## Solar Power: Next steps, facts & figures:



- Check with your utility company
  - See if you can join a "solar garden" or "community solar;"
     → then no need to consider panels at home.
     This might also be possible for condos or apartments.
- If you're interested in solar AT your home:
  - Log onto your utility provider (e.g. Xcel Energy); check your total annual, and monthly, energy usage, in kilowatt-hours (kWh)
  - Examine your roof areas & surrounding trees for solar exposure; check out morning, noon & evening
  - Try a quick on-line estimate: https://www.solar-estimate.org/
- Nerdy facts:
  - Power is the RATE of energy use, in kilowatts, horsepower, or a combination of amps x volts
  - Energy is the total AMOUNT used over time, in kilowatt-hours.
  - For example: horsepower is the POWER of the engine in your car, and ENERGY is the amount of gasoline in your tank, or how many gallons of gasoline you might use on a given trip.
  - Typical solar panels, today, deliver 350-400 watts per panel, in full sun
- Do your OWN rough estimate:

• Example:	Your figures
<ul> <li>Annual usage = 12,000 kWh (from your utility website)</li> </ul>	<ul> <li>Annual usage = kWh</li> </ul>
<ul> <li>Initial target = 80%</li> <li>80% of 12,000 = 9,600 kWh</li> </ul>	<ul> <li>Initial target =%</li> <li>% of = kWh</li> </ul>
<ul> <li>Divide by 1,000 to get PV system size:</li> <li>9,600 / 1,000 = 9.6 kW power</li> </ul>	<ul> <li>Divide by 1,000 to get PV system size:</li> <li>kWhr / 1,000 = kW</li> </ul>
<ul> <li>Divide system size in watts by 350 or 400 to get # of panels: 9.6kW = 9,600 W</li> <li>9,600 / 350 = ~27 panels</li> </ul>	<ul> <li>Divide system size in watts by 350 or 400 to get # of panels:        kW = _,W         _,000 / = panels</li> </ul>