



2016 EHS & Sustainability Career Profiles and Skills for Success





In collaboration with *Protecting Worker Health*

Letter from Executive Director

On behalf of NAEM, I am pleased to introduce the latest report in NAEM's comprehensive research series on how the EHS&S function is structured from an organizational design perspective.

Using a combination of quantitative data and qualitative insights, this report offers a detailed analysis of the education, skills and knowledge areas that EHS&S professionals need at each stage of their careers. This report also documents the success factors and outside influences that shape career paths, as well as the personal attributes that make EHS&S professionals unique among their peers. The result is a unique portrait of the profession that I believe belongs on the desk of all those responsible for designing and developing the EHS&S function today.

As the leading professional association for corporate EHS&S leaders, NAEM initiated this research to address our members' needs. Our goal was to provide our members with a profile of the professionals they should recruit or develop to build a healthy pipeline for succession. To do so, this report not only documents what EHS&S professionals do, but also how they think, how they behave and how they shape their internal culture to advance their goals.

Because no two companies or EHS&S professionals are the same, we do not make specific recommendations; we do, however, offer you information you can use to benchmark your own career progression or those of the employees on your team. The full report also offers more than 28 charts per profile that you can use to recruit, evaluate and develop your entire EHS&S staff.

I gratefully acknowledge the members of our advisory committee who helped to shape the questionnaire, and thank all those who participated in the research. I would also like to extend a special thanks to the American Industrial Hygiene Association (AIHA) for collaborating with us on the research. The generosity of time and knowledge from everyone involved in this project has helped advance our understanding of the profession and its value to this critical business function.

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Sincerely,

Carol Singer Neuvelt

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Executive Director

NAEM

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About NAEM

The National Association for Environmental Management (NAEM) empowers corporate leaders to advance environmental stewardship, create safe and healthy workplaces, and promote global sustainability. As the largest professional community for EHS and sustainability decision-makers, we provide peer-led educational conferences, benchmarking research and an active network for sharing solutions to today's corporate EHS and sustainability management challenges. Visit NAEM online at www.naem.org.

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How to Use this Report

How to Use this Report -

NAEM's EHS&S Career Profiles and Skills for Success report is designed to be an in-depth guide to those who are interested in advancing their own careers, and an essential resource for EHS&S hiring managers and training leaders. This is the first benchmark that comprehensively documents each step of the career path for corporate EHS&S managers as they rise to leadership positions.

What You'll Find Inside

Divided into five-year increments, this report combines quantitative and qualitative data to shed light on how professionals begin their career, position themselves for succession, and progress from manager, to leader, to decision-maker. It documents the core educational background, knowledge areas, skills and responsibilities for those at each stage of their career. Importantly it also demonstrates the importance of specific leadership attributes and personal behaviors to the success of leaders at all levels. The following is a snapshot of the main content areas included within this report:

- Job Titles
- Salaries
- Job Responsibilities (including Shared vs. 'Owned' Responsibilities)
- Professional Experiences Outside of EHS
- · Degrees and Certifications
- Core Technical and Business Skills
- · Core Technical and Business Knowledge Areas
- Key Leadership Attributes and Behaviors that Drive Success

How to Apply this Knowledge

This report will help you broaden your thinking beyond what is happening in your own organization by allowing you to benchmark your own or your team's skills and responsibilities against those of other professionals in the field. Specifically, you can use this report to:

- Write job descriptions
- · Screen applicants for the right mix of skills
- · Establish appropriate job titles
- Define job responsibilities
- Evaluate job performance
- Develop training programs
- Set salaries and pay increases
- Determine whether your EHS&S team members have the appropriate mix of skills and attributes
- · Identify those with the most potential for succession

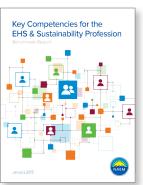
How to Use this Report •

How to Find More Benchmarking on this Topic

NAEM's landmark series on the Management of the EHS&S function is a comprehensive research portfolio on how companies design, budget and staff their EHS&S function. If you are seeking to benchmark how your peers structure their departments, learn what the average headcount is for a company at the same risk level as yours or find out which core competencies most EHS&S professionals share, consider purchasing another publication from this suite today.



EHS & Sustainability Staffing and Structure is the most in-depth benchmark of the EHS&S function. It is the only benchmark that looks at EHS&S staffing and structure based on industry sector, level of risk and corporate revenue. The report includes the roles and responsibilities of the EHS and sustainability function as well as staffing levels, budgets and salaries.



