



NEW
YORK
STATE

NYSERDA

Energize Your Future

New York State's Clean
Energy Career Opportunities



Clean energy jobs are the future of our workforce in New York State. Visit the **New York State Energy Research and Development Authority (NYSERDA)** Career Pathways website to learn about various clean energy sectors and the jobs that exist now or will in the future. Find out about the skills needed and training available.

New Yorkers with all kinds of skills and interests are starting clean energy careers across the State. You may find yourself building renewable energy systems, designing homes and buildings that are safer and more efficient, or helping New Yorkers drive the coolest new electric vehicles. There are even ways for you to get free training to learn new skills that will help you get started. In some cases, you can actually earn money while you learn.

No matter who you are, a career in clean energy can help you energize your future.

An Inclusive Career

For the transition from fossil fuels to clean energy to work, we need to make sure that everyone gets a seat at the table. New York State works hard to meet the needs of all New Yorkers. Specialized services, programs, and specially trained staff are available to assist job seekers through the New York State Department of Labor.

To learn more about these great jobs that are good for the planet too, visit NYSERDA's Career Pathways website at:

nyserdera.ny.gov/energize-your-future

or contact us:

wfinfo@nyserdera.ny.gov

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**Scan the QR code
to start energizing
your future.**



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Clean Heating and Cooling

Currently, most of the heating and cooling equipment we use is outdated and inefficient. Many systems even burn dirty fossil fuels like oil, propane, or natural gas, which is bad for air quality and the environment.

That's where clean heating and cooling comes in.

Clean heating and cooling uses cold-climate heat pump technology to help people become less reliant on fossil fuels, feel more comfortable in their homes, and save money on their energy bills. With a career in clean heating and cooling, you can help your friends and neighbors replace their inefficient heating and cooling equipment with one highly efficient, all-electric system that both heats and cools. Clean heating and cooling is a field that's growing fast in New York State, and you can be paid to get trained, learn new skills, and start your career.

Scan the QR code to explore resources and learn more about careers in clean heating and cooling.



Key Career Opportunities in Clean Heating and Cooling

HVAC Installer

If you enjoy working with tools and like hands-on work, then a Heating, Ventilation, and Air Conditioning (HVAC) Installer is a great career choice for you. HVAC Installers help New Yorkers replace outdated and inefficient heating and air conditioning equipment with cleaner options. As an HVAC Installer, you will directly improve your customers' quality of life by helping them feel more comfortable, reduce their carbon footprint, and even save money on their energy bills.

Typical Tasks

- Install electrical and mechanical equipment at both residential and commercial buildings
- Perform routine preventative maintenance and repairs on HVAC equipment
- Inspect and test HVAC equipment to diagnose any problems

Typical Skills

- Strong mechanical skills
- Critical thinking and problem-solving skills
- Ability to safely work with hand tools and power tools
- Ability to work in small, confined spaces



Wage Range:
\$39,000–\$99,000*

Median Hourly Wage:
\$31.10/hr*

Geothermal Driller

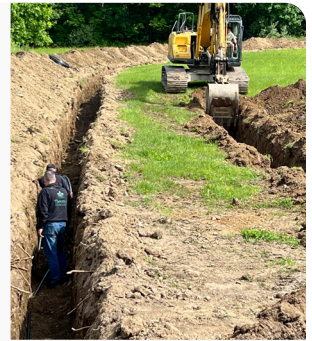
Did you know that a few feet below the earth's surface, the temperature of the ground remains the same no matter how hot or cold the air outside is? Because of this, we can actually connect buildings to the earth's natural temperature controls for clean heating and cooling. Pretty neat! If you are excited by the idea of operating heavy machinery, this is the job for you. As a Geothermal Driller, you will use specialized machines to help New Yorkers use one of the most effective and efficient types of clean heating and cooling.

