4 Energy Management Careers

March 17, 2025



Effectively managing energy resources propels progress on many fronts. The World Bank notes that the availability of energy paves the way for investment, innovation, employment, and economic growth. And the ongoing expansion in the use of renewable energy sources has the potential to mitigate the effects of climate change, reduce volatility in energy prices, and decrease the overall cost of energy.

Working in energy management can be a great career choice for individuals who want to become leaders in a growing field. Whether they prefer to focus on traditional or renewable sources of energy, professionals who decide to pursue an energy management career have a wide range of roles to select from. Individuals who are considering enrolling in a Master of Management in Energy degree program should explore some of the job options available for a career in energy management.

What Is a Master’s in the Management of Energy?

People who earn a master’s in the management of energy gain critical business and technical expertise that can position them well for leadership positions in the energy industry. The programs for this degree provide students with practical expertise and real-world skills they can put to use throughout their career.

Students receive a thorough introduction to the energy industry, and they get to develop their skills in areas such as financial modeling and quantitative analysis for the energy industry. They learn about fundamental topics in energy management, such as data analysis and energy trading systems and processes. Students also study subjects such as energy modeling, investment banking related to energy, and financial risk management in the energy industry.

Additionally, master’s in the management of energy degree programs offer students the opportunity to tailor their degree program to specialize in a certain topic such as:

- Analytics
- Banking and finance
- Electric power
- Energy trading and risk management
- Entrepreneurship
- Renewable and sustainable energy

Master of Management in Energy graduates are prepared to pursue a career in energy management at any of a variety of types of organizations such as:

- Banks
- Consulting firms
- Financial services firms
- Grid management organizations
- Regulatory agencies
- Renewable energy firms
- Trading organizations
- Utility companies

Master’s in the Management of Energy Requirements

The Master of Management in Energy degree program that Tulane University’s Freeman School of Business offers requires students to complete 36 credit hours. Depending on their course load, students can complete their degree in two to three semesters.

Prerequisite Courses

Students who want to enroll in the Freeman School of Business’s Master of Management in Energy degree program need to complete a prerequisite course in intermediate accounting as well as a prerequisite course in energy economics, markets, and policy. If students have not completed the required prerequisite courses, they can take those courses in the summer semester before they begin their graduate study.

Required Courses

The Freeman School of Business’s Master of Management in Energy degree curriculum includes required courses in subjects such as:

- Energy data analysis
- Energy fundamentals and trading
- Energy and environmental economics
- Energy risk management
- Energy industry projects

Students also take a required course in advanced career development and management, which helps them begin or advance their energy management career by providing them with expertise in areas such as job search strategies and interviewing

Elective Courses

The elective courses in Tulane’s Master of Management in Energy degree program give students the opportunity to take classes in their specific areas of interest. For

example, students who want to gain accounting and financial expertise can take elective courses in subjects such as:

- Accounting analytics
- Energy investment banking
- Financial risk management
- Venture capital and private equity

Students with a desire to learn more about analytics can take elective courses in subjects such as:

- Advanced spreadsheet modeling
- Algorithmic trading and quantitative strategies
- Econometrics and forecasting
- Modeling and analytics
- SQL database fundamentals and business intelligence

If students are interested in renewable energy and climate change, they can take elective courses in topics such as:

- Climate change and financial markets
- Electric vehicles and the supply chain
- Renewable and electric power markets
- Renewable energy project development and finance

Elective courses also are available in subjects such as:

- Energy modeling
- Energy regulation
- Energy trading
- Innovation and technology commercialization
- Management of technology and innovation
- New venture planning

4 Careers in Energy Management

Master’s in energy management graduates are well prepared for several types of careers in energy management. Four examples are described below.

1. Energy Manager

Becoming an energy manager is a great choice for someone who has a graduate degree in energy management. Energy managers oversee all aspects of an organization’s use of energy. This can include being responsible for optimizing the organization’s energy to reduce waste, maximizing its use of natural sources of energy such as sunlight, introducing renewable sources of energy into its infrastructure, and planning for its future energy needs.

Specific examples of an energy manager’s duties include:

- Identifying all the ways in which an organization uses energy
- Implementing technology to reduce energy use
- Developing organizational policies and procedures regarding energy use
- Training staff regarding energy use and conservation
- Forming relationships with energy vendors and distributors

Energy managers also can be responsible for:

- Conducting strategic planning regarding energy use
- Crafting goals for energy usage
- Developing solutions to problems involving the organization’s use of energy
- Performing cost analyses and performance assessments related to energy use
- Ensuring compliance with energy-related regulations

Energy managers work in a variety of types of environments, including manufacturing firms, educational institutions, municipal agencies, large commercial buildings, and other types of organizations that have large physical plants.