Key Competencies for the EHS & Sustainability Profession was released in 2015 and looks at the skills, attributes and knowledge areas that are necessary to achieve the business objectives of the EHS&S function. Key Competencies provides a detailed portrait of the diverse capabilities of the EHS&S professionals who are leading a broad range of regulatory compliance and sustainability activities for their companies.

Find Out What Comes Next

If 11-15 years is your current career stage, consider buying the 16-20 years profile of the EHS Professional, which will show you:



- Skills and competencies that are most important as you move into the next stage of your career
- Themes that characterize the change in responsibility and oversight
- Professional certifications you might consider getting to prepare yourself for leadership
- The level of accountability and authority that those in the next career stage typically have

If you would like to purchase another publication from our Career Profile Series, use the discount code CAREER to save 50% off of any other segment in this Portfolio.

http://www.naem.org/?survey_2015_careerpr



Methodology-

Survey Definitions

The following is a list of terms used throughout the benchmark study and the definitions associated with them.

EHS: Environment, health and safety

EHS&S: The term that is used to define the EHS and sustainability business function

Function: While many companies may use the term 'function' interchangeably with 'department,' this study defines 'function' as the role or purpose of the respondents themselves. In some companies, for example, the EHS function may reside in multiple departments

Level: The term level is used throughout the report to describe where respondents sit within their organizations. In addition, it is used to help define the extent of responsibility respondents have for activities they are involved in at their current position

Profiles: The five different career stages NAEM has defined, for the purpose of identifying distinct stages of a professional's career

Competencies: The general term which includes skills, knowledge areas, attributes and behaviors that help professionals to do their job

- **Skills:** The abilities of individuals, often gained through training. Within the report they are separated into technical, business and interpersonal spheres
- *Knowledge Areas:* The areas of expertise or specialization that individuals use in their work. They are separated into technical and business areas within the report
- *Attributes:* The qualities that individuals characteristically exhibit, as related to the performance and progression of their EHS&S function
- *Behaviors:* The actions that individuals take or exhibit, as related to the performance and progression of their EHS&S function

Key Responsibility Areas

The following is a list of definitions for the categories of responsibilities most common among EHS and sustainability professionals.

Responsibilities: The activities that may be included in the role of an EHS and sustainability professional

• **Prevention and Disposal:** Knowledge and experience necessary to properly address the management of hazardous materials. This includes materials/emissions control/reduction, waste identification/disposal and emergency response, including remediation of environmental contamination

Methodology.

- **Tracking and Monitoring:** Familiarity with the requirements and techniques needed to quantify potential hazardous releases/exposures. This includes the ability to gather and present accurate data to respond to surveys and reports detailing emissions, use and exposures from products or operations, and the ability to utilize data management tools to their fullest capability
- **Compliance:** Being conversant with all regulations or other requirements applicable to operations or products. Able to apply that knowledge in developing/implementing audits and other compliance activities for operations or other areas of concern. Maintaining awareness and addresses ongoing advances in scientific understanding of workplace hazards and potential regulatory changes
- **Health, Safety and Security:** Broadly capable across several exposure control functions to facilitate development and implementation of training, control and emergency response programs that address applicable physical risks. This includes measurement/control of personnel exposures/risks and protection of company assets
- **Energy Management:** Technical competency in selecting and using equipment and/or procedures to measure, manage and reduce energy use
- **Products and Purchasing:** Being conversant in relevant aspects of product lifecycle requirements. This includes the knowledge needed to reduce environmental impacts of products and supplier operations
- **Reporting, Strategies and Communications:** Being able to understandably communicate environmental program elements to audiences with varying technical understanding and subject matter interest. This includes knowledge of appropriate metrics to both measure and project the impact of operations or products, and the ability to select and use data to develop control and planning strategies
- **Fleet Management and Transportation:** Being conversant with rules and technical aspects of vehicle use. This includes ensuring proper permits and licensing along with emissions reduction planning/implementation

Overview of Methodology

This report is based on quantitative and qualitative research that took place from August 2014 – May 2015. The quantitative survey was fielded to a broad audience of EHS&S professionals through the NAEM membership and network in collaboration with other organizations.

The responses to the survey and interviews were primarily drawn from in-house EHS&S professionals within U.S.-based companies; consultants and service providers were excluded. This report represents the input from 498 respondents who met the eligibility criteria.

