time your solar panels produce more energy than your home needs, that extra electricity is sent back to the grid, earning you energy credits through a process called net metering. These credits work like deposits in a savings account, letting you draw on them later when your panels aren’t producing as much—like at night or on cloudy days. Instead of paying your utility company full price for that power, you’re using the “sun savings” you’ve already built up.

### BANKING THE SUN



### CUMULATIVE UTILITY BILL SAVINGS



### SOLAR SYSTEM SIZE

8.7 kW SYSTEM

15,760 kWh ANNUAL PRODUCTION

### FIRST YEAR'S BILL

OLD BILL: \$1,985.00

NEW BILL: \$239.00

YEARLY SAVINGS: **\$1,746.00**

### COST AND SAVINGS

SYSTEM COST: \$24,000

UTILITY BILL SAVINGS: \$43,650.00

ESTIMATED NET SAVINGS: **\$19,650.00**

### ENVIROMENTAL BENEFITS

CAR MILES AVOIDED - 104,788

TREES - 1,085

LONG HAUL FLIGHTS AVOIDED - 121



# What Should Solar Cost?

Looking at the system price from different installers can be difficult. It can be hard to figure out if you are comparing apples-to-apples.

**Please see worksheet on page 5.**

What to compare:

- First year production guarantee
- Equipment Types
- Cost Per Watt
- Kwh Per Year
- Payback Time
- Additional Items Included (Pigeon Guard, Consumption Monitoring)

# Choosing The Right Company

When you go solar, you are purchasing a small construction project. Check the company's contractor license at: <https://nvcontractorsboard.com>.

Read their reviews - Yelp! NextDoor, Facebook, Google, or any other review sites.

Look for answers to these questions:

- How long have they been in business?
- How many solar installs have they done in Las Vegas?
- Do they install their own systems or work through subcontractors?





# Know Your Borrowing Costs

Banks make money on loans in one of two ways:

- Interest over the term of the loan
- Finance fee is charged upfront

What to avoid in solar financing:

- A Prepayment Penalty
- High upfront financing fees
- Long loan terms
- Split Loans with phrases such as “No payments, No interest” or “Same As Cash.”

# Homeowner Associations & Solar

- Your HOA cannot say no to solar. NRS 278.0208 (the NV Solar access law) guarantees your right to install solar on your home as long as you own the roof.
- Your HOA cannot place “unreasonable restrictions” on your solar design.
- Most solar contractors should help you handle the process with your HOA. You simply need to provide the ARC form and the solar packet to your HOA and pay any application fee.



# Buying vs Leasing/PPA

## How to Pay for a Solar System

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### Buy

Pay Cash, Use Your Home Equity, or Finance It

- ✓ Price per kWh is set
- ✓ Warranty
- ✓ Increased home resale value
- ✓ No hassle transfer
- ✓ Control over system components
- ✓ No early termination fees
- ✓ Many financing options

### Lease / PPA

The solar company owns the panels and sells you the power

- ✓ Zero out of pocket
- ✓ Lower starting price
- ✓ Warranty & Maintenance
- ✗ No control over system components
- ✗ You could pay more for power
- ✗ Can affect a home sale
- ✗ Must transfer at home sale
- ✗ No added resale value
- ✗ Early termination fee to remove panels

# Picking An Inverter

Inverters are the “brains” of any solar system.

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## Central Inverter

One inverter for all panels.  
Single point of failure  
bringing whole system down.



## Central Inverter with Optimizers

One inverter for all panels.  
Single point of failure  
bringing whole system down.  
Optimizers handles production if  
panel is shaded or fails.



## Microinverters

One inverter per panel.  
Independent from each other.  
Failure only affects one  
inverter/panel.

## Why Are Microinverters The Best Value For The Money?

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- No Single Point of Failure
- No Performance Loss
- Ability to add panels in the future
- More Reliable & Longer Lasting with a 25-year warranty
- Panels can be monitored independently





# What Rooftop Solar Looks Like

Robco Electric installs all conduits in the attic whenever possible and paints any exterior conduits to match your house for a better looking installation. We also include a solid metal pigeon guard for all flush-mounted arrays.

# Pigeon Guard

Your contractor should offer pigeon guard. Don't skip pigeon guard! Sometimes it's included in the cost, and other times it's an add-on.

Bird waste is acidic and can cause massive problems if the pigeons decide to nest under your arrays. Their waste can seep down to your roofing and cause leaks.

Mesh net pigeon guard looks unsightly and may not be the most effective solution. The birds or high winds can pull it loose.

**Robco installations come standard with solid metal pigeon guard on all sides of the array** (For all pitched roof surfaces.)



Shingle Roof Pigeon Guard



Mesh Net Pigeon Guard



S Tile Roof Pigeon Guard



Flat Tile Roof Pigeon Guard

# How Solar

During installation, your contractor will make approximately 200 holes in your roof and install a new breaker in your main panel.

**1** Tiles are removed and nail holes are sealed

**2** Rafter is located. Mastic is applied to the base of the tile hook.

**3** Tile hook is anchored with lag bolts

**4** Mastic is applied to VersaFlash and is placed to seal roof penetrations from lag bolts.



# Gets Installed

All contractors in NV must warranty the roof against leaks for 10 years after install. Choosing a contractor who has been in business for 10 years or more can provide peace of mind.

**5** VersaFlash is sealed with Mastic and tile is replaced.

**6** Rails are set and cabling is run.

**7** Panels set on rails and clamped in place.

**8** Finished array before pigeon proofing





# Compare Conduit Runs

**LEFT:** A conduit run through the attic looks much neater and cleaner than an installation with an external conduit.

**RIGHT:** Notice the roof boot over the eaves and unpainted conduit. The contractor could have run the conduit through the attic.



# We've Got An App

Robco Electric has a free app available for download. The app is used to earn rewards for referrals to monitor your system. Download the App, select the sales consultant, and register. Once registered, you can begin sending referrals right away.

The monitoring experience is built specifically for the system owner. Delivering at-a-glance verification. Monitoring assures you that your Enphase system is performing as expected. Verify system health and performance. View energy production by month, day, or hour. Analyze performance against historical weather data.



Scan QR code to download our app

- Track Installation Progress
- Monitor Your System
- Request Cleaning & Maintenance
- Earn Referral Rewards

