

# Important Points about Solar Equipment Installations

- 1) Solar panels or modules form Direct Current electricity in a roof- or ground-mounted array, ideally facing 180 deg. South (azimuth) with a 21 to 47 degree fixed or adjustable tilt, depending on the season (with some exceptions). The amount of space the array occupies and the amount of power sought influence the quality of panels used, depending on intended use - if solar is just for electric or to power electric heat pumps, hot water, and maybe a Tesla. The power of the system is important – small arrays may now produce more than large arrays. Higher performing panels may have shorter lives or not. Site owner should own for real property valuation.
- 2) A solar inverter converts this DC solar power into AC, or Alternating Current, power for immediate home consumption or banking to the grid. Batteries are not part of typical installations.
- 3) Net Metering: Excess energy generation is tracked through Net Metering, which meters the net of how much solar energy is produced versus how much energy was consumed on-site. What excess is produced on-site monthly gets to be drawn back off the grid on-site, such as with snow build-up on panels or cloud cover in winter months, within one-year at the same rate. This rate is shown on your CMP (or Emera) bill. The banked credits may be used until depleted or expired, and then future rates would apply if CMP (or Emera) electricity is needed.

Examples are readily found at Sundog Solar, Revision Energy, and other Maine solar equipment installers.