

Student Resources for Green Energy Careers

Why should I consider a green energy career?

- **Job Opportunities Galore!** Countries across the world have committed to reducing their investment in coal and focus on alternative energy sources. This means careers in green energy will see steady growth. In 2020, there were 12 million clean energy jobs globally!
- **More Demand, Better Salaries.** As companies focus on sustainability and the demand for workers increases, so will the salaries. According to the Bureau of Labor Statistics, many green jobs pay higher wages than the average job in the U.S.
- **Innovation is the Name of the Game.** If you love solving problems and being creative, a career in green technology is a great option! You will be at the forefront of technological advancements and finding innovative ways to make energy more sustainable.
- **Making a Difference.** You spend most of your day working, so why not make it something that is worth your time? Green energy jobs can provide a sense of purpose AND lead to potential career growth. The sky is the limit!



How does a utility company support renewable energy?

- **Wind and Solar Projects.** Utilities participate in the integration of renewable energy into the electrical grid. Through power purchase agreements, grid integration, energy storage, and partnering with independent power producers, the role of utility companies is essential in the transition to renewable energy.

What skills do I need for a job in green energy?

- **Technical Knowledge.** No matter which job you choose, you will need to understand the industry, technologies, and most likely, environmental science.
- **Communication and Interpersonal Skills.** Effective communication skills are central to your success in any career that you pursue. The ability to actively listen, write reports efficiently and clearly, and to convey your knowledge to your coworkers, clients, and customers are all essential skills for success. The best part: these are the skills you have already practiced at school!
- **Problem-Solving Skills.** Green energy jobs often have complex challenges that require you to critically evaluate information, identify risks, and develop an innovative solution. This may seem like a daunting task, but if you're curious, like to think outside of the box, and not afraid to try new ideas, this may be more fun than work for you!
Remember, you problem solve every day; from how to get to class on time, what to do when your phone dies, and how to manage social conflicts with friends and family. You will apply those same skills just at a higher level!



- **Soft Skills.** How do you adapt to new situations? Are you resilient when you fail at a task? Are you aware how cultural beliefs impact decision making? Are you motivated to learn and willing to work hard to improve your knowledge and skills? These are all soft skills that many employers look for when hiring new employees. And like other skills, you can build soft skills, and they can always be improved.

Take a look below for specific examples:

Specialized Knowledge Areas		
Environmental, Social, and Governance (ESG) Frameworks		
Specialized Knowledge Area	Key Concepts	Relevant Skills/Tools
Renewable Energy	Solar, Wind, Hydroelectric, Geothermal	Energy Modeling Software
Circular Economy	Cradle-to-Cradle, Resource Recovery	Material Flow Analysis
Sustainable Supply Chain	Responsible Sourcing, Ethical Trade	Supply Chain Mapping Tools
ESG Frameworks	UN SDGs, GRI, SASB	ESG Reporting Software
Green Building	LEED, BREEAM, Net Zero Energy	Building Energy Simulation
Biodiversity Conservation	Ecosystem Services, Habitat Restoration	Biodiversity Assessment Tools
Sustainable Finance	Green Bonds, ESG Investing	Sustainability Accounting
Climate Adaptation	Resilience Planning, Vulnerability Assessments	Climate Scenario Analysis
Sustainable Agriculture	Regenerative Farming, Precision Agriculture	Crop Modeling Software
Corporate Social Responsibility	Stakeholder Engagement, Social Impact	Social Impact Measurement Tools

Curated by: Sustainabilityjobs.co

What degree do I need for a job in green energy?

- **So Many Options.** The answer to this question is, 'it depends'. You have SO many options that it really depends on what you're interested in the most. Do you prefer the business aspect of green energy? Then, you could consider business schools and study project management. If you prefer math and science, you have multiple engineering degree options. Perhaps you like government or law which means public policy might be a better fit. Whether you choose to complete a degree or a certification, both paths can lead to successful and exciting careers. Remember, a green energy career is about WAY more than only science and math.

Here's a brief list of degrees to get you started:

- Engineering (environmental, electrical, mechanical, solar, biomass, etc)
- Political Science
- Business
- IT
- Communications
- Marketing
- Sustainability
- Education
- Marine Biology



Where can I explore green energy careers that interest me?

1. While you're in high school, start by asking your teachers and guidance counselor. They can help you find resources, internships, and colleges.
2. You can also go to a site like www.onetonline.org and fill out the interest profiler to explore a variety of occupations.
3. Think about companies near you that are specific to you're interested field of study and visit their websites to see what jobs are currently available. Don't forget to check out your local utility companies too; you might be surprised by what you find for job opportunities!
4. Visit energy.maryland.gov and read through the Maryland Green Registry to see which businesses and organizations are participating energy conservation and check out their sites for career and internship opportunities.



How much money can I make with a green career?

- Salaries can vary depending upon your degree level, experience, and location. You can use job search sites like www.indeed.com to search specific jobs and many will list the salary ranges. This [link](#) breaks down the salaries by industries and jobs. You might be surprised by some of the salary ranges, even if you have minimal experience!



Best of luck in your future green career endeavors! 