Survey Development Process

In the spring of 2014, NAEM established an advisory committee of EHS&S leaders to help the association develop a new survey that reprised core concepts from NAEM's 2012 EHS and Sustainability Staffing and Structure benchmark. The advisory committee was composed of nine senior EHS&S leaders from a variety of industry sectors. Their input helped to define the objectives, guide question development and beta-test the initial draft questionnaire before it was launched to the broader audience of EHS&S professionals within corporations. In addition, the committee provided guidance and recommendations for analysis of the survey response data.



Methodology-

Survey Distribution

The survey was distributed through SurveyMonkey to members of the NAEM network, members of The Conference Board Chief EH&S Officers' Council, members of the World Environment Center and members of the American Industrial Hygiene Association (AIHA). The recipients were also encouraged to share the survey with colleagues in their function to capture input from those at different levels within an EHS organization.

The online survey was fielded by NAEM between August and September of 2014 and re-fielded by NAEM and AIHA between April and May of 2015 to gain a broader depth of respondents.

Collaboration with AIHA

Learning about industrial hygiene competencies and responsibilities adds depth to the NAEM research and better represents the profession, as NAEM members often focus their efforts on environmental and sustainability initiatives. In re-fielding the survey during the spring of 2015, NAEM partnered with the American Industrial Hygiene Association (AIHA) to ensure a better balance of environment, health, safety and sustainability professionals in the survey responses. Similar to NAEM members, the majority of AIHA members who responded to the survey are highly experienced professionals.

Outline of the Quantitative Survey

The online survey consisted of approximately 55 questions; the exact number answered depended upon self-identified responsibilities. The survey was broken into five sections covering:

- · Company Demographics
- Individual Job Responsibilities
- Individual Skills, Knowledge Areas and Attributes
- Educational Background and Professional Experience
- · Salaries and Bonus Potential

The survey asked respondents to indicate their level of involvement in 73 EHS&S activities. These responsibilities evolved from the list included in prior NAEM benchmarking and from suggestions from the advisory committee.

To parse the varying levels of responsibility EHS&S professionals have for each activity, respondents were asked to identify the extent to which the activities fall within their role. The five levels to choose from included:

- I am responsible but not involved with executing this activity
- I lead this activity and I am directly responsible
- I lead this activity but share responsibility with others
- I am involved without responsibility
- N/A

In addition, respondents were asked to self-assess their proficiency in 33 knowledge areas and 30 skills identified to be relevant to the EHS&S function.



Methodology-

Qualitative Interviews

In order to add context and depth to the survey data for this report, a discussion guide and questions were developed in partnership with corporate decision makers to conduct qualitative interviews with in-house EHS&S professionals.

In total, NAEM conducted 15 one-on-one interviews. The participants came from a variety of industries, backgrounds and job titles, with three interviews conducted for each profile segment, based on their years of professional experience.

Analytical Approach

To capture the nuances of each EHS&S manager's role, we asked respondents to indicate their level of involvement with a set of detailed activities. We then categorized their responses in terms of 'responsibility' and 'collaboration'. The rubric for this categorization is reflected below.

Level of Authority for EHS&S Activities Figure 1 Direct Responsibility Collaborative Activities Lead and Directly Responsible but Not Involved Responsibility Responsibility Lead and Share Responsibility



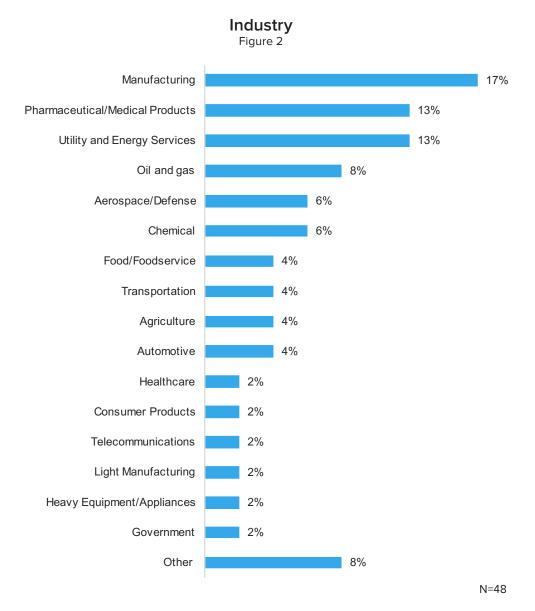
Demographics

The following section provides an overview of those survey respondents with 11-15 years of experience. Although the full survey had 498 responses overall, this section reflects the demographics for the 57 individuals at this career stage. The demographics are provided for both the companies they work for and for the individuals themselves.

