

Have an estimation of your wind power production  
Optimize or validate your wind turbine siting

# Small & community wind projects

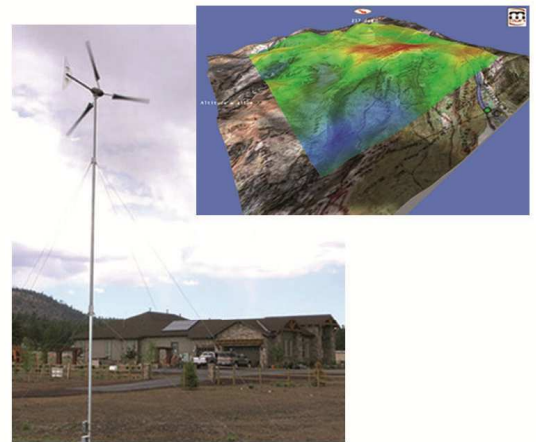
Meteodyn has developed advanced wind modeling tools to assess wind resource anywhere in North America. The use of high technology Computational Fluid Dynamics (CFD) models and high resolution topographical maps allows us to take into account all the obstacles effects on the wind. Critical information such as wind rose and annual energy production are accurately calculated at any height in all types of terrain. We can even compute buildings' effects on small wind turbines located in the built environment or on rooftops!

*Whether you are developing a small or community project, Meteodyn is your ideal partner for estimating the wind resource on your site.*

*Method validated for small scale (1 kW) and large turbines (1MW)*

## ▶ Wind resource assessment for wind projects in **rural areas**:

- Wind flow modeling in farmlands and open spaces
- Computation of any and all types of terrain
- Microscale analysis considering local roughness and surrounding vegetation
- Results from 10 ft (3m) up to 500 ft (150m) height



## ▶ Wind resource assessment for small wind projects in **urban areas**:



- Wind flow modeling around buildings
- Visualization of the flow vectors behind the obstacles
- Availability in the most complex architectural designs
- For any type of turbine (horizontal or vertical axis) and locations (rooftop or ground mounted turbines)

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## ▶ Consulting services

### ■ Proposal for Rural Area (without buildings)

#### Input data

- Latitude and longitude of a specific point
- Height (above the ground)

#### Prices

\$700 per point  
\$75 per additional point  
(different height or position - within 500m)

#### Deliverables

- Wind rose (30 year average) and Weibull frequency table
- Annual mean wind speed
- Mean turbulence intensity
- Annual energy production (if curve provided)

### ■ Proposal for Urban Area (with 1 or 2 buildings)

#### Input data

- Send CAD 3D or 2D files in .dwg, .stl, .dxf  
or 2D ground-plan with vertical extrusion
- Latitude and longitude
- Height (above the ground)

#### Prices

\$2,500 per point  
\$145 per additional point

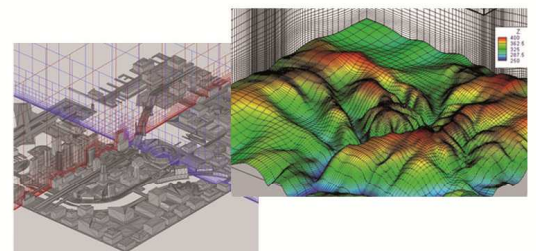
#### Deliverables

- Wind rose (30 year average) and Weibull frequency table
- Annual mean wind speed
- Mean turbulence intensity
- Wind production (if curve provided)

*For a proposal of a complex, built environment, please contact us.*

## ▶ CFD software

- **UrbaWind** small wind energy module: automatic wind simulation in urban areas
- **TopoWind**: automatic wind simulation in rural areas



**Free demo on our website**

**[www.meteodyn.com](http://www.meteodyn.com)**