# Environmental Protection & Waste Reduction Ladder



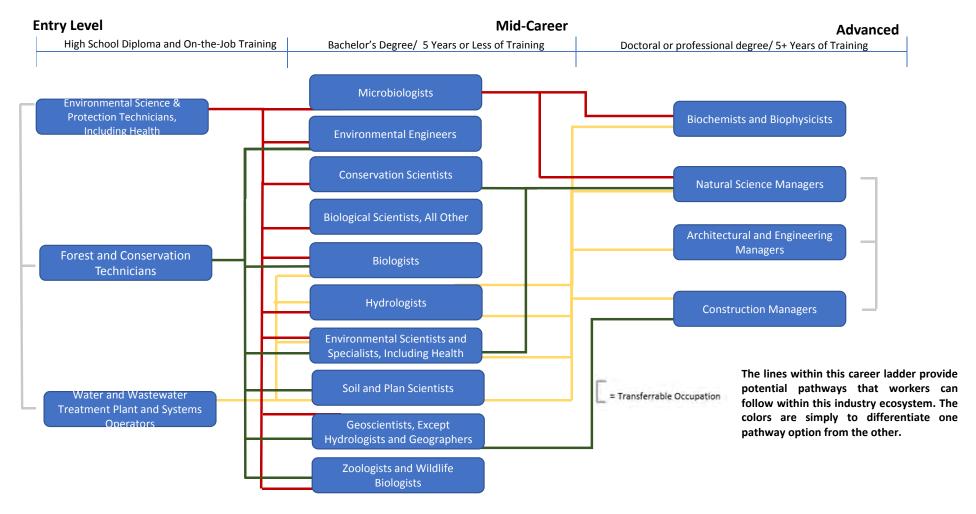


Prepared by AdvanceCT and Thomas P. Miller & Associates

To increase job opportunities in Connecticut's green technology sector, lower energy costs, improve energy efficiency and promote sustainability, the Office of Workforce Competitiveness, in consultation with other agencies, created a green jobs career ladder. This ladder is designed to link green jobs employers with technical education and career schools and institutions of higher education to foster coordination and grow the workforce in the sector.

The green jobs ladder includes components such as the scope of the industry and various occupations included, the skills and knowledge needed to succeed in those occupations, and the professional opportunities available at the entry, mid-career and advanced levels, along with the current salary ranges for each. To maintain this ladder as a comprehensive and useful resource for the green technology industry and its educational partners, it will be updated periodically as needed.

