



A Grassroots Movement
for Clean, Efficient Power





Solarize!

A Grassroots Solar Movement

- Started in 2009 in Portland, OR
- Based on neighbor-to-neighbor education
- Endorsed by the US Department of Energy and the NC Clean Energy Technology Center



Brought to you by... **NC WARN** 

A 26-year-old climate & energy nonprofit promoting a clean energy revolution by:

- Pressuring Duke Energy (the largest electric utility in the world) to stop burning fossil fuels in order to avert climate catastrophe, and
- Helping people go solar and save energy. Solarize Durham, Chatham & Triad have added over 100 solar roofs!



Solar installer partners



Kathy & Stew Miller



Maria & Bob Kingery

NORTH CAROLINA SOLARIZE PROGRAMS

| PROGRAM | CONTRACTS | KILOWATTS | SPONSOR ORGANIZATION |
|-----------------------------|------------|----------------|-------------------------------------|
| Solarize Asheville | 52 | 251 | Blue Ridge Sustainability Institute |
| Clean Energy for Buncombe | 23 | 145 | Clean Energy for Us |
| Solarize Durham | 33 | 160.9 | NC WARN |
| Solarize Carrboro | 40 | 192 | Next Climate |
| Solarize Charlotte | 37 | 170 | Cleaner is Cheaper coalition |
| Solarize Chatham | 64 | 330 | NC WARN |
| Solarize Orange | 35 | 188 | Next Climate |
| Clean Energy for Raleigh | 4 | 21.5 | Clean Energy for Us |
| Clean Energy for Western NC | 1 | 2.24 | Clean Energy for Us |
| Solarize Triad | 12 | 63 | NC WARN |
| TOTAL | 301 | 1523.64 | |



Next Climate

solarizenc.org



NC WARN

solarize-nc.org





Neighbor-to-Neighbor Education

- House meetings
- Tabling at community events
- Door-to-door outreach
- Neighborhood newsletter/website
- Church bulletin inserts
- Tell all your friends!



Solar Benefits Are Many

- Reduce power bills
- Increase property value
- Reduce pollution from fossil fuel plants
- Support local jobs
- Grow solar industry
- Help avoid rate hikes for new power plants
- Lock in low-cost clean energy for
at least 25 years!



Solar: Now is the Best Time!

- Retail solar prices have dropped 80% in 5 yrs.
- Tax credits = approx. 60% off through 12/31/15
- Solarize bulk purchasing discount of around 16%
- “Tiered pricing” means the Solarize price could drop 8% more, as more people participate



Average Solar House

Example:

4 kilowatts (16 panels)

Produces about
5,395 kilowatt-hours per year
= approx. \$583 savings on
electric bill (at Duke Energy rates)





Solar Tax Credits Pay Back 60%

- 35% NC tax credit
 - Can account for only ½ of your tax liability each year
 - Can be taken over 5 years
 - **Expires Dec. 31, 2015**
- 30% Federal tax credit
 - Can be taken over 2 years
 - Expires Dec. 31, 2016
 - Pay federal tax on state credit (so total is about 60%)

Consult your tax advisor to see if you can take the credits.

If you're installing solar on a nonprofit, people who donate money to the project can take the 35% state tax credit.



Solarize Pricing for the 4 kW Example

| | Tier 1 | Tier 2 | Tier 3 | Tier 4 |
|--|-----------------|-----------|------------|-----------------|
| Total of signed contracts | 1-49 kW | 50-199 kW | 200-300 kW | 300+ kW |
| Solarize price | \$15,800 | \$15,280 | \$15,000 | \$14,440 |
| Net price if you can use the tax credits | \$6,320 | \$6,112 | \$6,000 | \$5,776 |