Typical Tasks

- Assess job sites to plan drilling and excavating projects
- Use machine controls to operate heavy construction equipment
- Monitor the worksite and machinery for safety protocols
- Drive large trucks and construction vehicles

Typical Skills

- Ability to safely work with large machinery, hand tools, and power tools
- Strong attention to detail
- Ability to read and understand technical plans and detailed instructions, potentially including blueprints and schematics
- Critical thinking and problem-solving skills



Wage Range:
\$45,000–\$85,000*

Median Hourly Wage:
\$31.37/hr*

Geothermal Technician

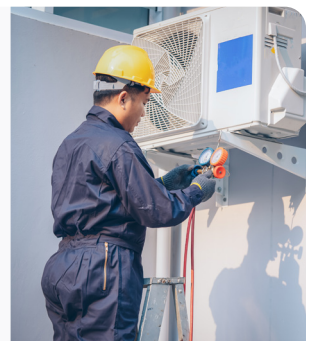
Once geothermal drilling is complete, a Geothermal Technician connects a system of pipes from the ground to the building itself. This important job is what allows New Yorkers to move the earth's geothermal energy from underground to inside their homes—otherwise you just have a hole in the ground! If you enjoy working outside and consider yourself “mechanically inclined,” then a career as a Geothermal Technician is a great way to earn a solid living while helping people use one of the most effective and efficient types of clean heating and cooling.

Typical Tasks

- Install electrical and mechanical equipment at both residential and commercial buildings
- Perform routine preventative maintenance and repairs on geothermal HVAC equipment
- Inspect and test HVAC equipment to diagnose any problems

Typical Skills

- Strong mechanical skills
- Ability to safely work with hand tools and power tools
- Ability to work in small, confined spaces
- Strong communication skills
- Ability to safely lift up to 50 pounds



Wage Range:
\$36,000–\$80,000*

Median Hourly Wage:
\$24.08/hr*



Electric Vehicles and Charging

You've probably been seeing a lot of Electric Vehicles (EVs) on the road recently. That's because EVs are significantly more energy efficient and require fewer repairs, and charging an EV with electricity is often cheaper than filling up a tank of gas. Not only that, EVs do not have any tailpipe emissions, so they can help us all breathe cleaner air.

These benefits make EVs an increasingly popular choice for drivers—and an industry that will be in demand for job seekers for many years to come.

Scan the QR code to explore resources and learn more about careers in electric vehicles and charging.



Key Career Opportunities in Electric Vehicles and Charging

EV Mechanic

Just like a mechanic is trained to fix a variety of vehicles, an EV Mechanic is trained to repair the specialized technologies that are used in EVs. If you are interested in cars, trucks, or motorcycles and are excited about the new electric models that are currently hitting the streets, becoming an auto mechanic with a specialization in EVs is a great way to start a career while helping people reduce vehicle emissions and clean up the air we breathe.

Typical Tasks

- Perform routine and scheduled maintenance on EVs
- Test drive vehicles and use specialized testing equipment to ensure safe vehicle operation
- Inspect EVs for potential damage and troubleshoot for fixes
- Review work orders and follow detailed instructions
- Document your work and communicate with customers and/or supervisors

Typical Skills

- Strong mechanical skills
- Critical thinking and problem-solving skills
- Ability to safely work with hand tools and power tools
- Customer service and teamwork skills
- Ability to safely lift up to 50 pounds
- A clean driving record



Wage Range:
\$31,000–\$77,000*

**Median
Hourly Wage:**
\$22.94/hr*

EV Charging Station Installer

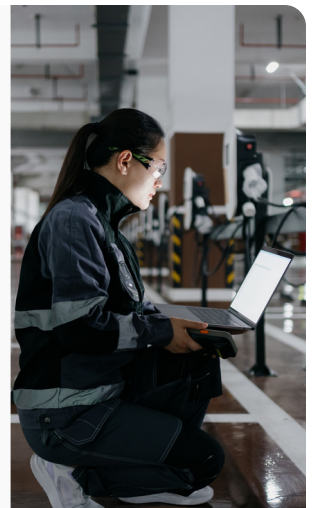
Electricians are supercharging the EV boom by building, operating, and maintaining new EV charging stations. Installing more charging stations is necessary to help EV drivers recharge their cars while they are on the road. You can help drivers accelerate the switch to EVs by becoming an EV Charging Station Installer. Most Charging Station Installers are electricians who have specialized their trade skills for this in-demand service.