Company Demographics

Diverse Representation of Industries

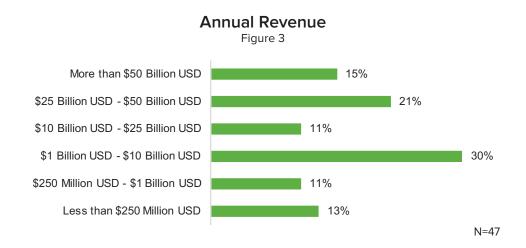
Because the survey audience included responses from more than one employee per company, the below chart has been refined to accurately reflect the range of industries represented among the survey audience. The largest segment of companies represented belongs to the manufacturing sector, with a fairly consistent representation among the other industries.



Demographics •

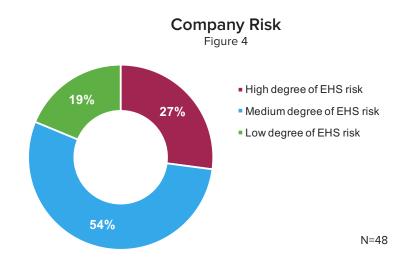
Respondents work for Companies of all Sizes

The annual revenues for the responding companies cover a broad range, from less than \$250 million (13%) to more than \$50 billion (15%).



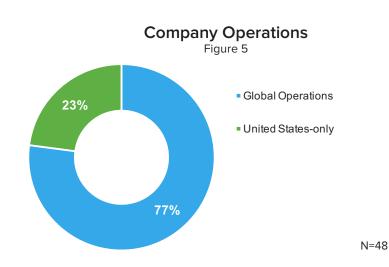
More than Half of Respondents Work for Companies with Medium-Risk Operations

When asked to self-assess the level of EHS risk at their companies, more than half of respondents characterized their operations as 'medium risk' (54%). An additional third have operations that fall into the 'high risk' category (27%).



Respondents in this Segment Mainly Work for Companies with U.S. Presence

Among the full respondent pool, most worked for companies with global operations. Those in this segment, however, primarily work for U.S.-based companies (77%).



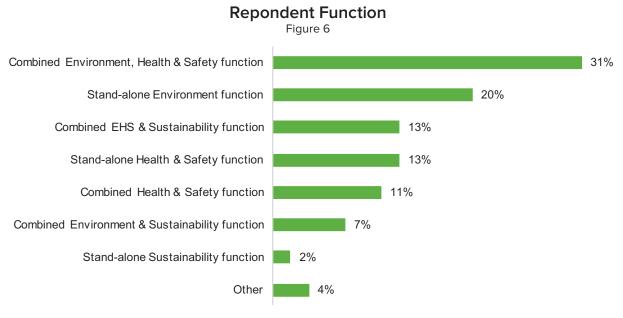


Demographics -

Respondent Demographics

About a Third of Respondents in this Segment Work within a Combined Function

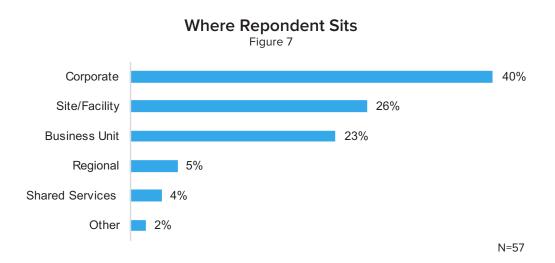
Among survey respondents overall, 36 percent of total respondents from all career stages work within a combined EHS function and an additional 19 percent work within a function that combines EHS and sustainability. Within this respondent segment, 31 percent work within a combined EHS function, while an additional 13 percent work within a function that combines EHS with sustainability. There was also a strong representation of stand-alone environmental practitioners in this segment (20%).



N=55

Respondents Work at all Levels of the Company

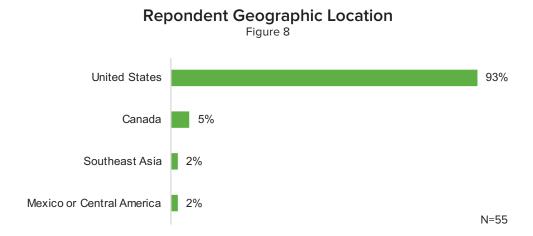
Respondents at this level work at various levels within the company, with 40 percent at the corporate level, 26 percent at the site or facility level and 23 percent at the business unit level.



