

O*NET Key Terms



The University of Oklahoma

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Bright Outlook - <https://www.onetonline.org/help/bright/>

Occupations that have a bright outlook are expected to grow rapidly in the next few years, will have large number of job openings, or are new or emerging occupations. Bright Outlook occupations are always denoted with a sun icon.



The Green Economy - <https://www.onetcenter.org/green.html>

As the workplace changes, O*NET makes an effort to adapt its system to reflect the changes in what is important to workers when choosing their occupations. As a result of the increased efforts to be environmentally friendly, O*NET has begun to identify jobs with what they define “The Green Economy,” defined as “economic activity related to the use of fossil fuels, decreasing pollution and greenhouse gas emissions, increasing the efficiency of energy use, recycling materials, and developing and adopting renewable energy sources.” Seen below are some of the ways that O*NET identifies and tracks occupations that may qualify as being “green.”

Click on these tabs for more information on Green Sectors (see more information below).

The National Center for O*NET Development, as part of its efforts to keep up with the changing world of work, investigated the impact of green economy activities and technologies on occupational requirements and the development of New and Emerging (N&E) occupations. Results of the research led to the identification of green economic sectors, green increased demand occupations, green enhanced skills occupations, and green new and emerging (N&E) occupations. These occupations are now reflected in the O*NET-SOC system.

For the National Center for O*NET Development's research on the green economy, read [Greening of the World of Work: Implications for O*NET-SOC and New and Emerging Occupations](#) (2009) and [Greening of the World of Work: Revisiting Occupational Consequences](#) (2011). In addition to these reports on the green economy, the National Center for O*NET Development maintains a [Green Book of References](#) that is updated quarterly. Most recently, green tasks have been developed for green enhanced skills and green new and emerging occupations; see the [O*NET Green Task Development Project](#) report.

Learn, discuss, and share promising practices in creating partnerships for Green Job Workforce Solutions and for leveraging Recovery Act Investments at the [Green Jobs Community of Practice](#)

Green Sectors
Green Occupations
Ongoing Activities
OnLine Search

To keep up with the changing green economy, the National Center for O*NET Development is currently:

- Collecting data on occupational and worker requirements for Green Increased Demand, Green Enhanced Skills, and Green N&E Occupations.
 - Updating task lists for green occupations by identifying new tasks resulting from the impact of green economy activities and technologies.
- Updating green lay titles by incorporating new occupational titles identified in the green economy.
 - Researching the green economy to identify new green occupations.
 - Tracking green economic sectors to identify new and emerging (N&E) occupations.

Occupations that are considered to be green are marked with a leaf icon, seen below.



Green Sectors

Workplace activities that are considered “green” have been categorized by O*NET into twelve different sectors. Clicking the “Green Sectors” tab provides a list of all of the green sectors, along with descriptions of each.

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The Green Economy

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Green Sectors Green Occupations Ongoing Activities OnLine Search

Major work activities of the green economy cover a broad spectrum. To efficiently and effectively determine the potential occupational implications of green technology, workplace activities were categorized under different green economy sectors:

- Renewable Energy Generation
- Transportation
- Energy Efficiency
- Green Construction
- Energy Trading
- Energy and Carbon Capture and Storage
- Research, Design, and Consulting Services
- Environment Protection
- Agriculture and Forestry
- Manufacturing
- Recycling and Waste Reduction
- Governmental and Regulatory Administration

Show all descriptions Hide all descriptions

Green Occupations

O*NET divides green occupations into three different categories: those with increased demand, those with enhanced skills that differ drastically from those used in the occupation in the past, and those that are new and emerging. Use this tab to find links to lists of green occupations that fall under those categories.

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Green Occupations

The impact of green economy activities and technologies is rapidly changing the world of work by affecting worker requirements and occupational demand. Here's our definition of the [green economy](#).

The National Center for O*NET Development's research on the green economy was conducted at the occupation level. Because green economy activities and technologies may have different effects on different occupations, we believe a useful approach to studying the green economy is to focus on the ["greening" of occupations](#).

