Case study #6

Can you see the 2 Megawatts wind turbine?

Wind-Do

If you look closer, you will:

Our corner wind turbines can be perceived as architectural garment that will enhance the look of tall building. With their laths that reduce noise and protect birds from the apparatus, pedestrians will simply ignore them.

Quite but efficient! As the wind is concentrate on the faces of the building, the network of wind turbine produce more electricity that standard apparatus.

This 47 stairs building can harness a surface of wind two to three time larger than a giant 2 Mwatts tri-blade, depending on wind direction. With low wind, the apparatus produce more electricity that can produce the tri-blade, but with high wind, there is more turbulence and the corner wind turbine lost a part of its advantage. Over the year, the production is similar to the 2 Mwatts wind turbine, within 4 and 6 millions of KW/h.

The system is consider as a part of the building, all the mechanical part are build to last 50 years or more, and the structure by itself will stand as long as the building will. For this reason the system have been finance on the mortgage and the energy saving is part of the building operations.

Today, the owner of the building pay is electricity 0.15$ per KW/h., for an annual saving within 600 and 900,000$ per year. In this city, the market for this class of building is close to 20 times the net earning. The bank had accept an increase of the trade value of the building of 16 millions dollars. The project, lightly bellow 10 millions dollars, have then been finance without any needs of cash down from the owners. As the energy cost is expected to grow much faster than the inflation, the wind turbine system will enhance the increase of the value of the building every year.

This project was not been done in a country where carbon reduction can be exchange. In some place, the owners may had received credit for a saving within 3 to 6,000 tons of CO_2 every years, increasing both their revenues and the value of the building.

Fig.12