Demographics •

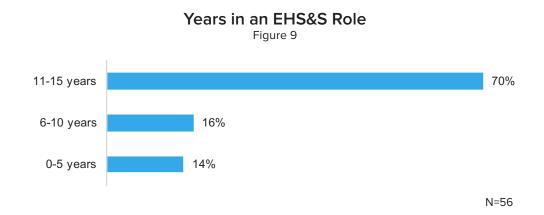
Respondents are Primarily North American-Based

The respondents in this segment are primarily based in North America (93%).



Among those with 11-15 Years of Professional Experience, the Majority of Respondents have Exclusively Worked within EHS&S

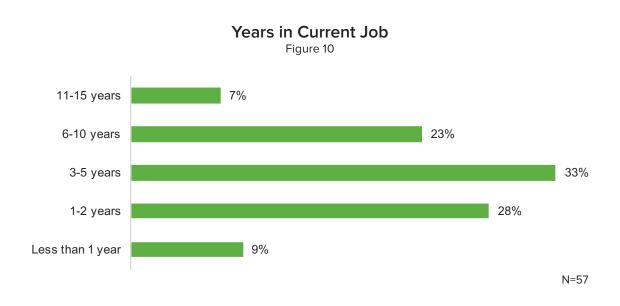
The majority of those who fall within this segment have gained their experience in EHS&S (70%).



Demographics -

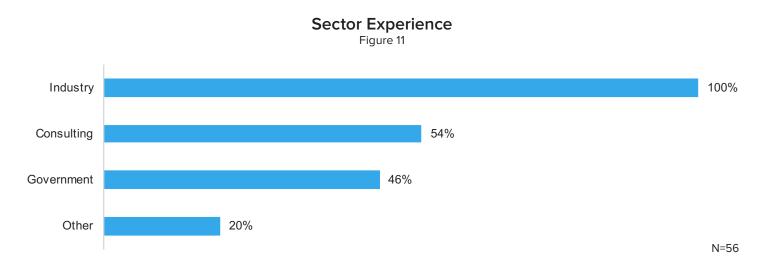
Respondents in this Segment Have Deeper Tenure

At this stage, about a third of respondents (33%) have been in their current role for between three and five years. An additional 23 percent have been in their role for between six and ten years. The final third are new to their roles (37%).



Respondents are Bringing a Variety of Experiences to their In-house Roles

EHS&S professionals often begin their careers in other areas of the field. Within this segment of the respondents, more than half also had experience in consulting (54%), while an additional 46 percent had worked within government.





Introduction:

In documenting the stages of a corporate environment, health and safety, and sustainability (EHS&S) manager's career, the underlying hypothesis was that distinct changes in responsibilities, knowledge areas and skills would emerge based on the numbers of years of a professional's experience. The quantitative analysis revealed, however, that the core competencies remain largely the same over the course of a career. Instead, it is how EHS&S professionals apply those core competencies, demonstrate personal initiative, achieve their level of accountability and expand their sphere of influence that evolve over time.

While EHS professionals' careers do not likely advance in symmetrical phases, an analysis of the data based on years of experience does reveal shifts in respondents' responsibilities, the application of their skills and the focus of their professional development efforts.

The profiles of each career stage featured later in the report will provide a detailed analysis of how and when these subtle shifts take place, highlighting how professionals at each stage arrived at their current position, the defining characteristics of that stage of their career, their current role and responsibilities, the key knowledge areas and skills for their career stage and what awaits them in the next phase. These profiles represent each of five 'stages' of an EHS career, characterized as follows:

0-5 Years: Early Career Professionals: Building Skills and Learning to Lead

At the entry level, EHS professionals are focused on task-based work as they apply their foundational education in science or engineering and explore the opportunities of their new field. In addition to applying their technical knowledge, early professionals communicate their operational goals with coworkers and cooperate in their implementation. Some professionals in this career stage will seek a career boost from a graduate degree or certifications.

6-10 Years: Advancing Managers: Increasing Responsibility and Specialization

With proven experience of delivering and demonstrating basic leadership skills such as effective communications and influencing, EHS professionals start to gain increasing responsibility for program management. This is also a time when they may be completing graduate degrees or achieving a first round of certifications, as they start to specialize in the areas of strongest professional interest to themselves. At the same time, they may seek out mentoring to help them round out their business acumen or gain the executive visibility they will need to continue to advance along a management track.

