Tips on Installing a Small Wind Turbine

- If tree growth at the site is not influenced by the prevailing wind (at least slightly visible flagging), and the wind is not a frequent nuisance, then the energy potential does not justify the investment.

- At most locations, wind energy is less consistent than PV, and usually peaks at different times. Wind is best used in a hybrid system with PV.

- The generator must be placed higher than all obstructions within 500 feet in all directions, by at least 30 feet plus the blade radius.

- For a tower structure, budget 1 to 2 times the cost of the generator.

Tower height is crucial for two reasons: (1) Adding tower height is the cheapest way to gain greater and more consistent energy yield. (2) Turbulence is greatly reduced with height. Turbulence is the equivalent of rocks on a highway. Sudden shifts in wind direction cause vibrations and stresses that greatly reduce reliability as well as energy output.

NOTE: The AIR-X Wind Turbine can be mounted onto a building in some cases, because it is small and vibration-dampened. Consider this only if the building's roof clears surrounding obstacles by at least 15 feet, and gets high exposure to steady, not gusty, prevailing winds. In some cases, there can be an acceleration of prevailing wind over the rooftop that can add to the wind energy potential.