Typical Tasks

- Connect electrical wiring for initial installations
- Read blueprints, schematics, and detailed instructions
- Inspect charging stations to identify any electrical problems that may be occurring
- Repair and perform routine maintenance on EV charging stations
- Collect data, document work, and make sure projects follow electrical codes

Typical Skills

- Ability to safely work with electrical equipment, hand tools, and power tools
- Comfort with working outdoors and performing physical work tasks for extended periods
- Communication and customer service skills
- Critical thinking and problem-solving skills
- Ability to work as part of a team
- Ability to safely lift up to 50 pounds



Wage Range:
\$43,000–\$131,000*

**Median
Hourly Wage:**
\$36.25/hr*



Energy Assessments

Energy assessments are the first step to solving energy inefficiency challenges, while helping people save money and be safer. That's because energy assessments find inefficiencies or safety concerns in homes and buildings and give recommendations for how to fix the problem.

Did you know you can get free professional training to learn how to do energy assessments and start a rewarding, well-paying career without a college degree? Sometimes you can even earn while you learn!

Scan the QR code to explore resources and learn more about careers in energy assessments.



Key Career Opportunities in Energy Assessments

Energy Efficiency Technician

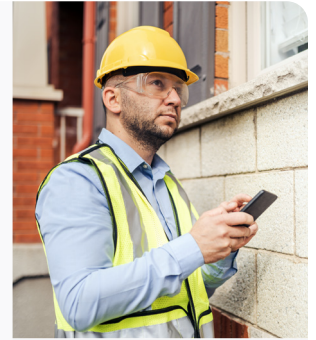
Energy Efficiency Technicians help New Yorkers use less energy, save money, and live safer, healthier lives. That's because Energy Efficiency Technicians actually visit homes and buildings to conduct energy assessments and recommend energy-efficient improvements. An energy assessment is often recommended as the first step when solving energy problems, so Energy Efficiency Technicians play an important part in helping people choose clean energy.

Typical Tasks

- Inspect buildings and equipment or appliances (in person) to collect technical data
- Document inspection results as reports and profiles, noting key areas to repair or replace
- Educate customers on the benefits of energy improvements—for example, lowering energy costs, feeling more comfortable, and breathing healthier indoor air

Typical Skills

- Basic understanding of energy-efficient building design and solutions (can typically be trained “on the job”)
- Excellent customer service and communication skills
- Strong organizational skills and ability to multitask
- Computer proficiency



Wage Range:
\$32,000–\$63,000*

**Median
Hourly Wage:**
\$23.84/hr*

Energy Efficiency Program Assistant

Energy efficiency programs are often started to help more people afford to pay for energy-saving improvements. The programs usually work by giving people extra money to help them pay for their energy efficiency projects. Energy Efficiency Program Assistants are responsible for the important administrative tasks that allow energy efficiency programs to run smoothly. If you have strong organizational skills and love working with people, this is a great job for you.

Typical Tasks

- Answer people's questions about energy efficiency programs
- Review program applications
- Assist with program promotion and marketing initiatives
- Help compile data and program reports

Typical Skills

- A high level of computer skills
- Attention to detail and organizational skills
- Excellent communication and customer service skills
- Critical thinking and problem-solving skills
- Ability to work as part of a team



Wage Range:
\$30,000–\$62,000*

**Median
Hourly Wage:**
\$19.00/hr*

Building Energy Analyst

A Building Energy Analyst's job is similar to that of an Energy Efficiency Technician, except Building Energy Analysts generally have more of a science or engineering background. Building Energy Analysts can provide energy-saving advice for more technical projects such as larger buildings and apartment complexes. This rewarding career is great for job seekers who are interested in greening our spaces.

Typical Tasks

- Analyze the energy use of buildings and their systems, equipment, or appliances
- Document building, energy, and customer information in the form of reports and profiles
- Perform heat load calculations for buildings
- Educate customers on the benefits of energy improvements—for example, lowering energy costs, feeling more comfortable, and breathing healthier indoor air

Typical Skills

- Understanding of energy-efficient building systems and solutions
- Excellent customer service and communication skills
- Strong organizational skills and ability to multitask
- Computer proficiency



Wage Range:
\$46,000–\$115,000*

**Median
Hourly Wage:**
\$31.00/hr*



Offshore and Land-based Wind

Today, wind energy is more important than ever. Modern wind turbines are a key part of helping us get more energy from renewable sources. Wind blows stronger, and more consistently, over the ocean than it does over land, making it an incredibly valuable renewable energy resource. That's because each and every spin of the turbine's blades creates clean electricity capable of powering homes and buildings—and jobs to make all of those wind turbines are available right here in New York State, helping energize your future too.