11-15 Years: Emerging Leaders: Refining the Career Path and Expanding the Sphere of Influence

This career stage is marked by increasing responsibilities and broader involvement in EHS-related activities across the business. It is also a time when a split seems to take place between those with a stronger technical orientation and those who are pegged for succession, who will be presented with new management opportunities. Because there are more competent managers than available leadership positions, those who exhibited weaker leadership attributes or were less directed earlier in their careers may reach a period of 'career doldrums,' finding themselves without sufficient opportunities for advancement.

16-20 Years: Advancing Leaders: Accountability with a Global Reach

Those who have actively invested in their professional growth and demonstrated continued leadership potential throughout their careers may start to gain accountability at this stage of their careers. They might be the head of a functional aspect of EHS (e.g. safety or environmental), or gain authority over the full function itself. In addition to having more direct authority, their role broadens to become increasingly strategic in nature and global in its scope.

21+ Years: Experienced Decision Makers: Business Strategy and Legacy

At this stage, EHS leaders start to shift their focus to broad questions of business strategy and risk management from an EHS perspective. Those who have achieved these positions of leadership are likely also thinking about organizational design and succession planning as they consider how to add value to their companies during their remaining years at the helm.

The research also revealed a number of broad insights that apply to EHS professionals regardless of the career stage:

Successful EHS&S leaders are well-rounded professionals

One of the key findings of *EHS&S Career Profiles* is that it takes more than technical know-how to be a successful EHS&S professional. The most effective EHS&S professionals possess systemic thinking and communications skills to explain technical processes across departments, functions and geographic borders. Additionally, the EHS&S professional's ability to transition from a manager to a leader to a decision maker rests on business acumen, interpersonal skills and the ability to communicate effectively.

Core Competencies Figure 11

Core Competencies for EHS&S Professionals

Business Acumen

- Communications
- Business Operations
- Training
- Change Management
- Budgeting
- Project Management
- Stakeholder Relations

Technical Expertise

- EHS&S Risks
- Interpreting Regulatory Requirements
- Compliance Systems
- Waste Management
- Management Systems
- Air
- Industrial Hygiene

Interpersonal Skills

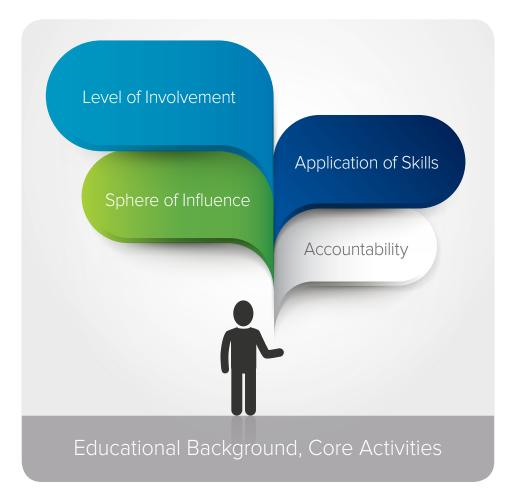
- Influencing Across Silos
- Motivating Others
- Managing without Authority
- Managing Unpredictability
- Team-building

Introduction ·

As EHS&S managers advance, they apply their core competencies in different ways

Technical knowledge, business acumen and interpersonal skills are the three core aspects of an EHS professional's skill set. As they progress through their careers, there are differences in how EHS professionals apply their core competencies to their role, their involvement with activities outside of their core 'function,' their level of accountability for the outcomes and the scope of their sphere of influence.

How Core Competencies are Applied to EHS&S Roles Figure 12



Collaboration is a key aspect of an EHS&S professional's job

As agents of change, EHS professionals are responsible for collaborating across functions to advance their programs. They do so, however, with limited direct authority except at the upper levels of management. Even then, the ability to collaborate, to communicate effectively and to be politically-savvy remain key skills as the sphere of their influence continues to broaden.

Introduction :

Advanced degrees and certifications are valuable for demonstrating expertise or helping EHS professionals round out their skill sets

While most professionals in the field tend to have bachelor's degrees in engineering or the sciences, 51 percent of respondents also hold a master's degree, and another 57 percent have specialized certifications. For some, a certification may pave the pathway for more rapid advancement, as described by one interviewee: "If I wanted to move up quickly in the profession I needed to supplement that because I don't have years of experience - so how do I make myself stand out? How do I prove that I'm more worthy than somebody else? [The certification] was the ticket to it."