#### Environmental Protection & Waste Reduction Career Ladder



## Architecture and Engineering Managers Occupational Profile



#### SIMILAR INDUSTRIES



Agriculture & Forestry



Energy Efficiency & Storage



Environmental Protection & Waste Reduction



Government & Regulatory Administration



Transportation



Green Construction



Research, Design, Consulting, & Supportive Services



Manufacturing



Renewable Energy Generation



## Biochemists and Biophysicists Occupational Profile



#### SIMILAR INDUSTRIES



Agriculture & Forestry



Energy Efficiency & Storage



Environmental Protection & Waste Reduction



Government & Regulatory Administration



Transportation



Construction



Manufacturing

Research,

Design,

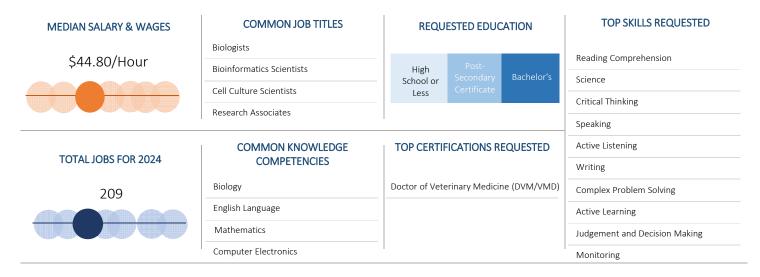
Consulting, &

Supportive Services



Renewable Energy Generation

## Biological Scientists, All Other Occupational Profile



#### SIMILAR INDUSTRIES



Agriculture & Forestry



Energy Efficiency & Storage



Environmental Protection & Waste Reduction



Government & Regulatory Administration



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Green Construction



Research, Design, Consulting, & Supportive Services



Manufacturing



Renewable Energy Generation



## **Biologists Occupational Profile**



#### **SIMILAR INDUSTRIES**



Agriculture & Forestry



Energy Efficiency & Storage



Environmental Protection & Waste Reduction



Government & Regulatory Administration



Transportation



Green Construction



Research, Design, Consulting, & Supportive Services



Manufacturing



Renewable Energy Generation

### Conservation Scientists Occupational Profile



#### SIMILAR INDUSTRIES



Agriculture & Forestry



Energy Efficiency & Storage



Environmental Protection & Waste Reduction



Government & Regulatory Administration



Transportation



Green Construction



Research, Design, Consulting, & Supportive Services



Manufacturing



Renewable Energy Generation



## Construction Managers Occupational Profile



#### SIMILAR INDUSTRIES



Agriculture & Forestry



Energy Efficiency & Storage



Environmental Protection & Waste Reduction



Government & Regulatory Administration



& Transportation



Green Construction



Research, Design, Consulting, & Supportive Services



Manufacturing



Renewable Energy Generation





### **Environmental Engineers Occupational Profile**



#### SIMILAR INDUSTRIES



Agriculture & Forestry



Energy Efficiency & Storage



Environmental Protection & Waste Reduction



Government & Regulatory Administration



Transportation



Green Construction

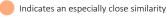


Research, Manufacturing Design,
Consulting, &

Supportive Services



Renewable Energy Generation



## Environmental Science and Protection Technicians, Including Health Occupational Profile



#### SIMILAR INDUSTRIES



Agriculture & Forestry



Energy Efficiency & Storage



Environmenta Protection & Waste Reduction



Government & Regulatory Administration



ernment & Transportation egulatory



Green Construction



Research, Design, Consulting, & Supportive Services



Manufacturing



Renewable Energy Generation



## Environmental Scientists and Specialists, Including Health Occupational Profile



#### SIMILAR INDUSTRIES



Agriculture & Forestry



Energy Efficiency & Storage



**Environmental** Protection & Waste Reduction



Regulatory Administration



Government & Transportation



Green Construction



Research. Design, Consulting, &

Supportive Services



Manufacturing



Renewable Energy Generation



## Forest and Conservation Technicians Occupational Profile



#### SIMILAR INDUSTRIES



Agriculture & Forestry



Energy Efficiency & Storage



Environmental
Protection &
Waste
Reduction



Government & Regulatory Administration



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Green Construction



Research,
Design,
Consulting, &
Supportive
Services



Manufacturing



Renewable Energy Generation



## Geoscientists, Except Hydrologists and Geographers Occupational Profile



#### SIMILAR INDUSTRIES



Agriculture & Forestry



Energy Efficiency & Storage



Environmental Protection & Waste Reduction



Government & Regulatory Administration



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Green Construction



Research, Design, Consulting, & Supportive Services



Manufacturing



Renewable Energy Generation



## Hydrologists Occupational Profile



#### SIMILAR INDUSTRIES



Agriculture & Forestry



Energy Efficiency & Storage



Environmental Protection & Waste Reduction



Government & Regulatory Administration



nent & Transportation Itory



Green Construction



Research, Design, Consulting, & Supportive Services



Manufacturing



Renewable Energy Generation



## Microbiologists Occupational Profile



#### SIMILAR INDUSTRIES



Agriculture & Forestry



Energy Efficiency & Storage



Environmental
Protection &
Waste
Reduction



Government & Regulatory Administration



ernment & Transportation egulatory



Green Construction



Research, Design, Consulting, & Supportive Services



Manufacturing



Renewable Energy Generation

## Natural Science Managers Occupational Profile



#### SIMILAR INDUSTRIES



Agriculture & Forestry



Energy Efficiency & Storage



Environmental Protection & Waste Reduction



Government & Regulatory Administration



Transportation



Construction



Research, Design, Consulting, & Supportive Services



Manufacturing



Energy Generation



## Soil and Plant Scientists Occupational Profile



#### SIMILAR INDUSTRIES



Agriculture & Forestry



Energy Efficiency & Storage



Environmental Protection & Waste Reduction



Regulatory Administration



