



 **Seattle City Light**
Conserving Today. Sustaining Tomorrow.

Going Solar in Seattle

October 2012

www.seattle.gov/light/conserve

Outline

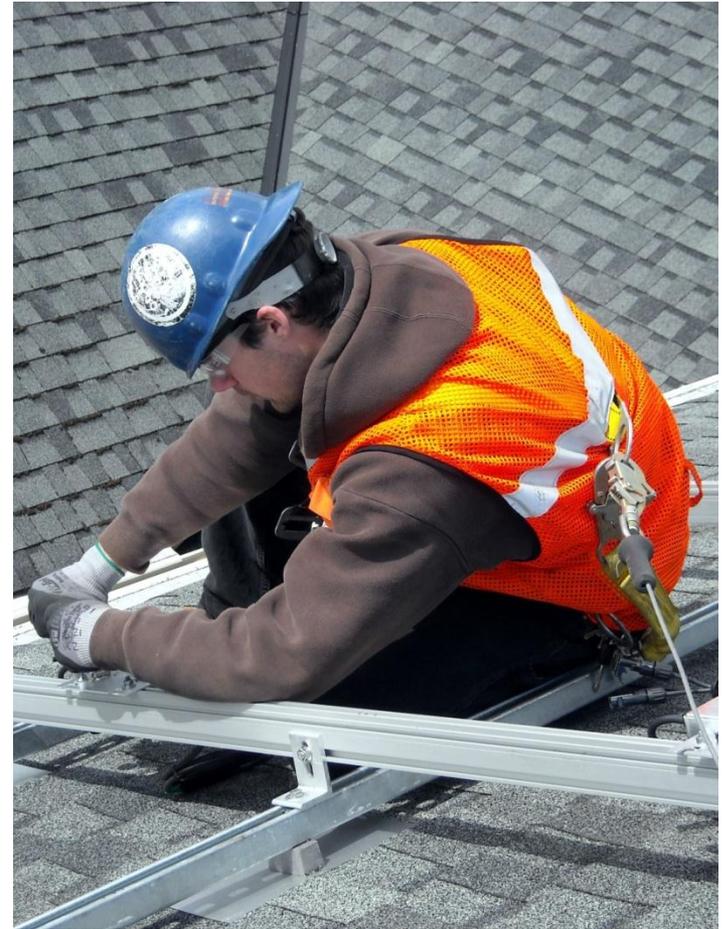
Solar in Seattle

Photovoltaic technology

Incentives