From assembly to maintenance of wind turbines, New York State's growing wind industry is a major career opportunity.

Scan the QR code to explore resources and learn more about careers in offshore and land-based wind.



Key Career Opportunities in Wind

Wind Turbine Technician

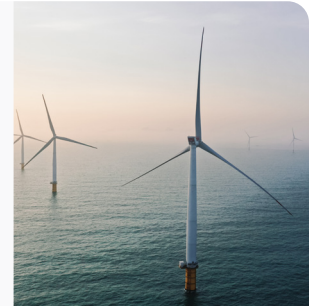
A Wind Turbine Technician is a great position for New Yorkers who are interested in fixing machinery and working outside. Wind Turbine Technicians—sometimes called field service technicians or wind farm support specialists—typically perform technical tasks with their hands to keep wind turbines functioning properly. If you’ve had previous work experience performing mechanical repairs, this could be a great role to help you get your foot in the door of New York State’s clean energy economy. Most wind energy companies do not require their turbine technicians to have a college degree.

Typical Tasks

- Climb turbine structures and remain at tall heights for extended periods of time
- Inspect and repair turbine structures
- Inspect, repair, and perform routine maintenance on wind turbines
- Inspect and collect information to identify potential technical problems

Typical Skills

- Ability to safely work with machine parts, hand tools and power tools
- Comfort with heights, working in confined spaces, and performing physical work tasks for extended periods
- Ability to document and prepare detailed reports



Wage Range:
\$53,000–\$96,000*

Median Hourly Wage:
\$31.30/hr*

Wind Electrical Engineer

A Wind Electrical Engineer is responsible for understanding how to design and operate all of the various electrical components that are needed to make wind turbines work. Becoming an electrical engineer requires an interest in math and computers, as well as a four-year college degree. Once you become a certified electrical engineer, you can then focus your expertise on helping New Yorkers harness clean energy from the wind.

Typical Tasks

- Work with clients and managers to understand the goals and needs for their wind project
- Design and plan the electrical specifications for safe wind turbine functionality
- Offer technical support to installation teams and other coworkers
- Provide detailed information and instructions to explain your engineering decisions

Typical Skills

- Strong math or engineering background
- Strong attention to detail
- Computer skills, including applications like email, word processing, customer relationship management (CRM) software, and computer-aided design (CAD)
- Critical thinking and problem-solving skills



Wage Range:
\$62,000–\$160,000*

Median Hourly Wage:
\$49.29/hr*

Wind Welder

Trained Wind Welders are highly sought after in New York State’s growing wind industry. Wind Welders use specialized tools to “weld” or join together the various metal components that are used to build wind turbines. If you enjoy working with your hands on intricate projects, welding could be a great opportunity to get your foot in the door of New York State’s clean energy economy. Most wind energy companies do not require their welders to have a college degree.

Typical Tasks

- Use specialized tools and equipment to work with metal parts and materials
- Follow technical instructions, sketches, and specifications
- Inspect and test equipment to diagnose any problems
- Climb towers and remain at tall heights for extended periods of time
- Communicate information with coworkers, especially around safety and project timelines

Typical Skills

- Ability to safely work with hand tools and power tools
- Comfort with heights, working in confined spaces, and performing physical work tasks for extended periods
- Critical thinking and problem-solving skills
- Ability to work independently for long periods
- Ability to safely lift up to 50 pounds



Wage Range:
\$36,000–\$77,000*

Median Hourly Wage:
\$31.30/hr*



Solar

Did you know that there is enough solar energy in 1.5 hours of sunlight hitting the earth's surface to power the whole world's electricity for an entire year?

What about that you can be paid to get trained, learn new skills, and start your career working with this powerful source of clean energy?

