

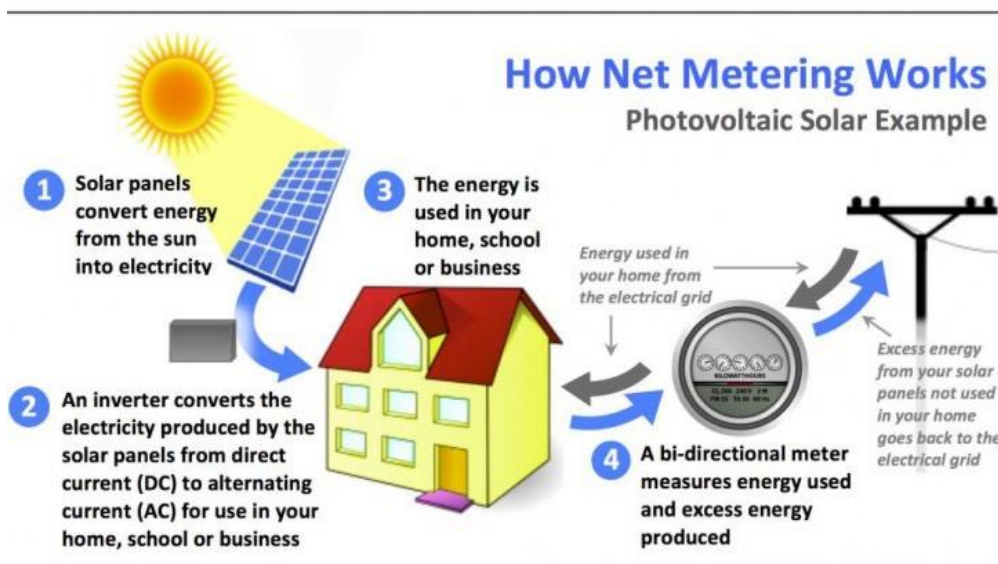
RESIDENTIAL SOLAR BASICS

Why Go Solar? Reduced electricity bills and systems pay for themselves (eventually), add clean energy to the grid as part of climate solutions, helps create green jobs, your kid told you to do the right thing, panels look cool on your roof, tax credits are yours for the taking, coal is a bummer, the time is right, and on and on...

Solar Today: < 1% of MT electricity. Rooftop solar potential: 28% of MT electricity needs! (NREL 2016)

What is Net Metering?

- On-bill \$ credit for excess energy produced from rooftop PV and connected and exported to grid
- System size cap: 50kW (NorthWestern Energy), 10kW (Missoula Electric Co-op)
- On-bill credit: retail rate (NWE: \$0.11/kWh, MEC: \$0.07/kWh)
- No aggregate net metering
- 12-month cycle to use excess credits

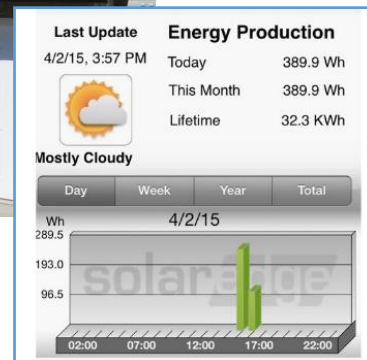
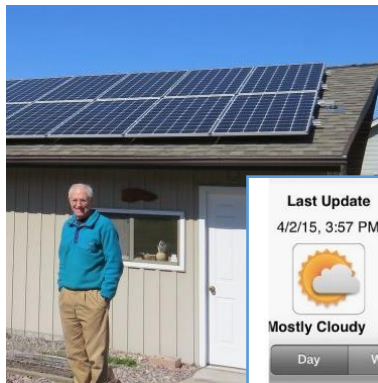


A typical residential system:

- One panel typical size: 65" by 39'
- E.g., 10-panel system: ~ 11' x 16'
- Average panel: 320 watts (typically 290 - 360 W)
- 10 panels X 320 watts = 3200 watts or 3.2 kW system

Simple process:

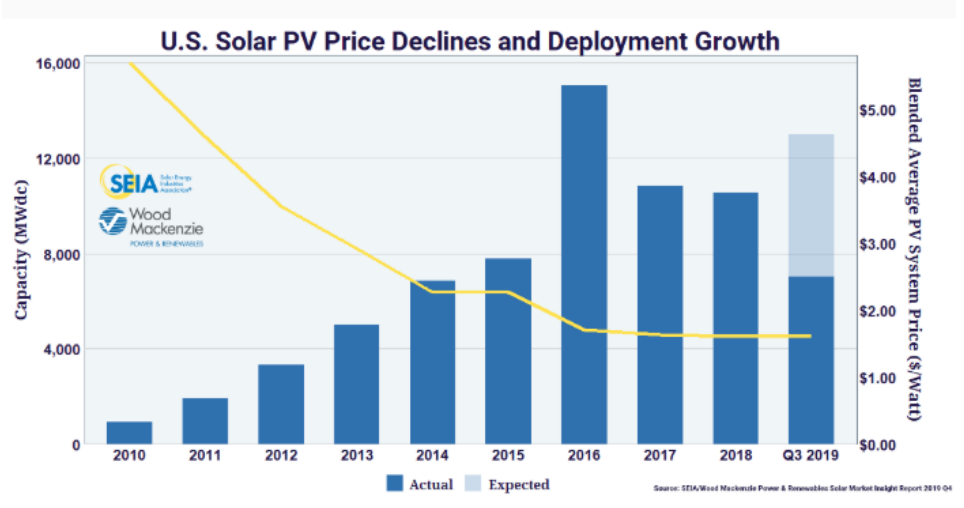
- Contact local installer(s)
- Get a free site assessment
- Review your energy usage
- Understand cost & financing options
- Sign contract
- Go solar!