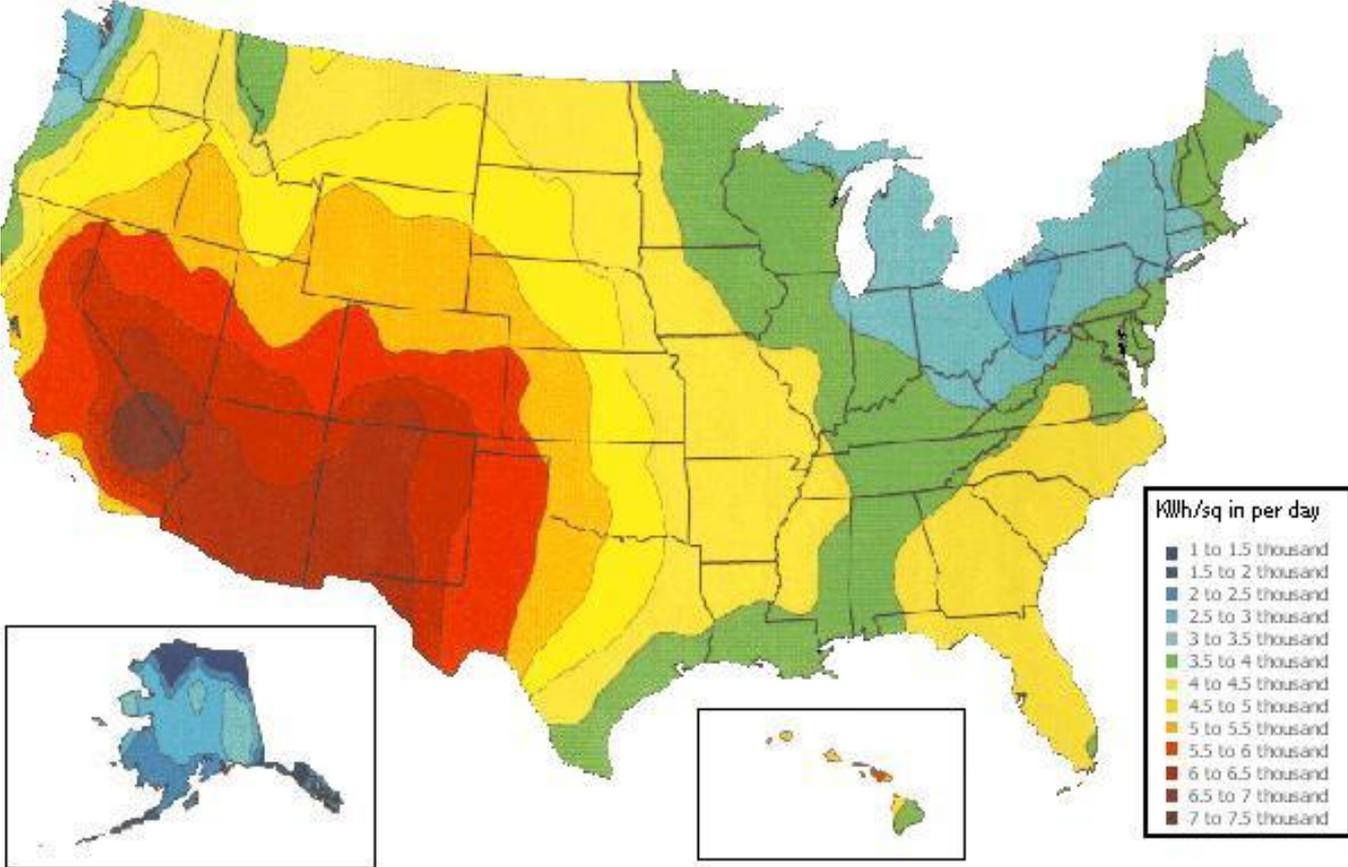
Resources

Q&A

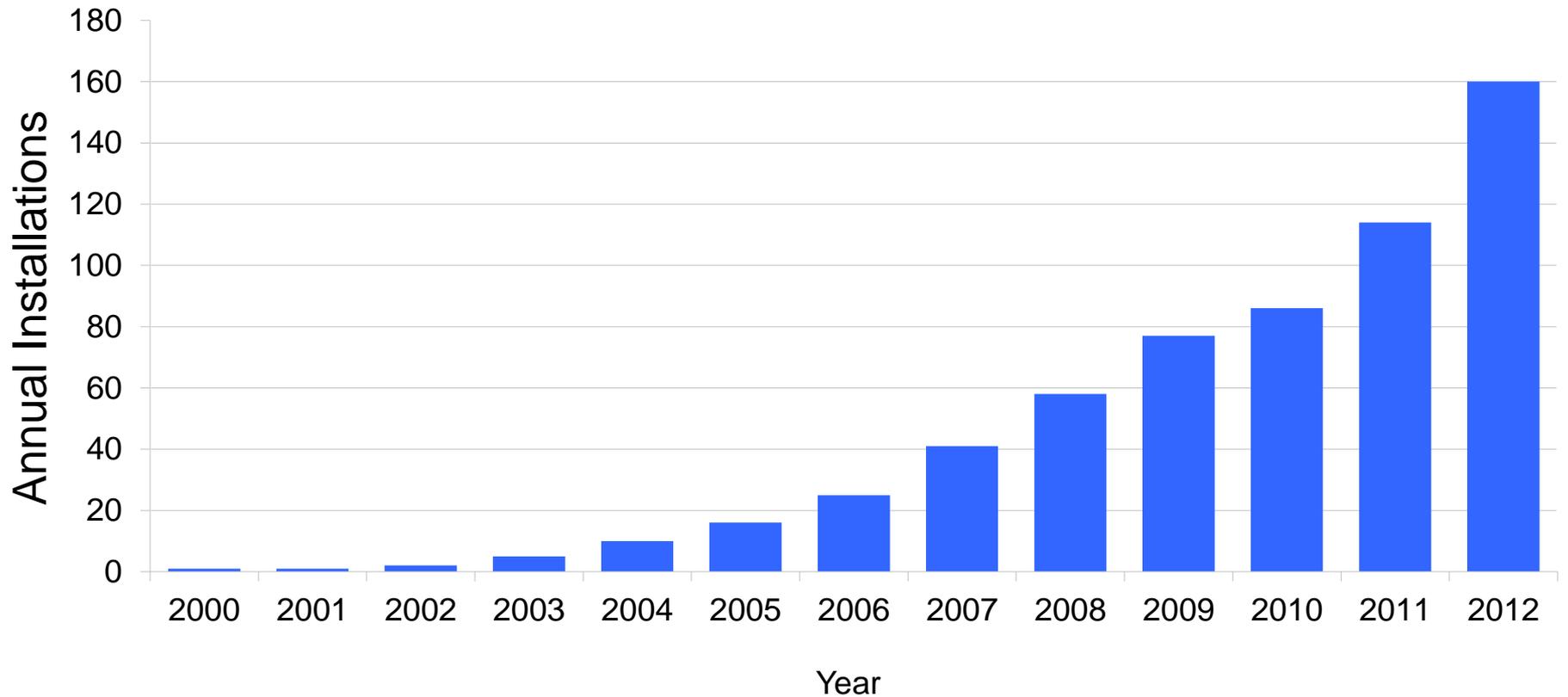


Does solar work in Seattle?

