



AIR & WASTE MANAGEMENT
ASSOCIATION

Fact Sheet:

Environmental Careers



INTRODUCTION

Environmental careers are exceedingly diverse, encompassing everything from office to field to classroom work, conducting research in a lab, designing air, water, or other pollution control equipment, organizing a community to action, advocating in a courtroom, managing a plant, or teaching in a classroom. A common thread of dedication to environmental preservation and improvement unites many people who pursue these careers, although some simply find the work interesting and challenging.

Because the field is so diverse, there are opportunities for you to participate at all levels, and with almost any kind of educational background. However, there are certain skills and areas of knowledge that can facilitate entry into the environmental field and provide the background needed for increased effectiveness on the job.

This fact sheet describes working conditions and job requirements in various major environmental employment sectors, primarily within North America. It also describes generally desirable skills and education for the environmental field, and concludes with a section on career resources available through the Air & Waste Management Association (A&WMA) and other channels.

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THE PRIVATE SECTOR

Private sector jobs in the environmental field fall generally into two categories: private industry/manufacturing and consulting.

PRIVATE INDUSTRY/MANUFACTURING

There is a huge diversity of business types in this sector, including Fortune 500 employers like oil and utility companies and consumer products manufacturers, as well as small and medium-size businesses. Environmental professionals working in these companies are often responsible for maintaining compliance with both overarching environmental regulations (those that apply to all industry types) and industry-specific laws and regulations.

As an environmental professional working in private industry, you may be monitoring emissions, applying for permits, or auditing compliance. You may be designing, specifying, and overseeing implementation of various pollution prevention and control technologies.

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You may interact with production employees, community members, and regulatory agency staff. In a smaller company, expect a broader portfolio of responsibility, covering several environmental media (air, water, and/or waste) and, possibly, health and safety. At higher levels in the company, you may be responsible for developing and implementing company environmental policies and performance goals.



There is a huge diversity of business types in the private sector, including Fortune 500 employers like oil and utility companies and consumer products manufacturers, as well as small and medium-size businesses.

In private industry, a key issue is maintaining regulatory compliance with federal, state, and local regulations. Since in private enterprise the company makes a profit by selling its products for more than they cost to produce, the costs of environmental compliance can translate to a direct reduction in overall profit. To prevent top management from viewing environmental compliance as a cost burden, it is important to understand as much as possible about the company's core processes and seek ways to cost effectively integrate environmentally protective measures into those processes.

Another key issue for virtually all manufacturers is maintaining good community and public relations. Running a company that makes environmental stewardship a priority will help ongoing relations with the community. Salaries for regulatory compliance, management, and public relations jobs will vary depending on the size of the company, but they can pay relatively well and may offer good benefits. However, job security may be less assured than in the government sector.

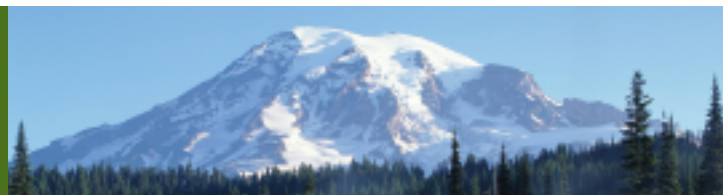
CONSULTING

There are many types of environmental consulting companies, including firms that specialize in providing compliance services (such as those described above) to industry and government, firms that specialize in land use or urban planning and the preparation of environmental impact assessments, and firms that specialize in designing and constructing pollution prevention and control systems. Increasingly, a number of consulting companies are consolidating with large engineering and architectural firms. This trend may mean that environmental work is not the main focus of the firm.

Environmental professionals working in private consulting can expect a variety of work assignments, a fair amount of travel, and long work hours. Consulting companies make money through each billable hour worked by their employees, so junior staff must meet high billability goals and keep scrupulous track of their time, often down to the half or quarter-hour. More senior staff may have lower billing goals, but will be responsible for bringing in work, either from new clients or repeat assignments from existing clients. In consulting, it is helpful to have a high energy level, a positive attitude, and the ability to cope with change, in addition to the technical skills you bring to the job. Pay levels may be comparable to those in private industry, but benefits may not be as generous.

THE PUBLIC SECTOR

A wide variety of public sector or government jobs are dedicated to environmental purposes. Government jobs often exist as a result of federal or state legislation that creates laws, programs, and agencies whose mission is to protect the environment, public health, and



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natural resources. Government employees may directly regulate the operations of private industry by preparing regulations for adoption or enforcing emission limits imposed on industrial source operations. Government employees may indirectly regulate industrial operations through programs such as air monitoring, sources testing of facilities, or water analysis. They may work to preserve or enhance natural resources such as parks, forests, rivers, and oceans. In some states, these functions are combined in a single agency, while in others they are separate.

Since government agencies work in the public interest, their actions must be made in the public arena and are typically controlled by a board of elected officials, or persons appointed by elected officials. Public sector work can be time-consuming, since processes like permitting decisions must be fair, objective, and consistent for all applicants. However, political considerations can also be expected to play into public decision-making and, to be most effective, government employees should be aware of the political context in which they work. The more senior-level the job, the more likely it is to be directly affected by political considerations.

Environmental jobs can be found at all levels of government: federal, state, regional, county, and local. At the local (city) level, it may be difficult to get a job focused only on environmental matters except in larger jurisdictions; at the same time, the right city can be a great place to implement innovative programs. In the past, it was assumed that governmental employees could expect a slower pace of work than in the private sector. This is generally not true today. Depending on the job specifics, you may find yourself dealing frequently with the general public, local community activists, or elected officials.