Government &



Transportation



Construction



Research, Design, Consulting, & Supportive

Services



Manufacturing



Energy Generation



## Water and Wastewater Treatment Plant and System **Operators Occupational Profile**



#### SIMILAR INDUSTRIES



Agriculture & Forestry



Energy Efficiency & Storage



Environmental Protection & Waste Reduction



Government & Regulatory Administration



Transportation



Construction



Research, Design, Consulting, & Supportive Services



Manufacturing



Energy Generation



## Zoologists and Wildlife Biologists Occupational Profile



#### SIMILAR INDUSTRIES



Agriculture & Forestry



Energy Efficiency & Storage



Environmental Protection & Waste Reduction



Government & Regulatory Administration



ment & Transportation atory



Green Construction



Research, Design, Consulting, & Supportive Services



Manufacturing



Renewable Energy Generation



Architectural & Engineering Managers	Biochemists & Biophysicists	Brownfield Redevelopment Specialists & Site Managers	Climate Change Analysts
Advanced Electrical Services, Inc. Asnuntuck Community College Capital Community College Central Connecticut State University Connecticut College Construction Education Center, Inc. Dominion Nuclear Connecticut Inc- Apprenticeship Dubaldo Electric Co Eversource (Convex Operating Group)- OJT Fairfield University Gateway Community College Griffin Electrical Contractors, Inc. Haskins Electric, LLC Housatonic Community College Manchester Community College Manufacturing Alliance Service Corporation, Inc. Middlesex Community College National Electrical Contractors Associates NECA & Local 90 JATC Naugatuck Valley Community College Northwestern Connecticut Community College Norwalk Community College Paier College of Art Quinebaug Valley Community College Quinnipiac University Ray Brown Electric, LLC Sacred Heart University Southern Connecticut State University Three Rivers Community College Tunxis Community College Tunxis Community College United States Coast Guard Academy University of Bridgeport University of Hartford University of New Haven Yale University	Asnuntuck Community College Capital Community College Central Connecticut State University Connecticut College Eastern Connecticut State University Fairfield University Gateway Community College Housatonic Community College Manchester Community College Middlesex Community College Naugatuck Valley Community College Northwestern Connecticut Community College Norwalk Community College Quinebaug Valley Community College Quinipiac University Sacred Heart University Three Rivers Community College Trinity College Tunxis Community College University of Connecticut, Storrs Campus University of Hartford University of New Haven University of Saint Joseph Wesleyan University Yale University	New Horizons Computer Learning Centers Patrick's Academy University of Connecticut, Storrs Campus University of Hartford University of New Haven	Charter Oak State College Connecticut State Police Training Academy Fairfield University Gateway Community College Goodwin College Home Performance Institute of New England Manchester Community College Middlesex Community College Mitchell College Northwestern Connecticut Community College Southern Connecticut State University Trinity College University of Connecticut, Avery Point University of Saint Joseph Wesleyan University Yale University

Construction Managers	Environmental Engineers	Environmental Restoration Planners	Environmental Scientists & Specialists, Including Health
Albertus Magnus College Asnuntuck Community College Capital Community College Central Connecticut State University Charter Oak State College Eastern Connecticut State University Eversource (Convex Operating Group)- OJT Fairfield University Gateway Community College Goodwin College Housatonic Community College Manchester Community College Middlesex Community College Middlesex Community College Mitchell College New Horizons Computer Learning Center Northwestern Connecticut Community College Norwalk Community College Post University Quinebaug Valley Community College Quinnipiac University Sacred Heart University Southern Connecticut State University Three Rivers Community College University of Menunity College University of Gonnecticut - Waterbury Campus University of Connecticut, School of Business University of Connecticut, Storrs Campus University of Connecticut, Storrs Campus University of Hartford University of New Haven University of Saint Joseph Western Connecticut State University Yale University Yale University Yale University	Connecticut College University of Connecticut, Storrs Campus University of Hartford University of New Haven Yale University	Charter Oak State College Connecticut State Police Training Academy Fairfield University Gateway Community College Goodwin College Home Performance Institute of New England Manchester Community College Middlesex Community College Mitchell College Northwestern Connecticut Community College Southern Connecticut State University Trinity College University of Connecticut, Avery Point University of Connecticut, Storrs Campus University of Saint Joseph Wesleyan University Yale University	Central Connecticut State University Charter Oak State College Connecticut State Police Training Academy Fairfield University Gateway Community College Goodwin College Home Performance Institute of New England Manchester Community College Middlesex Community College Mitchell College Northwestern Connecticut Community College Southern Connecticut State University Trinity College University of Connecticut, Avery Point University of Connecticut, Storrs Campus University of New Haven University of Saint Joseph Wesleyan University Yale University