In addition to needing technical expertise in managing energy, successful energy managers benefit from having skills in areas such as organization, communication, project management, and problem-solving.

Energy managers can enhance their credentials by earning a certification such as:

- Certified energy manager (CEM) certification from the Association of Energy Engineers

- Business energy professional (BEP) certification from the Association of Energy Engineers
- Energy management professional (EMP) certification from the Energy Management Association

Energy Manager Salary

Energy managers had a median annual salary of about $96,100 as of December 2024, according to the compensation website Payscale. Those in the highest 10 percent of the salary range earned up to about $134,000, while those in the lowest 10 percent of the salary range earned salaries as low as about $62,000.

The employment outlook for energy managers is bright. When the U.S. Department of Energy surveyed employers in 2023, 43 percent reported it was very difficult to find qualified professionals in energy efficiency, and 40 percent reported it was somewhat difficult. Employers also estimated there would be 8 percent growth in jobs related to energy efficiency in 2024.

2. Energy Auditor

Working as an energy auditor is another strong choice for an individual seeking a career in energy management. Energy auditors concentrate on energy conservation, reducing energy use, and decreasing carbon emissions. Energy auditors analyze energy flows and identify ways to make buildings more energy efficient. They work in residential, commercial, and industrial buildings, and they offer advice that can enable homeowners and business owners to reduce their energy costs.

Specific job responsibilities of an energy auditor can include:

- Conducting inspections and walk-throughs of buildings
- Implementing tests using thermal imaging, blower doors, and modeling software
- Calculating energy conservation estimates
- Identifying health and safety concerns related to energy use
- Collecting and analyzing data on energy use from multiple sources
- Performing cost-benefit analyses on options for achieving greater energy efficiency

- Selecting the types of energy-saving solutions from which a building could benefit

Additionally, energy auditors can carry out tasks such as:

- Monitoring a building’s consumption of energy
- Promoting the implementation of devices to save energy and the use of alternative sources of energy
- Evaluating construction methods, electrical systems, and wiring
- Determining the feasibility of measures that could save energy
- Writing reports detailing the results of energy audits and recommendations for reducing energy costs
- Educating consumers regarding energy efficiency
- Overseeing the installation of equipment designed to save energy

Work environments vary greatly for energy auditors, depending on their employer. For example, they work in residential homes, commercial buildings, factories, manufacturing facilities, and agricultural facilities.

In addition to needing technical skills, energy auditors benefit from being skilled in areas such as communication, data analysis, and attention to detail.

Earning a certification can expand energy auditors’ credentials. For instance, they can earn:

- Certified energy auditor (CEA) certification from the Association of Energy Engineers
- Carbon auditing professional (CAP) certification from the Association of Energy Engineers
- Total building performance (TBP) certification from the Building Performance Institute Inc.

Energy Auditor Salary

As of December 2024, Payscale reported that the median annual salary for energy auditors was approximately $48,600. Energy auditors in the top 10 percent of the salary range earned up to about $62,000, while those in the bottom 10 percent earned salaries as low as about $34,000.

The U.S. Department of Labor includes energy auditors within the category of construction and building inspectors. Although the U.S. Bureau of Labor Statistics (BLS) projects no net growth in jobs in that category from 2023 to 2033, it estimates there will be approximately 15,000 job openings for construction and building inspectors each year during that period due to retirements and individuals' changing jobs or leaving the profession.

3. Sustainability Manager

Sustainability managers promote sustainability throughout an organization's operations in areas that range from internal functions to supply chains. Sustainability managers focus on creating and implementing strategies across the organization that are environmentally friendly. They also can be responsible for forming strong relationships with the communities in which the organization operates.

Examples of the responsibilities of a sustainability manager include:

- Ensuring that an organization purchases raw materials from sustainable sources
- Monitoring whether the organization consistently uses eco-friendly materials
- Advocating for the organization to use recycled materials and lower its use of energy and water
- Implementing paperless systems
- Promoting the use of green technologies

Sustainability managers also can perform duties such as:

- Creating recycling programs
- Encouraging employees to follow processes that promote sustainability
- Evaluating the organization's existing sustainability practices and making recommendations to improve them

Sustainability managers work in environments that include private companies, government agencies, healthcare organizations, and manufacturing facilities.

In addition to needing expertise in sustainability techniques, sustainability managers also must have skills in areas such as leadership, communication, analytical thinking, teamwork, and organization.

