



Renewable Energy

FACTS ...

- The renewable energy industry is one of the fastest growing industries in the United States and the World
- Alternative energy technologies are the key component in this program. The technologies include wind, photovoltaic, geothermal, biofuel, hydrogen, and hydroelectric.
- There is a large variety of career opportunities available in the renewable energy industry.

Abilities, Skills, and Knowledge that are important to be successful in this field!

ABILITIES

- Work in a team setting without supervision
- Read and understand work related materials
- Hand-eye coordination with small tools
- Lifting heavy objects (75+ lbs)

SKILLS

- Troubleshooting skills are essential
- Attention to details & pride in your work

KNOWLEDGE

- Basic math skills including, addition, subtraction, multiplication and division of whole numbers and fractions
- Understand and follow complex directions
- Problem solving
- Basic computer skills

Fact Sheet

Career Opportunities Include:

- Maintenance and installation careers in solar, wind, geothermal, bio-fuels, and many green industries.
- Manufacturing jobs in the trades listed above.
- Design and engineering jobs in the green industries.

Graduates of this program have been employed by:

- Renewable Energy is a new program in the 2011-12 school year. There is a great potential for this trade in Idaho, the US, and world wide.



Employment Outlook & Salary

Source: Department of Labor

Salary Ranges

<u>OCCUPATION</u>	<u>Years of Education Needed</u>	<u>Openings per year</u>	<u>Entry Salary</u>	<u>ID Avg. Salary</u>	<u>NW Avg. Salary</u>	<u>U.S. Avg. Salary</u>
Wind/Solar Technician Level I	2	150	\$19,500	\$28,000	\$32,000	\$28,000
Wind/Solar Technician III & IV	4	150	\$25,000	\$30,000	\$35,000	\$38,250
System Designer	4 +	40	\$38,500	\$72,500	\$88,000	\$83,000

**Dennis
Center
Course
Offerings**

Renewal Energy Overview:

PROGRAM/YEARS	CREDITS <i>(2hr. block)</i>	WEEKS
Renewable Energy Intro- duction	2	36
Electronics AC/DC	2	36
Wind Energy Introduction	2	36

Program Description:

- Students will learn:
 - How the following technologies produce renewable energy, : wind, photovoltaic, biofuel, hydrogen, geothermal, and hydro electric.
 - Develop a working knowledge of energy terminology.
 - Assess the energy needs for home and businesses.
 - Design an energy system to supply energy needs for home or business.
 - Explain what LEED certification is and what is required to achieve the various levels.
 - Alternating current and its behavior in circuits.
 - Direct current and its behavior in circuits.
 - The dynamics behind wind capture by a turbine
 - Develop a working knowledge of wind energy terminology and turbine components.

Job Shadowing Opportunities:

- None at the time of printing this fact sheet.

Program Costs:

Students are required to purchase the following at an estimated cost of \$25.00

- Coveralls \$20.00
- Safety Glasses \$5.00

Program Selection Criteria:

Students are selected using the following criteria:

- Renewable Energy Introduction Open to: 10, 11, 12 graders
- Attendance
- Disciplinary actions
- Cumulative GPA

Post-Secondary Education:

- 2 year certification from College of Southern Idaho, Idaho State University and many other colleges nationally.

Transportation:

- Bus transportation is provided to and from the home high school to off-campus sites. Students who are enrolled in 7/8 period and completing an internship must provide their own transportation.

Contact Us:

For more information about the programs offered by the Dennis Center, please contact us at:

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