

# Green Zebra

Local Savings for Natural Living

## Green Zebra School Solar/Wind Power System Contest

Green Zebra is delighted to announce that it will award a functional and educational solar and wind power system with retail value of \$8,000 to the San Francisco school that sells the most 2007 Green Zebra guides. It is our intention that this incredible educational tool will help nurture the next generation of environmentally responsible citizens. The full package includes solar and wind power generators, a solar-powered weather station, metering system, and more. The system is donated and will be installed by Bay Solar Power Design ([www.baysolarpower.com](http://www.baysolarpower.com)). For complete specifications, see below.

Students can use data collected from the metering system to compare the amount of energy generated by solar versus wind power under various weather conditions. The



system generates enough modified sine wave power to run a PA system or a classroom A/V system, for example. The winning school may elect to receive a full-mounted hybrid system or a portable version of the PV module and inverter.

The winning school will also be invited to send teachers to attend an energy workshop sponsored by NEED (National Energy Education Development) and PG&E. These workshops provide the most up-to-date information on all aspects of energy, including the science of energy, sources of energy, consumption, electricity, efficiency, and environmental and economic impacts. Workshop participants receive the background to return to their classrooms with the tools and materials necessary to implement innovative hands-on energy units in their classrooms. Substitute reimbursement is also included. For more information about Need, visit [www.need.org](http://www.need.org).

### School Eligibility/Contest Rules

- Any school within San Francisco that has children enrolled in any grades from Kindergarten through 12th.
- Prior to January 15, 2007, any interested school must notify Green Zebra of its intention to enter the contest.
- All sales (including online sales) made through January 31<sup>st</sup>, 2007 will be counted to determine the winning school.
- Contest winner will be announced by March 1, 2007.
- If the winning school does not take delivery of or make arrangements to implement the system prior to December 31, 2007, the system will be given to the SFUSD Environmental Science Center at Fort Funston, where it can be used to educate children who live throughout the city.



Photos courtesy of Need ([www.need.org](http://www.need.org))

**For more info please contact Anne Vollen at [anne@thegreenzebra.org](mailto:anne@thegreenzebra.org) or 415.346.2361.**

## Solar/Wind Power System Specifications

- **PV Module**
  - UNI-SOLAR framed solar module
  - US Series (US-64)
  - 64 Watt Power Rating
  - Clear Anodized aluminum frame with steel backing for stiffness
  - Unbreakable (Glass-free vandal resistance)
  - Shadow and high heat tolerant
  - Weighs 20.2 lbs.
  - 53.8 " long x 29.2 " wide
  - 20 year warranty on power output
  - If mounted, placed on permanent, fixed position module racks that adjusted for optimum tilt, wind resistance, and orientation to sunlight
- **Output cable**
- **Module mounting structure**
- **AC and DC disconnect switches**
- **Xantrex Inverter** (modified sine wave)
  - 1500 Watt
  - X-power converter
  - V-12 Charge Controller (auxiliary power source)
  - Battery Box – 110 amp and deep cycle
  - Battery
- **Grounding equipment**
- **Metering system**
- **Wind Power System**
  - AIR-X 12 V Land Wind Generator
  - Peak output of 400 watts at 28 mph wind speed
  - Carbon reinforced blades
  - Suitable for locations where wind speed reaches up to 100mph
  - Unpainted aluminum housing weighs 17 pounds
  - 3 year warranty
  - Mounted on 4" pole 17-60 feet in height
- **Weather Station**
  - Solar-powered
  - Measures temperature, barometric pressure, wind speed, height above sea level
  - Has alarms and memory
  - Can be set up to report readings on a computer