Forest & Conservation Technicians	Geoscientists, Except Hydrologist & Geographers	Hydrologists	Industrial Ecologists
Yale University	Central Connecticut State University Eastern Connecticut State University Southern Connecticut State University United States Coast Guard Academy University of Connecticut, Avery Point University of Connecticut, Storrs Campus Western Connecticut State University Yale University	Central Connecticut State University Southern Connecticut State University United States Coast Guard Academy University of Connecticut, Avery Point University of Connecticut, Storrs Campus Western Connecticut State University Yale University	Central Connecticut State University Fairfield University Gateway Community College Goodwin College Home Performance Institute of New England Manchester Community College Middlesex Community College Mitchell College Northwestern Connecticut Community College Southern Connecticut State University Trinity College University of Connecticut, Avery Point University of Connecticut, Storrs Campus University of Saint Joseph Wesleyan University Yale University

Microbiologists	Natural Sciences Managers	Soil & Plant Specialists	Soil & Water Conservationists
Quinnipiac University University of Connecticut, Storrs Campus University of New Haven	Albertus Magnus College Asnuntuck Community College Capital Community College Central Connecticut State University Charter Oak State College Connecticut College Eastern Connecticut State University Fairfield University Gateway Community College Goodwin College Housatonic Community College Midclesex Community College Midclesex Community College Mitchell College Naugatuck Valley Community College New Horizons Computer Learning Center Northwestern Connecticut Community College Norwalk Community College Post University Quinebaug Valley Community College Quinnipiac University Sacred Heart University Sacred Heart University Southern Connecticut State University Three Rivers Community College Trinity College Tunxis Community College United States Coast Guard Academy University of Bridgeport University of Connecticut - Health Center University of Connecticut - Waterbury Campus University of Connecticut, Avery Point University of Connecticut, Stamford University of Hartford University of Hartford University of New Haven University of Saint Joseph Wesleyan University Western Connecticut State University Yale University	Capital Community College Naugatuck Valley Community College University of Connecticut, Storrs Campus	University of Connecticut, Storrs Campus University of New Haven Yale University

Water & Wastewater Treatment Plant & System Operators	Water Resource Specialists	Zoologists & Wildlife Biologists
Gateway Community College Stormwater One, LLC	Albertus Magnus College Asnuntuck Community College Capital Community College Central Connecticut State University Connecticut College Eastern Connecticut State University Fairfield University Gateway Community College Housatonic Community College Manchester Community College Middlesex Community College Mitchell College Northwestern Connecticut Community College Northwestern Connecticut Community College Northwestern Connecticut Community College Post University Quinebaug Valley Community College Quinnipiac University Sacred Heart University Southern Connecticut State University Three Rivers Community College Trinity College Tunxis Community College United States Coast Guard Academy University of Bridgeport University of Connecticut, Avery Point University of Connecticut, Storrs Campus University of Hartford University of New Haven University of Saint Joseph Wesleyan University Western Connecticut State University Yale University	Connecticut College University of Connecticut, Storrs Campus

## Glossary

**ABILITIES** – the proficiency, skills, or talent within a particular area.

CAREER PATHWAY – a career pathway means a combination of relevant, rigorous and high-quality education, training, and supportive services that aligns both vertically and horizontally across Secondary Education, Adult Basic Education, Workforce Training and Development, Career and Technical Education, and Postsecondary Education systems, pathways, and programs.

**CERTIFICATION** – third party accrediting or authorizing agency or person who assess, verifies, and provides an official documentation that attests a level of achievement.

**COMPETENCIES** – an individual's ability to do a job properly through a set of behaviors.

**INDUSTRY-ALIGNED CREDENTIAL** – credentials whose standards are aligned to industry-recognized standards.

**INDUSTRY-ENDORSED CREDENTIAL** – credentials whose standards are aligned to and endorsed by industry.

**INDUSTRY-RECOGNIZED CREDENTIAL** — an industry-recognized credential is one that either is developed and offered by, or endorsed by a nationally-recognized industry association or organization representing a sizeable portion of the industry sector, or a credential that is sought or accepted by companies within the industry sector for purposes of hiring or recruitment which may include credentials from vendors of certain products.

**KNOWELDGE** – the skills and information acquired through education or experience.

MEDIAN HOURLY EARNINGS – hourly earnings for the occupation reported at the 50th percentile.

**REQUESTED EDUCATION** – the highest level of education for workers within the given occupational category. Please note these are not the level of education of new incoming workers but of workers currently employed within these positions.

**SKILLS** – the ability or expertise to do something well.

TOTAL JOBS – estimated number of jobs in the given year, taken as average over a period of 12-months. This value includes both full- and part-time jobs.