

Capstone: My Future in Clean Energy

Opening Activity

What is your most significant takeaway from this course?

The Big Question

What role can I play in climate solutions?

My Climate Goals

When you complete this lesson, you'll be able to

1. Reflect on climate-critical careers and climate solutions discussed in the course
2. Evaluate different career paths based on your skills, interests, and values
3. Connect personal strengths with potential career paths in clean energy
4. Articulate your role in climate solutions and how you envision contributing to a sustainable future.

Notes:

Self-Evaluation

Instructions

Use the prompts below to reflect on your skills, interests, values, and preferences regarding careers in clean energy.

What am I good at? What skills or strengths do I have that would be valuable in a clean energy career?

What excites me? What do I want to learn more about in clean energy?

What kind of setting do I work best in? Can I see myself working in clean energy?

What motivates me in a career? Does that align with a future in clean energy?

Analyzing Job Descriptions

Instructions

In your group, analyze your assigned job description. Use the information below to identify the skills, interests, and values that align with your assigned role. Be prepared to share your findings with the class.

Job Descriptions

Solar Project Manager

Role Summary

As a solar project manager, you will lead and coordinate the planning, installation, and completion of solar energy projects for residential, commercial, and industrial clients. You'll oversee project timelines, budgets, and resources, ensuring the successful implementation of solar systems while meeting quality and safety standards. This role requires strong leadership skills, effective communication with clients and team members, and the ability to solve problems quickly and efficiently. Solar project managers play a vital role in accelerating the transition to renewable energy by ensuring projects are completed on time, within budget, and to customer satisfaction. This position offers opportunities to work on diverse projects and advance into higher-level management roles in the clean energy industry.

Qualifications:

- Experience in project management, construction, or renewable energy projects
- Strong organizational and leadership skills
- Knowledge of solar energy systems, permitting processes, and safety regulations
- Bachelor's degree in engineering, business, or a related field; project management certification preferred

Pay Range: \$60,000–\$90,000 annually, depending on experience and certifications

Notes:

Energy Auditor

Role Summary

As an energy auditor, you will conduct detailed assessments of homes or businesses to identify areas of energy waste and recommend solutions to improve efficiency. You'll evaluate insulation, heating and cooling systems, and other building components using tools like thermal imaging cameras and blower doors. After your analysis, you will prepare reports, explain findings to clients, and suggest upgrades that save energy and lower costs. This role combines technical expertise with excellent communication skills, as you'll work directly with customers to help them understand the benefits of energy efficiency. Energy auditors contribute to reducing energy consumption and greenhouse gas emissions while helping clients save money and increase comfort.

Qualifications:

- Basic understanding of building systems (HVAC, insulation, etc.)
- Strong analytical and communication skills
- Experience with energy auditing tools and software preferred
- High school diploma required; certification (e.g., BPI, HERS) preferred

Pay Range: \$20–\$35 per hour, based on experience and certifications

Notes:

Electric Vehicle Technician

Role Summary

As an electric vehicle (EV) technician, you will specialize in maintaining and repairing EVs, ensuring they operate safely and efficiently. Your responsibilities will include diagnosing mechanical and electrical issues, performing routine maintenance, and replacing or upgrading components such as batteries, motors, and charging systems. This role requires staying up-to-date with the latest advancements in EV technology and adhering to industry safety standards. You'll play a vital part in supporting the growing adoption of EVs by ensuring drivers have reliable, efficient, and sustainable transportation options. Working as an EV technician offers opportunities to work with cutting-edge technology and contribute to the clean energy transition.

Qualifications:

- Knowledge of electrical systems and automotive repair practices
- Strong diagnostic and problem-solving skills
- Certification in automotive technology or EV repair is preferred
- High school diploma required; post-secondary technical training is a plus

Pay Range: \$22–\$40 per hour, depending on experience and certifications

Notes:

Discussion Prompts

What are the key tasks and responsibilities of this role?

What skills and expertise are required?

What type of work environment does this role typically work in?

How does this role contribute to the clean energy transition?

Notes:

Closing 3-2-1 Reflection

List three clean energy roles that interest you and why:

List two skills you want to develop further to prepare for a clean energy career:

What is one step you can take to learn more about clean energy careers as you prepare for your future?

Lesson Key Points

- Your strengths, interests, and motivations can help you find a fulfilling and climate-critical role in the clean energy sector.
- Roles of all types, with all levels of training and expertise, contribute to creating a sustainable future.
- Progress toward any career is made through individual steps.

Additional key points:

Closing Activity

What is one word that describes how you feel about your future in climate solutions?