

# New Energy Education Center

*"Built by Students for Students"*



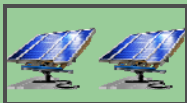
## Pacific Gas & Electric Grant Enables Construction of New Energy Education Center (EEC) for Tri-City Students

### Development Plan

The EEC will be built entirely by students enrolled in Mission Valley ROP's Construction Technology program. Students will gain knowledge and hands-on experience with the latest renewable energy technologies including Solar PV and Thermal, Wind Power generation and Energy Efficient Construction materials and strategies.

#### Phase 1: Solar Farm

Students will begin construction of a 20-25 panel Solar Farm generating 3,000 to 3,500 watts in early 2010. Installation configurations will include grid tie-in with and without battery backup.



#### Phase 2: Wind Turbine System

Design and installation of a Wind Turbine System, acting as a stand-alone electrical source.



#### Phase 3: Energy Education Center

A LEED Certified energy self-sufficient house, providing electricity needs, hot water, heating and cooling. Constructed entirely of recycled building materials and featuring energy efficient appliances, hands-on demonstrations of energy conservation, energy efficiency, and renewable materials, the EEC will be an attractive field trip site for area schools and staffed entirely by students acting as hosts.

Mission Valley ROP's Energy Education Center (EEC) is a planned training center for area students to learn about renewable energy and energy efficiency. The EEC is made possible by a grant from Pacific Gas & Electric, through their Solar Schools Program.

The EEC is a collaboration between industry, education and government, and is located at Mission Valley ROP in Fremont, CA. Construction of the Solar Farm begins in January 2010.

MVROP is seeking additional industry partners to turn this vision into reality.

We need industry participation to complete the EEC, which will be built entirely by students from Fremont, Newark and Union City.

Home for the EEC is MVROP's Construction Technology program under the leadership of Mr. Stan Hearne. A licensed contractor, experienced in solar installations, Mr. Hearne has been teaching construction for over 25 years. MVROP students have built many functioning buildings, including their own Construction Tech classroom and workshop.



Mr. Hearne teaches a comprehensive program that includes electrical, carpentry, plumbing, and solar installation. His students are qualified for entry level employment in several different areas of construction, and many go directly into employment after graduation.

Students will be trained in performing Energy Audits of existing buildings. Students will then be qualified to conduct energy audits at their home schools, and their family's residences, and make recommendations for improving energy conservation.

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### Development Plan (con't)



Completed EEC (2012)

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#### Multi-Year Media Campaign

MVROP is planning periodic media events and announcements surrounding the EEC, resulting in positive attention for corporate sponsors and partners.

What you can do

## How To Participate

## Contributing Partners



- Unitek College, Boots on the Roof Program
- Syed Ali, CEM, CSDP, BEP, Energy Management Consultant



*"The Energy Education Center will enable students to fulfill their ambition to participate in the Green Economy."*

*- Charles Brown  
Superintendent*

## EEC Development Phases



**Phase 1: Solar Farm**



**Phase 2: Wind Farm**



**Phase 3: Energy Efficient House**

## MVROP Prepares Students for Employment

- |                                     |  |
|-------------------------------------|--|
| • Solar Energy System Installer     | • Painter                              |
| • Solar and PV Installation: Roofer | • Acoustical Tile Installer            |
| • Residential Solar Sales Assistant | • Flooring Installer                   |
| • Wind Field Technician             | • Masonry, Concrete Installer          |
| • Wind Field Service Technician     | • Roofer                               |
| • Jr Renewable Energy Technician    | • Interior & Exterior Finish Carpentry |
| • Insulation Installer              |  |
| • Energy Auditor                    |  |
| • Carpenter                         |  |
| • Electrician                       |  |
| • Plumber                           |  |
| • Drywall Installer                 |  |
| • Drywall Taper & Texturer          |  |

### And for Further Education:

- Apprenticeship Training Programs
- Solar Installation Certificate Pgms
- A.S. Construction Management
- B.S. Construction Management



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