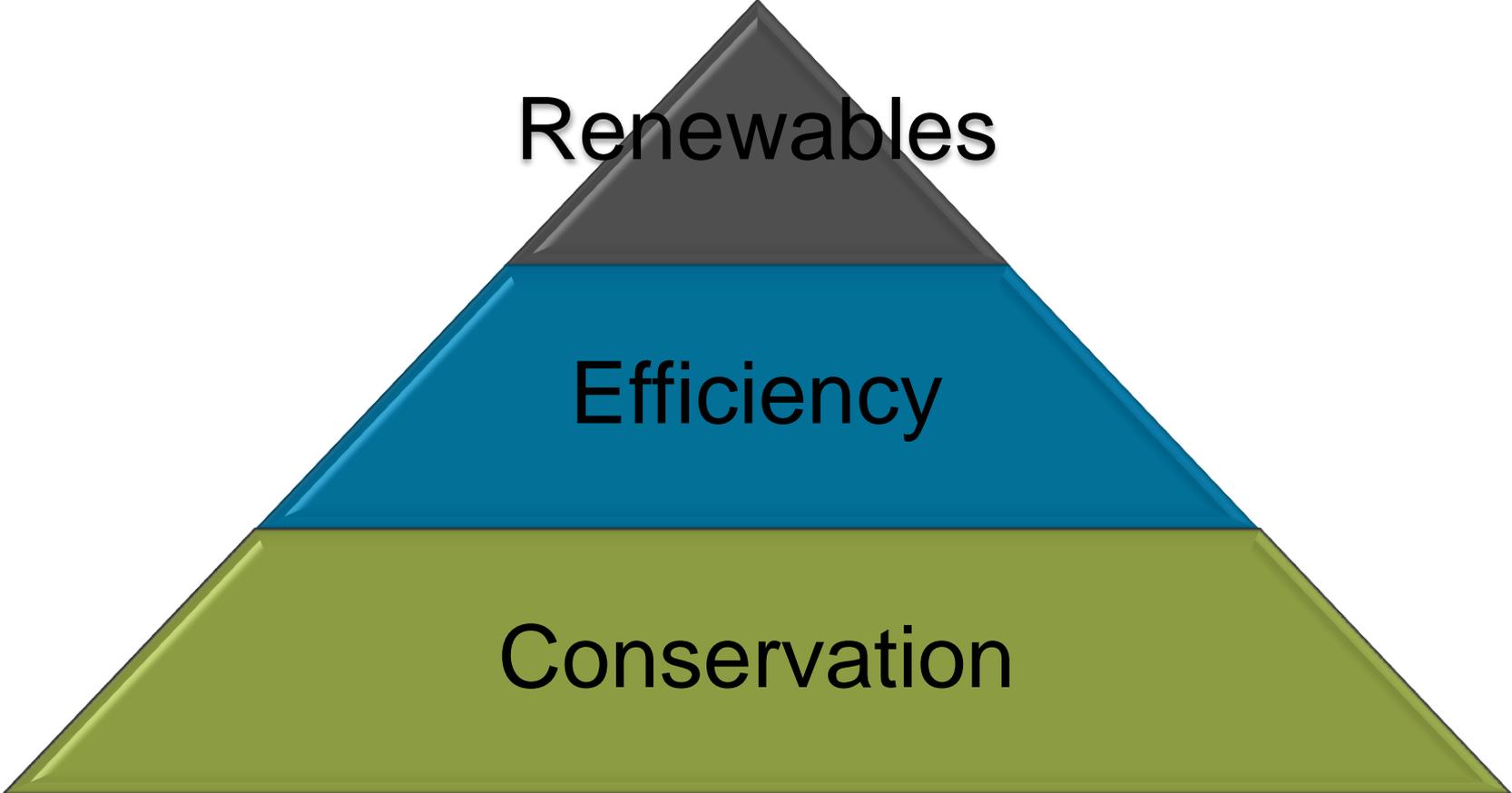
Yes!



Seattle Installations Growing!



Solar is *part* of your energy solution



Renewables

Efficiency

Conservation

Solar technologies

Solar electricity

Photovoltaics, or PV

Solar hot water

Does not produce electricity

Concentrating Solar Power

Uses mirrors, Utility scale electric generation



Solar PV's unique values

Silent and clean

Low maintenance

Long life

**Integrates with the
urban environment**

Free fuel!



Do you have the right site?

Lots of shade = Not Good



Future shade = Not Good



Do you have the right site?

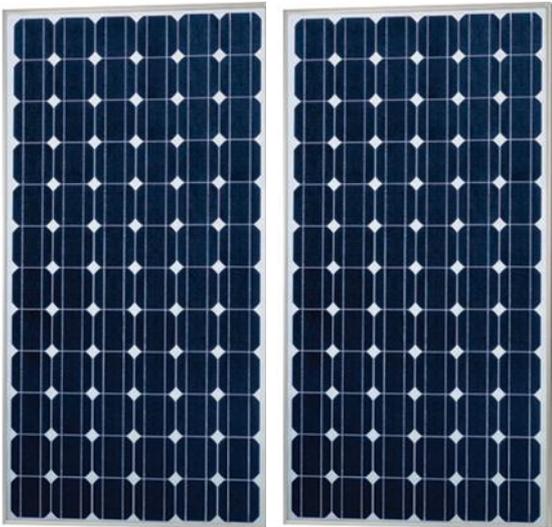
Roof in good condition = Good!



Facing South, East, or West = Good!



On your home...