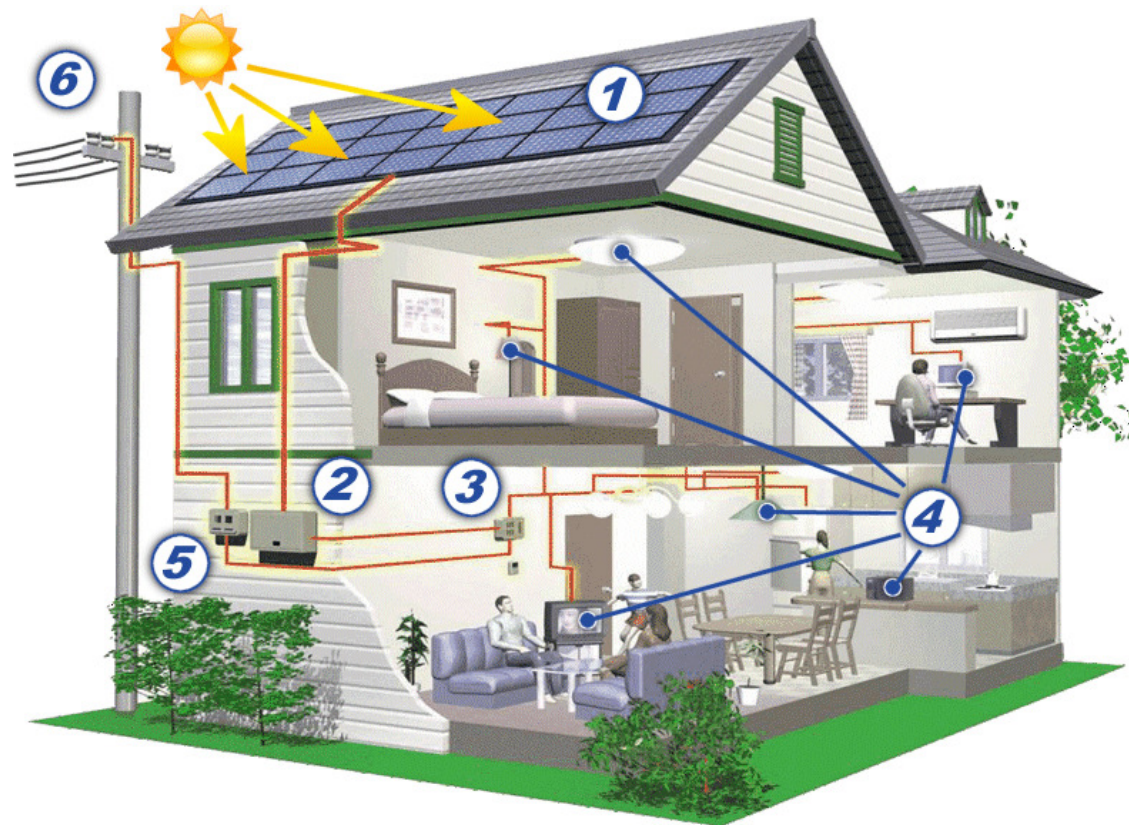
For Duke-Progress customers: Ask your installer about the SunSense incentive.

Extra charges for: steep roofs, three stories or more, vent-moving, web-monitoring, specialized equipment. Commercial systems and ground-mounts priced individually.

Solar Energy Justice: A small amount from each installation will go into a fund to help low- and fixed-income households get solar.

Payments: 30% with contract, 60% at installation, balance when final tier determined.

How Solar Works



What's Good for Solar?

Optimal Conditions

- Roof area facing south, southeast or southwest
- As little shading as possible from trees or any other obstructions
- Roof pitch, or tilt angle, between 20 and 45 degrees

Typical Installation





Installation Process

Preliminary steps for all projects

- Site and shading analysis
- Analyze usage and estimate production
- Preliminary system design
- HOA review (if required)

Project planning & permitting

- Structural and electrical drawings
- NC Utilities Commission and utility company interconnection
- All applicable permits

System is installed, inspected & interconnected!!!