Earning a certifications can enable sustainability managers to add to their credentials. For example, they can earn:

- Sustainability excellence associate (SEA) certification from Green Business Certification Inc.
- Sustainability excellence professional (SEP) certification from Green Business Certification Inc.
- Climate change professional (CC-P) certification from the Association of Climate Change Officers

Sustainability Manager Salary

As of December 2024, Payscale reported that the median annual salary for sustainability managers was about $92,800. Sustainability managers in the top 10 percent of the salary range earned up to about $136,000, and those in the bottom 10 percent earned salaries as low as about $62,000.

The employment outlook for positions in sustainability is bright. In 2024, LinkedIn included sustainability analysts and environment health safety managers on its list of the 25 fastest growing roles in the United States. In addition, the BLS projects 7 percent growth in environmental specialist positions from 2023 to 2033.

4. Environmental Consultant

Environmental consultants advise their clients on how their clients' actions affect the environment and recommend specific initiatives that their clients can implement to reduce adverse effects on the environment. For example, environmental consultants can identify ways for clients to reduce emissions and improve air quality.

Specific responsibilities of an environmental consultant can include:

- Recommending the implementation of automated systems that track the locations of hazardous materials
- Providing employee training regarding hazardous waste
- Investigating complaints related to pollutants
- Inspecting workspaces to analyze environmental factors that affect working conditions
- Creating written reports based on inspections

Environmental consultants also can perform duties such as:

- Sampling hazardous waste for banned substances
- Assisting clients in responding to environmental incidents
- Recommending strategies to ensure compliance with environmental regulations
- Providing coordination with regulatory agencies regarding hazardous materials

The work settings for environmental consultants include construction sites, manufacturing plants, and energy facilities.

In addition to needing environmental expertise, environmental consultants benefit from being skilled in areas such as communication, project management, attention to detail, problem-solving, and negotiation.

Earning a certification can help environmental consultants boost their credentials. For example, they can earn:

- Certified environmental professional (CEP) certification from the National Association of Environmental Professionals
- Certified hazardous materials manager (CHMM) certification from the Institute of Hazardous Materials Management
- Registered environmental manager (REM) certification from the National Registry of Environmental Professionals

Environmental Consultant Salary

Payscale reported that, as of December 2024, the median annual salary for environmental consultants was roughly $65,700. Environmental consultants in the top 10 percent of the salary range earned up to about $103,000, and those in the bottom 10 percent of the salary range earned salaries as low as about $47,000.

As noted above, the BLS has projected 7 percent growth in environmental specialist positions from 2023 to 2033. It also projected 11 percent job growth for management analysts and consultants during that same period.

Why Choose Tulane’s A.B. Freeman School of Business for Your Master of Management in Energy?

The Master of Management in Energy degree program at Tulane’s Freeman School of Business provides students with the knowledge and skills that employers are seeking.

Students pursuing a career in energy management who earn the degree gain real-world expertise that can help them ascend to leadership positions.

The unique features of our degree program highlight its advantages. For example, our Master of Management in Energy degree program:

- Covers a wide range of energy sources. Our degree program offers opportunities to gain expertise in both traditional and renewable forms of energy.
- Offers students fellowships. We consider all students who apply to our program for fellowships that can reduce the cost associated with completing a graduate degree.
- Features an industry-driven curriculum. We develop our curriculum with input from employers, so students can be assured that what they learn will be applicable as they pursue their energy management career.
- Enables students to specialize. Students can pursue a specialization in a key area, such as analytics, banking and finance, electric power, energy trading and risk management, entrepreneurship, or renewable and sustainable energy.
- Offers two timeline options for completion. Students can earn their degree on a schedule that takes two semesters and enables them to graduate in May. If students need to take a lighter course load, they can earn their degree in three semesters and graduate in December. Students who have not completed the prerequisite courses can take those courses in the summer term preceding their first fall semester.

In addition, our Master of Management in Energy degree program:

- Provides students with the opportunity to work on energy projects. Students get to work on real-world projects and conduct hands-on exercises that enhance their understanding of energy management.
- Delivers experiential learning. Students have the opportunity to visit sites such as refineries, power plants, and solar fields to enhance their knowledge of the energy industry.

- Encompasses career services. Career consultants work with our students to connect them with potential employers both in the New Orleans area and in other locations.
- Has a strong career track record. Ninety-four percent of the students who completed our Master of Management in Energy program in 2023 secured employment within six months of graduation.

Earning a relevant advanced degree can place individuals on the path to a fulfilling energy management career. Equipped with the skills and expertise that a graduate degree in energy management offers, people can rise to leadership positions in an expanding field.

If you are interested in pursuing a graduate education in energy management, explore the Master of Management in Energy degree program that the Freeman School of Business at Tulane University offers to learn how it can help you achieve your career goals. Providing students with the comprehensive knowledge and competencies that employers demand, the program can establish the foundation for a meaningful career.

Start working on advancing your career in energy management today.

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