Solar helps people and businesses save money on their electric bills while creating less air pollution from burning fossil fuels like oil and gas. That makes solar an increasingly popular choice for New Yorkers. It also makes a career in solar a really smart path for job seekers who want to set themselves up for a rewarding, stable, and successful future—and even if you don't know much about solar energy now, that doesn't mean you can't learn!

Scan the QR code to explore resources and learn more about careers in solar.



Key Career Opportunities in Solar

Solar Installer

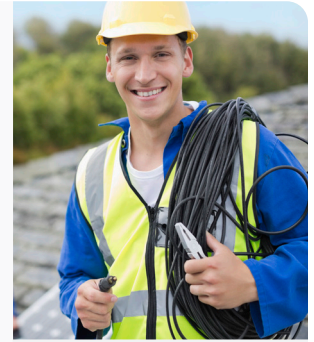
A Solar Installer is an entry-level position that is great for New Yorkers who love to work outside. Solar Installers typically work on a team to install solar panels on rooftops and other structures, so if you have an interest in construction, this could be a great opportunity to start your career in clean energy. Some solar companies are willing to provide on-the-job training to workers with little or no experience doing solar installations.

Typical Tasks

- Climb ladders and remain on rooftops for extended periods of time
- Install electrical and mechanical equipment at both residential and commercial buildings
- Perform routine preventative maintenance and repairs on solar equipment
- Inspect and test solar equipment to diagnose any problems

Typical Skills

- Strong mechanical skills
- Critical thinking and problem-solving skills
- Ability to safely work with hand tools and power tools
- Ability to safely lift up to 50 pounds
- Ability to climb ladders and work at heights



Wage Range:

\$39,000 - \$59,000*

Median Hourly Wage:

\$21.46/hr*

Solar Designer

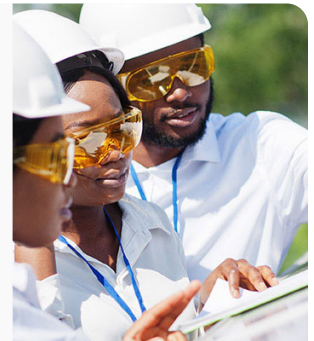
A Solar Designer is responsible for understanding how to use solar panels to generate electricity. That means, when a solar project is developed, it is the job of the Solar Designer to plan exactly how it should be designed and built. Becoming a Solar Designer typically requires a college degree. Once you become a solar designer, you will use your expertise to help New Yorkers harness the power of the sun.

Typical Tasks

- Work with customers to understand their goals and needs for their solar project
- Perform calculations to figure out the correct size and best possible layout for the solar panels
- Use CAD software to create technical drawings and schematics for your customers' solar project and to diagnose any problems

Typical Skills

- Strong math or engineering background
- Computer skills, including applications like email, word processing, CRM software, and CAD
- Ability to work as part of a team
- Critical thinking and problem-solving skills



Wage Range:

\$63,000–\$163,000*

Median Hourly Wage:

\$50.31/hr*

Solar Sales Representative

Most solar projects start with a conversation between the customer and a Solar Sales Representative. When you join a solar sales team, you will work directly with New Yorkers to build relationships and understand their clean energy goals. If you feel passionate about helping New York State get more energy from the sun, a career in solar sales can be a great way to help New Yorkers switch to clean energy. Many solar companies have entry-level sales positions to get started.

Typical Tasks

- Complete a solar site assessment using computer software
- Create reports and project proposals for customers to review
- Present and explain solar energy home improvement opportunities to customers
- Educate customers on benefits of solar—e.g., lowering energy costs, making homes more resilient, and lowering our carbon footprint

Typical Skills

- Basic understanding of how solar works (can typically be trained “on the job”)
- Excellent customer and communication skills
- Strong organizational skills and ability to multitask
- Computer proficiency



Wage Range:

\$52,000–\$182,000*

Median Hourly Wage:

\$53.92/hr*



Weatherization

It's common for homes and buildings to have temperature and comfort problems. It might be a drafty window, bad air quality, or any number of issues. Weatherization uses techniques like air sealing and insulation to fix those issues. It also helps people save energy and money because it works to keep the warm air in during the winter and keep the cool air in during the summer. It's sort of like how a thermos keeps your drink warm for longer than a paper cup does.