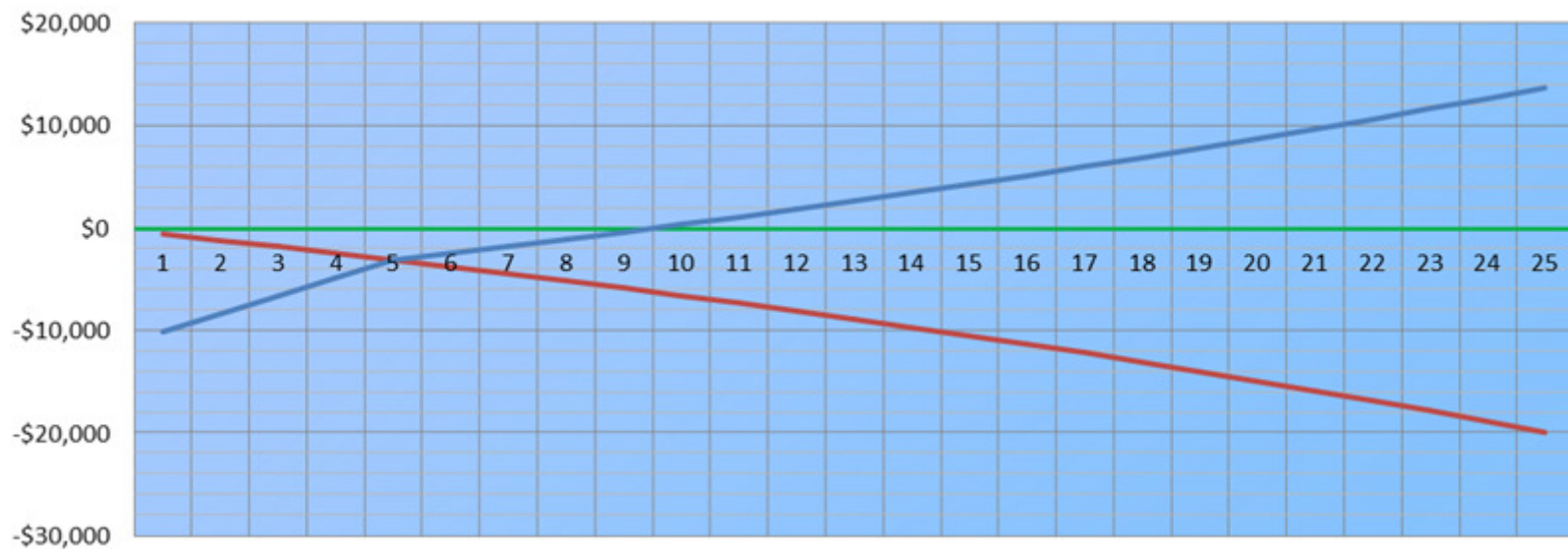




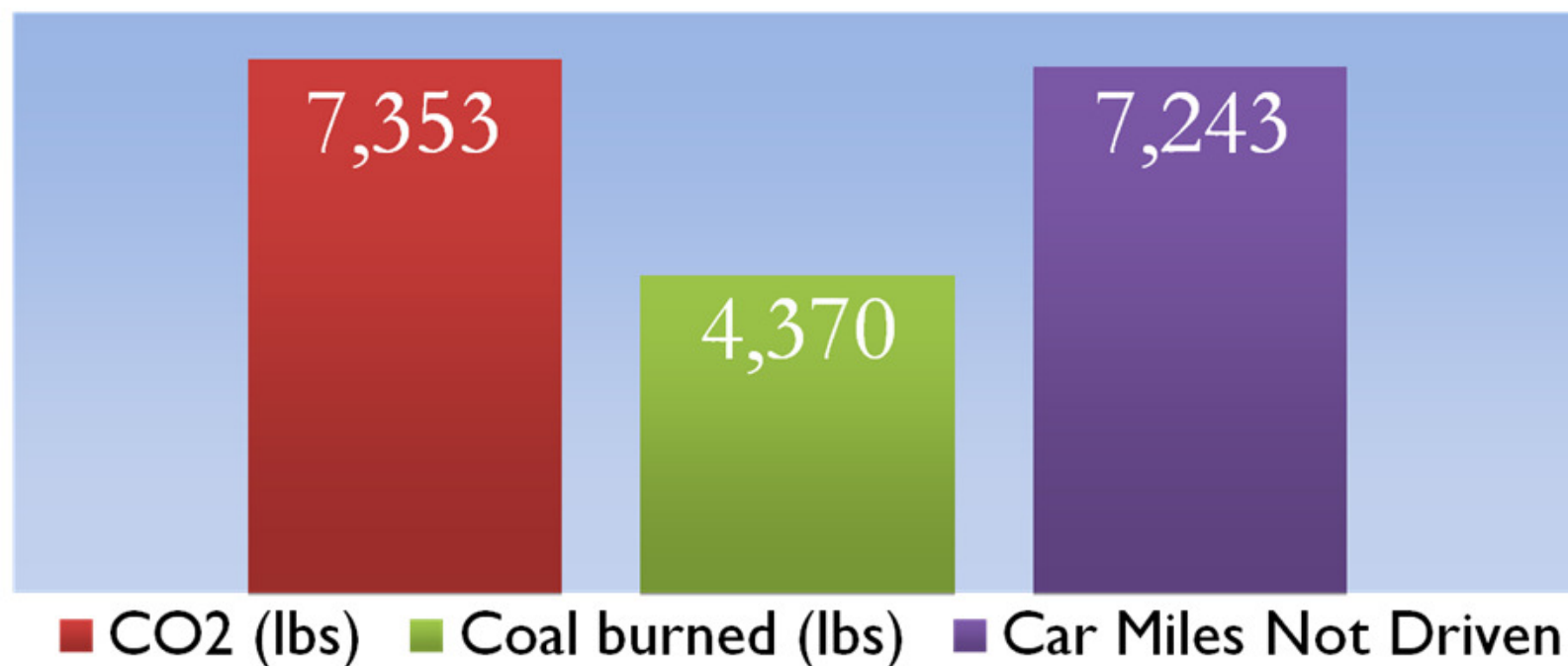




Cash Flow: Purchasing PV System (blue) vs. Doing Nothing (red)



Annual Environmental Impact of 4 kW System



Ask Your Installer about Special Solar Financing!

EXAMPLE OF A SOLAR LOAN USING TAX CREDIT TO STEP DOWN THE PAYMENTS:
5 kW Solar system costing \$17,500 in a market with 35% state tax credit

Monthly Savings on electric bill:

\$70

30% of loan
(= Federal tax credit)
often interest-free

monthly payment of
\$91
on remaining 70%

State Tax Credit
applied to loan

monthly payment of
\$54



Questions?

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Enroll today or at

solarize-nc.org