

A.L. Huber, a Kansas City general contractor, is working in partnership with Burns & McDonnell and Kansas City Power & Light (KCP&L) to erect a first-of-its-kind vertical-axis wind turbine in the Greater Kansas City area. The wind turbine and other green efforts will be located and operated at the A.L. Huber corporate office building in Overland Park, Kan. The alternative-energy initiatives include a 90-foot vertical-axis turbine, a new technology roof-top wind turbine and photo-voltaic panels, which will be mounted directly to the building.

As leaders in the construction, engineering and technology fields, the team has come together to test new technologies as well as demonstrate alternative-energy technologies to the Kansas City community. The team will monitor the solar and wind energy output. A “demonstration” area will be open to the public and visitors will be educated on the different technologies being used.



#### **Owner/Developer**

A.L. Huber general contractor

#### **Partners**

Burns & McDonnell Engineering  
Kansas City Power & Light (KCP&L)

#### **Project Goals**

To educate the public about sustainable development and alternative energy alternatives, to test and improve these new “green” technologies, and to implement new sustainable technologies in the Kansas City metropolitan area.

#### **Energy education**

A public educational component at the A.L. Huber office will illustrate energy usage and savings using alternative energy sources. Wind turbine speed and data will be collected and used for educating the public on utilizing alternative energy.

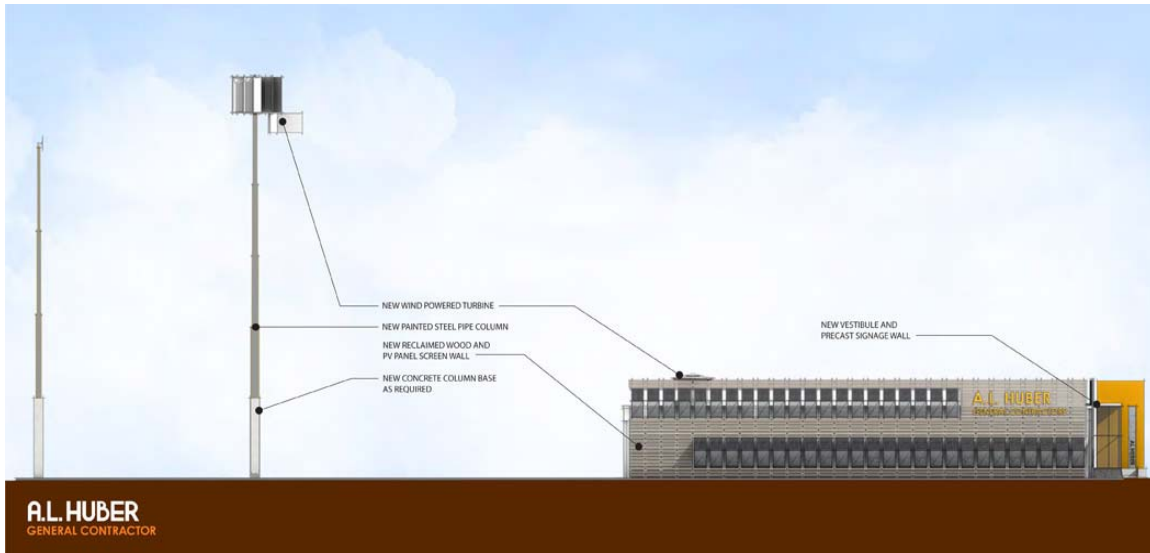
#### **Vertical-axis wind turbine**

90-foot, pole-mounted wind turbine and anemometer

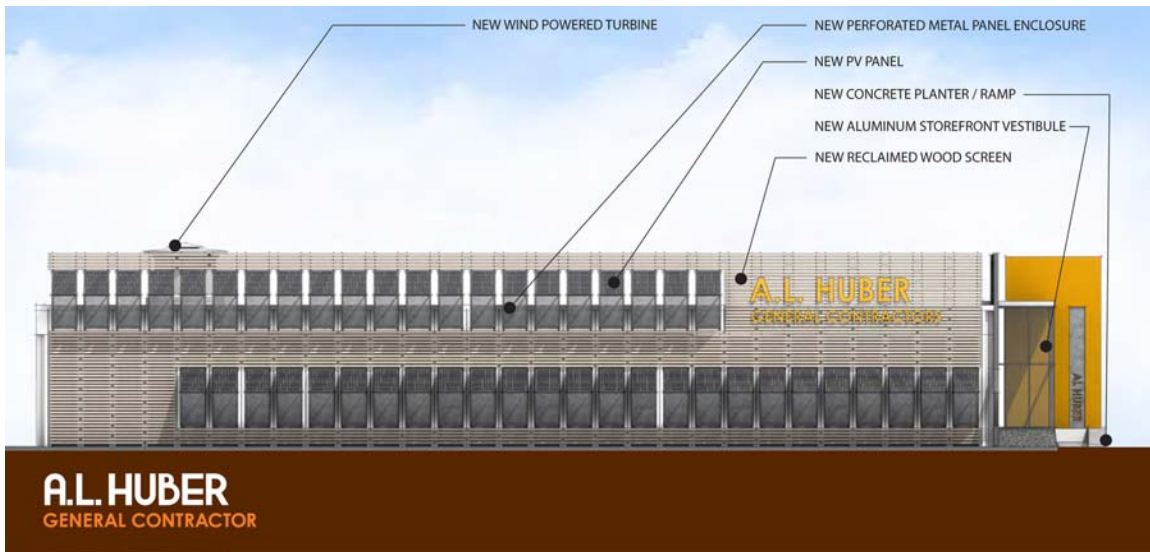
Diameter of turbine is approximately 15 feet

Estimate 5 kW power

This cutting-edge design is more efficient and generates power at lower wind speeds. The unique vertical-axis design provides a quieter turning than horizontal blades.



### Photo-voltaic panels



A.L. Huber will install two different types of photo-voltaic panels and will monitor each technology for optimum efficiency.

The “screen wall” of reclaimed wood on the south of the building screens the rooftop units, blocks direct sunlight and provides additional energy-efficiency savings.

### Greening the building



In addition to the alternative-wind energy solutions, the photo-voltaic panels and the shading on the South side, A.L. Huber will install a “green” wall on the East side of the building. This green wall will be part of the natural landscaping and will demonstrate green solutions.