Panels

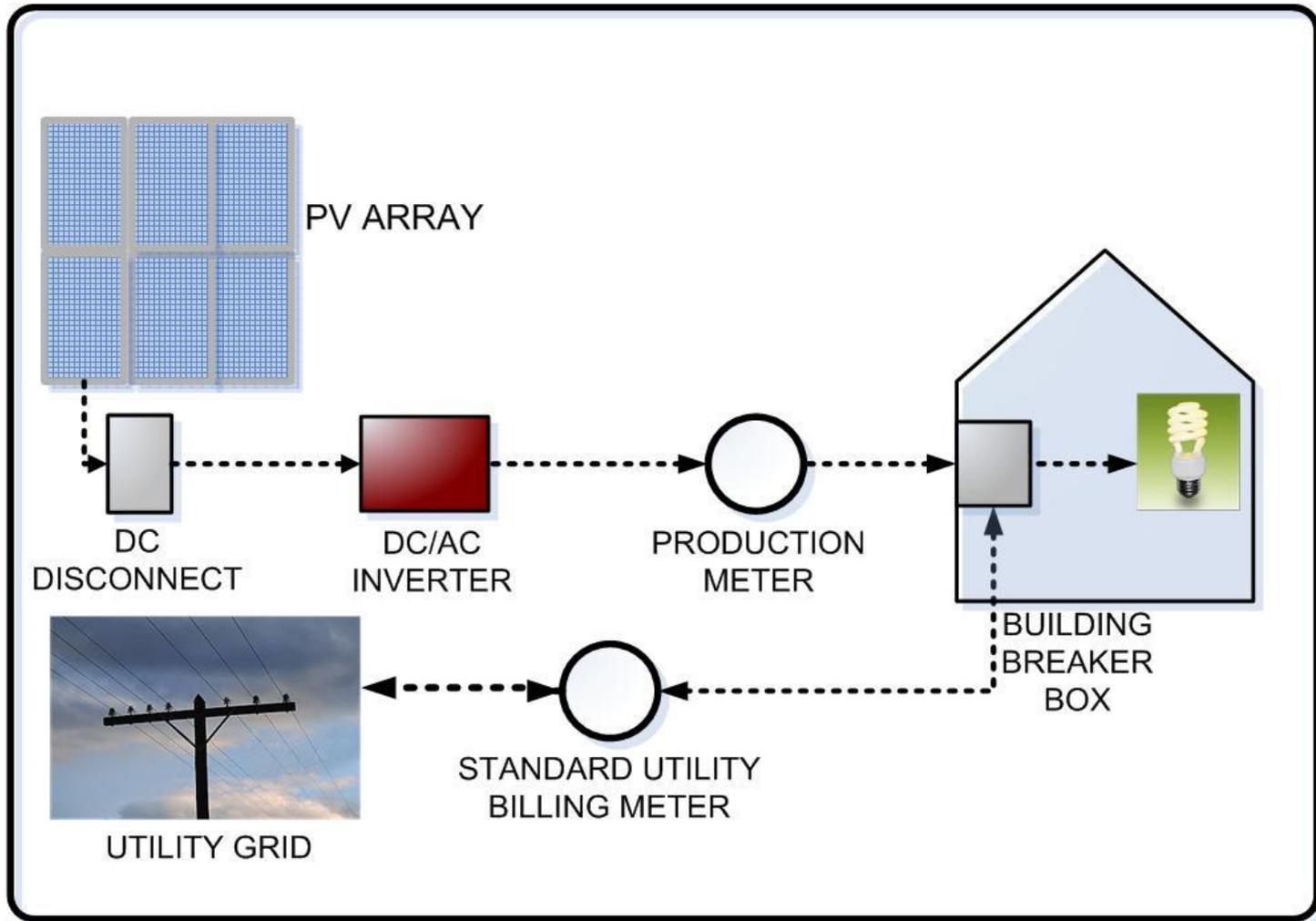


Inverter



Meters

Solar system diagram



Sizing

A kilowatt (kW) is an instantaneous measure of power

Like your speedometer

A kilowatt-hour (kWh) is an amount of energy

Like your odometer

Average Seattle home uses about 9,000 kWh/yr

1 kW of PV produces about 1,000 kWh/yr in Seattle

A 5 kW installation will provide more than ½ the electricity for an average Seattle home!