This definition lends itself to three general occupational categories, each describing different consequences of green economy activities and technologies on occupational performance:

- Green Increased Demand Occupations** [View list](#)
The impact of green economy activities and technologies is an increase in the employment demand for an existing occupation. However, this impact does not entail significant changes in the work and worker requirements of the occupation. The work context may change, but the tasks themselves do not.
- Green Enhanced Skills Occupations** [View list](#)
The impact of green economy activities and technologies results in a significant change to the work and worker requirements of an existing O*NET-SOC occupation. This impact may or may not result in an increase in employment demand for the occupation. The essential purposes of the occupation remain the same, but tasks, skills, knowledge, and external elements, such as credentials, have been altered.
- Green New and Emerging (N&E) Occupations** [View list](#)
The impact of green economy activities and technologies is sufficient to create the need for unique work and worker requirements, which results in the generation of a new occupation relative to the O*NET taxonomy. This new occupation could be entirely novel or "born" from an existing occupation.

Through a multi-stage research and screening process:

- 64 O*NET-SOC occupations were found to qualify as **Green Increased Demand** occupations,
- 62 O*NET-SOC occupations were found to qualify as **Green Enhanced Skills** occupations,
- 45 O*NET-SOC N&E occupations previously identified through research on in-demand industry clusters were found to qualify as **Green N&E** occupations, and
- 46 candidate N&E occupations in the green economy were found to qualify as **Green N&E** occupations.

Career Clusters - https://www.onetonline.org/help/online/browse_career

Career Clusters are groups of occupations that are in the same field and require similar skills. There are currently 16 Career Clusters. Career Clusters themselves may be further broken down into Career Pathways, which share common skills, knowledge, and interests. Listed below are all of the Career Clusters, along with their Career Pathways.

Agriculture, Food, and Natural Resources – Agribusiness Systems; Animal Systems; Environmental Services Systems; Food Products and Processing Systems; Natural Resources Systems; Plant Systems; Power, Structural, and Technical Systems

Architecture and Construction – Construction; Design and Pre-Construction; Maintenance and Operations

Arts, Audio/Video Technology, and Communications – Audio and Video Technology and Film; Journalism and Broadcasting; Performing Arts; Printing Technology; Telecommunications; Visual Arts

Business Management, and Administration – Administrative Support; Business Information Management; General Management; Human Resources Management; Operations Management

Education and Training – Administration and Administrative Support; Professional Support Services; Teaching and Training

Finance – Accounting; Banking Services; Business Finance; Insurance; Securities and Investments

Government and Public Administration – Foreign Service; Governance; National Security; Planning; Public Management and Administration; Regulation; Revenue and Taxation

Health Science – Biotechnology Research and Development; Diagnostic Services; Health Information; Support Services; Therapeutic Services

Hospitality and Tourism – Lodging; Recreation, Amusements, and Attractions; Restaurants and Food and Beverage Services; Travel and Tourism

Human Services – Consumer Services; Counseling and Mental Health Services; Early Childhood Development and Services; Family and Community Services; Personal Care Services

Information Technology – Information Support and Services; Network Systems; Programming and Software Development; Web and Digital Communication

Law, Public Safety, Corrections, and Security – Correction Services; Emergency and Fire Management Services; Law Enforcement Services; Legal Services; Security and Protective Services

Manufacturing – Health, Safety, and Environmental Assurance; Logistics and Inventory Control; Maintenance, Installation, and Repair; Manufacturing Production Process Development; Production; Quality Assurance

Marketing – Marketing Communications; Marketing Management; Market Research; Merchandising; Professional Sales

Science, Technology, Engineering, and Mathematics – Engineering and Technology; Science and Mathematics

Transportation, Distribution, and Logistics – Facility and Mobile Equipment Maintenance; Health, Safety, and Environmental Management; Logistics Planning and Management Services; Sales and Service; Transportation Operations; Transportation Systems/Infrastructure Planning, Management, and Regulation; Warehousing and Distribution Center Operations.

Industries - https://www.onetonline.org/help/online/browse_ind

O*NET also divides occupations by industries. Industries are “broad groups of businesses or organizations with similar activities, products, or services.” There are 21 total industries, listed below.