SOLAR BY THE NUMBERS

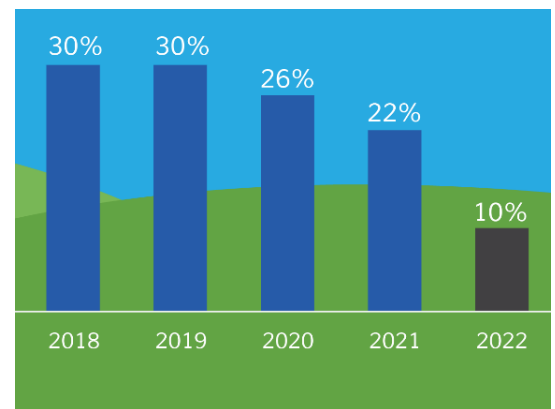
The Price of Solar

- It continues to go down (see yellow line) even with tariffs – prices have dropped 70% in the last decade & solar is cheaper than ever!
- Federal and state tax credits are available
- Low-interest financing is available from both the Montana Dept. of Environmental Quality (DEQ) and Clearwater Credit Union



Tax Credits

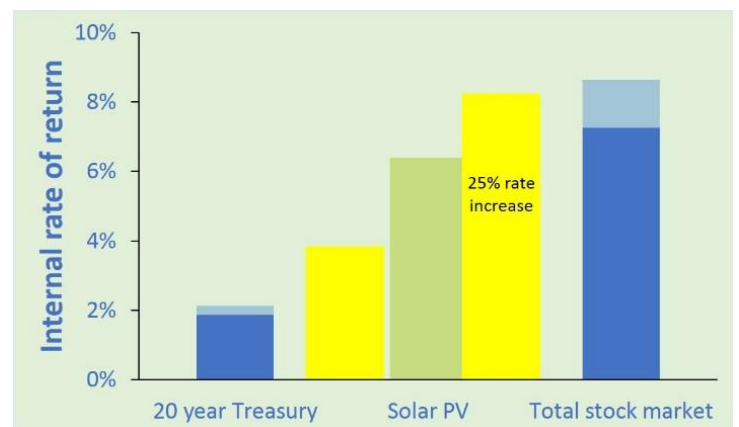
- Federal Income Tax Credit: "The ITC"
 - Credit to step down starting in 2020 (see right) – now is a good time to take advantage!
 - Worth up to 26% of total installed cost, no maximum
- Montana Alternative Energy Systems Credit
 - \$500 per taxpayer, up to \$1,000 per household
 - Solar PV, solar thermal, small wind, biomass, geothermal
 - Does not expire



Is Solar A Good Investment?

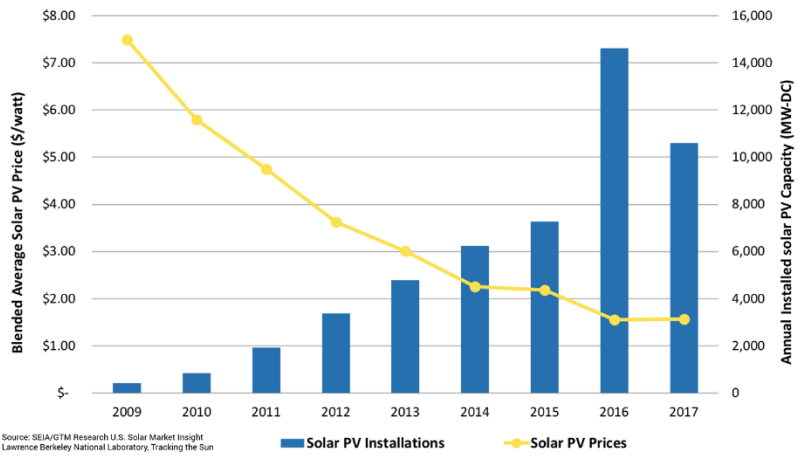
Example using a 5KW system in Missoula:

- Average monthly savings = \$56
- Payback: 13 years
- See Clearwater Credit Union's Investment Guide!





**Find this guide and links to partner resources:
missoulaclimate.org/solar-ease**



Source: SEIA/GTM Research U.S. Solar Market Insight
Lawrence Berkeley National Laboratory, Tracking the Sun