Net metering

“Bank” excess energy with City Light

Production directly offsets customer bill with bi-directional meter

Excess generation is credited toward the next month’s bill

Like “rollover minutes” for solar electricity!

Incentives

No sales tax on systems <10kW *Ends June 30, 2013!*

Federal Tax Credit = 30% of project cost *through 2016*

Washington Solar Production Incentive *through 2020*

\$0.15/kWh for out of state panels and inverters

\$0.54/kWh for Washington panels/inverters

Net Metering: City Light credits your account for energy produced

Ask your installer about loans, or check your credit union!

So, how much does it cost?

It depends!

Size of system

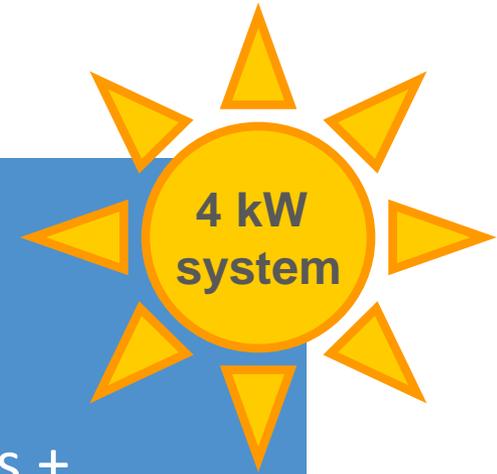
Brand of equipment

Complexity of roof



How the price breaks down

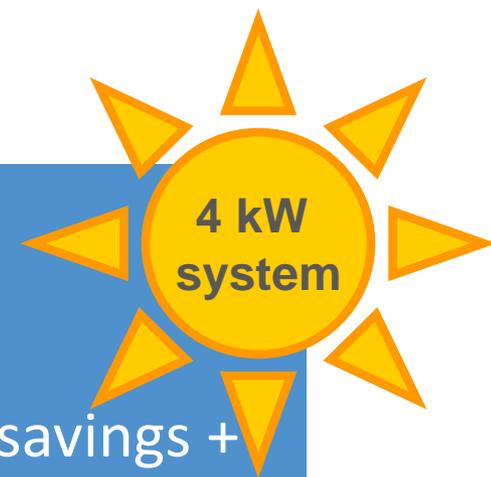
SAMPLE system manufactured out of state



| | |
|-------------------|--|
| \$20,000 | Installed Cost |
| <u>(\$6,000)</u> | Federal tax credit |
| <u>(\$920)</u> | First year benefit (energy savings + production incentive) |
| \$13,080 | Net cost to you after year one |
| ~ 20 years | Cash positive investment |

How the price breaks down

SAMPLE System manufactured in WA



| | |
|------------------|---|
| \$26,000 | Installed Cost |
| (\$7,800) | Federal tax credit |
| <u>(\$2,480)</u> | Average annual benefit (energy savings + production incentive until 2020) |
| \$15,720 | Net cost to you after year one |
| 7 years | Cash positive investment |

The bottom line

**DROPPING
COSTS**

+

**WA SOLAR
INCENTIVE**

+

**FEDERAL
TAX CREDIT**

=

**Best
Payback
Ever!**

Other Solar Options



***Solarize Group Buy
(some neighborhoods)***



Seattle Community Solar

For more information:

Linda Irvine, Northwest SEED: linda@nwseed.org

Seattle City Light Energy Advisors: (206) 684-3800

Seattle City Light website:

www.seattle.gov/light/Conserve/cgen/

Solarize Washington website:

www.solarizewa.org