Salaries may sometimes be lower than in the private sector (though there are many exceptions to this), but benefits can be comparable or better. Job security is generally better with public sector jobs – which is not to say a government job can never be eliminated. However, it can be difficult to get a government job: though the hiring process must by law be open, some public agencies give hiring priority to internal qualified candidates. Sometimes it is necessary to qualify for a list of candidates for a general grade or position; specific openings are then filled from this list. Public sector work can be very rewarding for those with an interest in improving the environment, in public policy or enforcement, or in influencing long-term changes in public behavior to benefit the environment.

THE NONPROFIT SECTOR

The nonprofit sector falls roughly between the government and private sectors in terms of function. In the environmental arena, nonprofits are often referred to as nongovernmental organizations (NGOs); they may focus on missions that are not taken up by the commercially motivated private sector or by the financially and legally limited government sector. The nonprofit sector thus enjoys the greatest flexibility in its approach to environmental issues. Nonprofits or NGOs may be formed to advocate for a specific or general goal



of environmental protection (e.g., clean air or clean water), for a particular constituency (e.g., children, park users, or residents of a certain community), or for a particular resource (e.g., salmon or forests).

In addition to advocacy and community nonprofit groups, several other notable types of nonprofits offer interesting career choices, including trade and professional associations, private foundations, and think tanks. Trade and professional associations represent the interests of their constituencies: for example, the nonprofit Air & Waste Management Association represents environmental professionals worldwide. Other associations represent specific industry sectors, like auto manufacturers or the telecommunications industry, and can be found at the international, national, regional, and local levels. Many private foundations have a partly or exclusively environmental mission, and make grants to advocacy and community groups as a way of furthering their causes. Think tanks tend to be concentrated near seats of government (e.g., Washington, DC, and state capitals); they produce research and publications to promote shifts in public policy.

Compared to the private and public sectors, pay is often lower in the nonprofit sector, and benefits may also be limited. This can be offset by greater freedom and flexibility, as well as the chance to work in an organization whose entire mission is devoted to environmental matters. NGOs that are organized for the public benefit are subject to certain restrictions on their activities, and have an ethical obligation to their donors to use funds responsibly and in support of their mission.

Fundraising or grant writing abilities are important skills in the nonprofit sector, since these organizations must create their own sources of funding. Political and policy knowledge relevant to the group's mission is also key. Job security can be lower in the nonprofit sector compared to other sectors, since funding is often temporary.

OTHER ENVIRONMENTAL CAREER OPTIONS

In addition to the public, private, and nonprofit sectors, there are several other career paths that do not fit precisely into those categories. Some environmental professionals pursue advanced degrees and work in academia as professors, teachers, researchers, and authors. Many environmental professionals who already have significant work experience find they like the flexibility of independent consulting, and often start by contracting back to their last employer. There is a large corps of environmental journalists in print media, television, and on the Internet. Environment-related technology firms offer the power of information management to environmental professionals; these ventures may be attractive to people who are computer-oriented. And since environmental problems know no national boundaries, there is a wealth of opportunity in the international arena through all of the sectors.

Environmental law is a complex and rewarding specialty; environmental attorneys work in all three sectors mentioned above. Also, many political careers begin with the study of law.



REQUIRED EDUCATION AND SKILLS

Students or others wishing to enter the environmental field have many choices because opportunities in the field are diverse and at many levels. In choosing a course of study, you can readily tailor your major to fit your own interests or abilities, while preparing yourself for an environmental career. For example,

- major in engineering or science to follow a technical path: most likely career options are in consulting, private industry, or government;
- major in communications, law, or political science to follow a regulatory, public affairs, or policy path: most likely career options are in government, advocacy, journalism, or academia; or
- major in finance or economics to follow an administrative path: most likely career options are in nonprofits or foundations, consulting management, or planning agencies.



No matter what your educational background, having basic science knowledge is very helpful in the environmental field. Chemistry, biology, and geology can all be relevant to environmental work, and an understanding of statistics is also helpful. Basic science knowledge – even for majors in the humanities or social sciences – can make you a more credible environmental professional and enable you to detect the difference between good information and environmental propaganda. Advanced (Master’s) degrees are not a prerequisite for most environmental careers, but they can be helpful to career advancement in the right environments. For pursuits such as law, planning, academia, and think tanks, advanced degrees are extremely important. Some technical jobs in the environmental field may not require a college degree; some academic institutions offer focused professional certificates that can get you started at the entry level.

The most useful skills and abilities for environmental professionals are the ones common to all jobs, the ability to:

- communicate clearly in writing and orally;
- work effectively in a team;
- be creative and innovative; and
- have computer and database skills.

With the wealth of career possibilities in the environmental field, it should be easy to find a path that plays to your strengths. You supply the energy that comes from your dedication to environmental protection.

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ENVIRONMENTAL CAREER RESOURCES

Environmental protection laws have been on the books for almost five decades, and environmental professionals are recognized as essential by both the private and public sectors. Those seeking advice on an environmental career can take advantage of numerous resources:

- Request informational interviews with local environmental organizations or companies you might like to work for.
- Seek internships (paid or unpaid) with environmental organizations.
- Seek the advice of a mentor who already works in the environmental field. Sign up to a mentoring program, such as at www.mentornet.net, to learn more about the profession you are considering.
- Take advantage of career services offered by your current or past educational institution.
- Search the Internet. Numerous sites now specialize in environmental job postings and environmental career guidance, much of it free of charge.
- Remember the Internet has information on specific companies, as well as government agencies. Do your homework by checking before going to an interview.

A&WMA offers a variety of resources for those seeking to enter an environmental career at any level. Local chapter and section meetings are a great way to meet and network with professionals in the field, as are periodic regional and annual conferences. The Association's Career Center at www.awma.org offers a variety of job postings. The Association also offers an ongoing schedule of professional development courses and conferences, which offer the opportunity to develop new marketable skills.