

Massachusetts Climate Careers: Powering the Future Climate Hero Spotlight: Wind Turbine Technicians



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Opening Activity



Why would each of these items be necessary for keeping wind turbine technicians safe?



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Today's Agenda

- The Big Question and My Climate Goals
- Intro to Wind Turbine Technician Roles
- Climate Watch and Discussion
- Turbine Troubleshoot Challenge
- Key Takeaways and Closing





How are wind turbine technicians essential to the offshore wind industry and our energy goals in Massachusetts?







When you finish this lesson, you'll be able to:

- 1. Understand wind turbine technician roles and contributions to clean energy.
- 2. Recognize the link between climate goals and the need for wind turbine technicians.
- 3. Explore the skills, training, and pathways for wind turbine technician careers.
- 4. Connect personal interests to possible roles in wind turbine technology.





Climate Watch: Video





Climate Watch Discussion

- What stood out to you or surprised you about the work of a wind technician?
- Wind technicians describe their role as mainly proactive and preventative. Why are those operations critical?
- 3. What skills or expertise seem important to have as a wind technician?

Wind Turbine Technicians

- Climb and inspect turbine towers.
- Replace mechanical, hydraulic, and electrical components.
- Test and analyze turbine performance.
- Train new technicians in safety and operations.





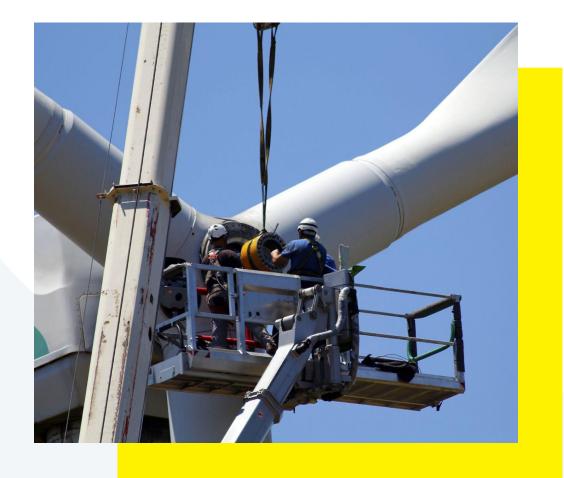


Related Roles

- **1. Engineers** design and test wind turbine components.
- **2. Electricians** connect wind energy systems to the grid.
- **3. Assemblers** manufacture and assemble wind turbine parts.







Wind Energy Goals

- Generate 5,600 megawatts* from offshore wind by 2027.
- Install and maintain at least 120 offshore wind turbines over the next 25–30 years.

* 5,600 megawatts of wind energy will power more than 5 million houses!



Skills and Knowledge

- Physical fitness and endurance
- Mechanical, electrical, and hydraulic systems knowledge
- Attention to safety and detail
- Willingness to work at heights







Training Pathways

- Apprenticeships
- Vocational programs





Oh no! One of our turbines isn't working correctly!

As a group, you must:

- 1. Identify the issue.
- 2. List the safety considerations.
- 3. Identify the necessary skills and expertise to fix the problem.
- 4. Present your plan to the class.





Activity Debrief

- What was most challenging about identifying the cause of the problem?
- How does the speed of problemsolving contribute to energy reliability?
- What role does safety play in a wind turbine technician's day-today work?





Key Points

- Wind turbine technicians are essential to expanding wind energy in Massachusetts.
- They need a combination of technical skills and physical endurance.
- Demand for technicians is growing due to the state's clean energy goals.



Closing Activity

Before You Go

- What is one aspect of this role that matches your skills or interests?
- 2. How does this role contribute to Massachusetts's status as a climate leader?

