

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 <u>world</u>) 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	201	1522.64		
TOTAL	301	1523.64		





Next Climate

solarizenc.org





THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

NC WARN

solarize-nc.org













Neighbor-to-Neighbor Education

- -House meetings
- -Tabling at community events
- –Door-to-door outreach
- -Neighborhood newsletters/websites
- -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

Commercial systems and ground-mounts priced individually. No tiered pricing.

Extra charges for: steep roofs, three stories or more, vent-moving, web-monitoring, specialized equipment.

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.

Ask Your Installer about Special Solar Financing!

EXAMPLE: 5 kW solar system costing \$17,500 in a market with 35% state tax credit

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

Monthly Savings on electric bill:

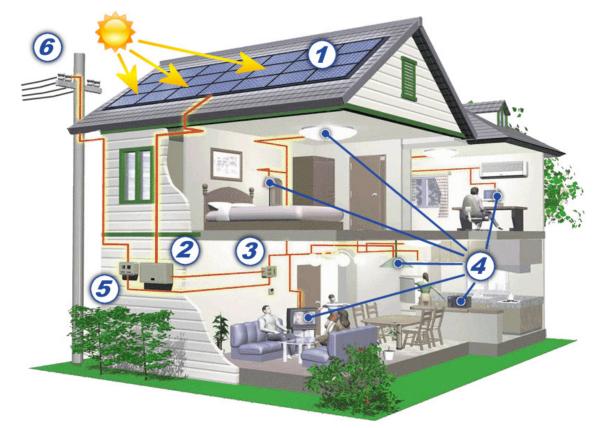
monthly payment of **\$91** on remaining 70% State Tax Credit applied to loan

monthly payment of **\$54**





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







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!!!

Installation Process























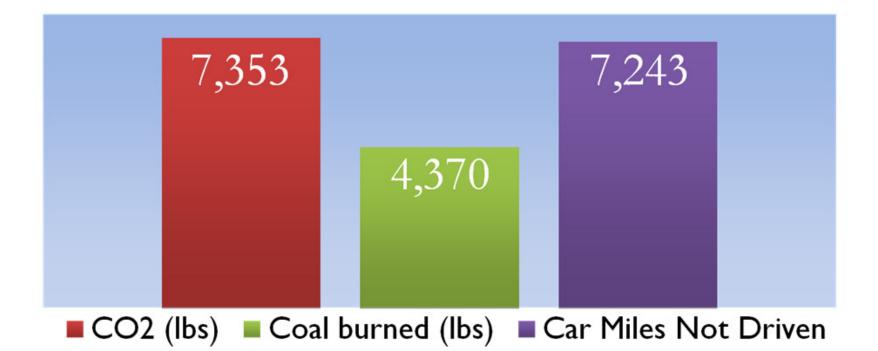








Annual Environmental Impact of 4 kW System







Questions? info@solarize-nc.org 919-416-5077

Enroll today or at solarize-nc.org