New York State has a goal of 2 million climate-friendly homes by 2030, making weatherization an in-demand service with plenty of rewarding jobs available.

Scan the QR code to explore resources and learn more about careers in weatherization.



Key Career Opportunities in Weatherization

Energy Efficiency Sales Representative

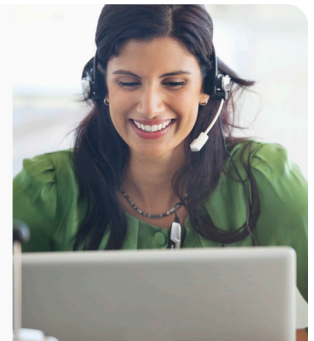
Energy Efficiency Sales Representatives get to know their customers and help them save energy, making this a great job for those who enjoy talking with others and providing excellent customer service. Energy Efficiency Sales Representatives often work in an office and conduct remote energy assessments to help people solve their comfort and energy problems. If you have strong organizational skills and love working with people, this is a great job for you.

Typical Tasks

- Use computer software to conduct preliminary energy use screenings
- Document building, energy, and customer information in the form of reports and profiles
- Recommend energy-saving opportunities to customers based on their needs
- Educate customers on the benefits of energy improvements—for example, lowering energy costs, feeling more comfortable, and breathing healthier indoor air

Typical Skills

- Basic understanding of energy-efficient building design and solutions (can typically be trained on the job)
- Excellent customer service and communication skills
- Strong organizational skills and ability to multitask
- Computer proficiency



Wage Range:
\$40,000–\$103,000*

Median Hourly Wage:
\$34.38/hr*

Insulation and Air Sealing Technician

The main job of an Insulation and Air Sealing Technician is to physically install products like insulation and provide weatherization services like air sealing. That usually means learning how to use building science techniques to make homes and buildings as comfortable and energy efficient as possible. This is a great job for people who don't mind doing manual labor and enjoy working alone or in small teams.

Typical Tasks

- Measure, cut, and install various types of insulating materials
- Wrap air ducts and pipes with specialized insulating material
- Apply caulk and install weatherstripping around windows and doors to seal a building's air leaks
- Repair holes in walls by applying spackling, compounding, or other materials
- Prepare job sites by unloading materials and cleaning up when the job is done

Typical Skills

- Ability to safely work with building materials, hand tools, and power tools
- Strong attention to detail
- Basic math and measurement skills, often fitting materials in small spaces
- Critical thinking and problem-solving skills
- Ability to work as part of a team
- Ability to safely lift up to 50 pounds



Wage Range:
\$37,000–\$97,000*

Median Hourly Wage:
\$29.35/hr*

Building Maintenance Worker

Building Maintenance Workers help buildings run as efficiently as possible. A Building Maintenance Worker's role may vary based on the building, but they are generally responsible for minor repairs, routine maintenance, and helping out when new equipment upgrades are needed. This is a great job for people who don't mind doing manual labor and love having a lot of variety in their work.

Typical Tasks

- Perform routine preventative maintenance on HVAC equipment, such as changing air filters
- Communicate with building occupants and facility staff team members of all levels, especially in the event of an equipment outage
- Help with inventory of building materials and supplies

Typical Skills

- Strong mechanical skills, such as the ability to take apart equipment and fix it
- Critical thinking and problem-solving skills
- Ability to safely work with hand tools and power tools
- Ability to work in small, confined spaces



Wage Range:
\$32,000–\$79,000*

Median Hourly Wage:
\$23.53/hr*



About the New York State Energy Research and Development Authority (NYSERDA)

NYSERDA is helping New Yorkers transition to cleaner energy options and reduce our statewide use of fossil fuels. Simply put, we cannot reach these critical clean energy goals without the trained professionals to translate them into action.

NYSERDA has dedicated funding to support clean energy workforce development and training, including additional support and benefits for New York State's disadvantaged communities.

Our mission: Advance clean energy innovation and investments to combat climate change, improving the health, resiliency, and prosperity of New Yorkers and delivering benefits equitably to all.

