

HANNA:KEELAN ASSOCIATES, P.C.
COMMUNITY PLANNING AND RESEARCH

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Net Metering in Nebraska

The impacts of Solar and
Wind alternative energy
systems on Planning and
Zoning Documents

Appropriate Use?

- Is the Incorporated area of the Municipality an appropriate location? The Planning Jurisdiction?
- If so, should they only need a building permit to be installed, or...
- Should Public Hearings by Planning Commission and Governing Body be required for approval?



Potential Conditions for Approval

- Maximum Height
- Setback distance?
Equal to total height of the tower to tip of turbine blade, or 1.5 times the total height?
- Non-reflective surfaces.
- Flashing lights when required by the FAA.
- If Solar panels are located on the roof, they must comply with maximum heights of structure provisions.
- Non-reflective surfaces.
- Not permissible within required yard setbacks.

Recent Solar Applications



Perceptible Disturbances

- Any noise, vibration, shadow flickering or other disturbances, either by operation or lack of adequate maintenance.
- Any disturbance perceptible off-site may result in Special or Conditional Use Permit not being renewed.

“Green Buildings” or LEED Certified

“LEED” certification promotes quality building techniques by methods used to promote sustainability, which recognizes performance in five areas of human and environmental health:

- 1) Sustainable site development,
- 2) Water savings,
- 3) Energy efficiency,
- 4) Materials selection, and
- 5) Indoor environmental quality.

Recent Helix Applications...

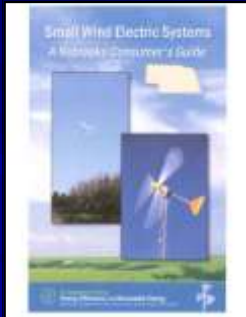


Could this be your neighborhood?



Excellent source of small wind energy systems information.

- http://www.windpowerinamerica.gov/pdfs/small_wind_ne.pdf



Desire for taller wind towers...

- Increasing the height of a 60' tower to 100' has a 10% increase in cost, but will produce 30% more power.
- One rule of thumb is that the tower height should be twice the height of adjacent buildings, trees, etc. within 300' of tower. Wind speeds can be 15 to 25 percent stronger and more constant.

Legislative Bill 997

- Introduced by Mello, District 5
- New or full update to an existing Comprehensive Plan shall include an Energy Element that assesses energy infrastructure and use by residential, commercial, and industrial sectors.
- The Plan shall evaluate utilization of renewable energy sources, and promote energy conservation measures that benefit the community.