- | | |
|--|---|
| -Accommodation and Food Services | -Mining, Quarrying, and Oil and Gas Extraction |
| -Administrative and Support Services | -Other Services (Except Public Administration) |
| -Agriculture, Forestry, Fishing, and Hunting | -Professional, Scientific, and Technical Services |
| -Arts, Entertainment, and Recreation | -Real Estate and Rental and Leasing |
| -Construction | -Retail Trade |
| -Educational Services | -Self-Employed |
| -Finance and Insurance | -Transportation and Warehousing |
| -Government | -Utilities |
| -Health Care and Social Assistance | -Wholesale Trade |
| -Information | |
| -Management of Companies and Enterprises | |
| -Manufacturing | |

Job Families - https://www.onetonline.org/help/online/browse_family

Job Families are “groups of occupations based upon work performed, skills, education, training, and credentials.” O*NET divides occupations into 23 Job Families, listed below.

- Architecture and Engineering*
- Arts, Design, Entertainment, Sports, and Media*
- Building and Grounds Cleaning and Maintenance*
- Business and Financial Operations*
- Community and Social Services*
- Computer and Mathematical*
- Construction and Extraction*
- Education, Training, and Library*
- Farming, Fishing, and Forestry*
- Food Preparation and Serving Related*
- Healthcare Practitioners and Technical*
- Healthcare Support*
- Installation, Maintenance, and Repair*
- Legal*
- Life, Physical, and Social Science*
- Management*
- Military Specific*
- Office and Administrative Support*
- Personal Care and Service*
- Production*
- Protective Service*
- Sales and Related*
- Transportation and Material Moving*

STEM Occupations - https://www.onetonline.org/help/online/browse_stem

O*NET identifies occupations which qualify as STEM (Science, Technology, Engineering, and Mathematics). There are five (5) STEM disciplines within O*NET, some of which contain sub-disciplines. A complete list of STEM disciplines can be seen below.

- *Managerial*
- *Postsecondary Teaching*
- *Research, Development, Design, and Practitioners*
 - o *Architecture and Engineering*
 - o *Computer and Mathematical*
 - o *Healthcare Practitioners and Technical*
 - o *Life, Physical, and Social Science*
- *Sales*
- *Technologists and Technicians*
 - o *Architecture and Engineering*
 - o *Computer and Mathematical*
 - o *Healthcare Practitioners and Technical*
 - o *Life, Physical, and Social Science*

Job Zones - <https://www.onetonline.org/help/online/zones>

Job Zones divide occupations based on the amount of education, experience, and on-the-job training needed to successfully perform in that occupation. There are five (5) Job Zones.

Job Zone One: Little or No Preparation Needed

Job Zone One may require a high school diploma or a GED certificate. There is little need for previous work-related skill, knowledge, or experience. Training may last from a few days to a few months, and may be conducted by an experienced worker already employed in the occupation.

Examples – baristas, dishwashers, taxi drivers, food servers

Job Zone Two: Some Preparation Needed

Job Zone Two almost always requires a high school diploma. Some previous experience is usually needed. Training may last up to a year, for example, during an apprenticeship.

Examples – bartenders, firefighters, truck drivers, manicurists

Job Zone Three: Medium Preparation Needed

Job Zone Three requires training from a vocation school, on-the-job experience, or an associate's degree. Previous work-related skill, knowledge, and experience is a requirement for these occupations. Training may last up to two years.

Examples – barbers, dental hygienists, flight attendants, paralegals

Job Zone Four: Considerable Preparation Needed

Job Zone Four usually requires a bachelor's degree (though not always). A considerable amount of previous work-related skill, knowledge, and experience is required, as well as several years of training and/or work-related experience.

Examples – accountants, biomedical engineers, editors, video game designers

Job Zone Five: Extensive Preparation Needed

Job Zone Five almost always requires a graduate degree (master's, Ph.D., M.D., J.D., etc.). Extensive work-related skill, knowledge, and experience is required. Most training will occur before beginning the occupation (i.e. during school).

Examples – anesthesiologists, clinical psychologists, microbiologists, pharmacists