EHS managers need to be self-directed

With job descriptions that provide a breadth of latitude, EHS management roles are best-suited to self-starters who can identify opportunities for continuous improvement and drive value through leadership. The initiative and creative problem-solving they bring to their work often means that successful EHS professionals have carved out unique roles for themselves within their organizational structure that would not be easily filled by just any other candidate with a similar skill set.

Leaders tend to have a growth mindset

Regardless of their level within a company, those who expressed an interest in a leadership position also demonstrated a desire to master new skills and actively sought out new opportunities to learn. Indeed, one interview respondent summed up his leadership advice as follows: "Being naturally curious and always being in a learning mode," he said. "I think the biggest thing that prevents a lot of people from progressing in our field is that they think that if they get a certification then it's just stop, or they think that if they get a degree... now they own the world. They get into their role but they just kind of do it fast enough; they don't try to learn further. That's one piece and then the second thing I would say is always trying to push the limits or always trying to kick up the ambition levels."



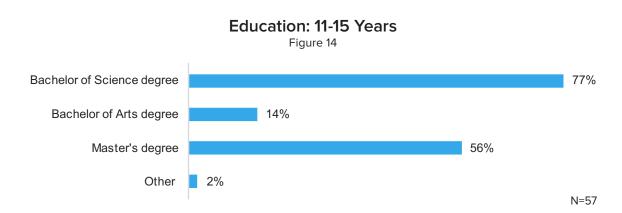
11-15 Years: Emerging Leaders

Focusing of Career Path and Increasing Sphere of Influence

While the first decade of a corporate EHS&S career may call on professionals to rely more on their technical knowledge, an important split takes place around the 11-15 year mark. This is when careers diverge into two distinct paths: one characterized by subject matter expertise, the other populated by "emerging leaders," or generalists who are involved in a broad range of EHS&S-related responsibilities. Each track may require EHS&S professionals to demonstrate management skills, but managers who are adept at selling their vision, navigating internal politics and driving business results will advance along a management path to the director level and beyond. In this profile, we'll explore the shifts taking place during this career stage and the factors that shape the direction emerging leaders are likely to go next.

Path to Their Current Role

For those with 11-15 years of EHS&S experience, career paths may have started very similarly. Equipped with a strong foundation in science or engineering (77%), these emerging leaders likely spent the first five years of their careers applying their technical background to the management of compliance processes, conducting safety trainings and learning some of the basic leadership skills they need to be effective. Those who intended to remain in EHS&S or who sought to accelerate their advancement may have begun pursuing certification in specific areas or started a graduate program in a specialty area (56%).



Master's Degrees: 11-15 Years Figure 15

Degree	Percentage
Environmental Science	19%
Public Health	11%
Engineering	9%
Environmental Management	5%
Industrial Safety	4%
Occupational Health	4%
Other	23%

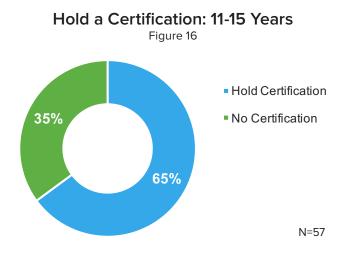
N = 57



During the previous career stage, today's emerging leaders likely gained direct management oversight for core programs such as permitting or auditing, while completing a master's degree or achieving a specialized certification (Figure 16, 65%).

It may also have been a time when EHS&S professionals were still relying more on their technical skills, as another interviewee explained: "Before, I was actually using my technical skills and knowledge on probably a day-to-day basis solving plant problems, working with other areas to ensure that they follow the regulatory requirements," she said. "I didn't have any direct reports, so it was more of an influencing role of making sure people did what they were supposed to do."

They also likely started demonstrating their affinity or aptitude for particular aspects of the EHS&S profession, either by developing advanced expertise in technical areas such as air permitting, or cultivating leadership skills such as communications or influencing. Looking back, those at the 11-15 year mark also credit their current role to specific choices, behaviors or organizational dynamics that started to shape their career at the 6-10 year mark.



According to the research, a company's overall succession model similarly shapes the path for today's emerging leaders. One interviewee, for example, described a corporate model in which EHS&S leadership positions are treated as 'rotations' for the business leaders who are being groomed for succession.

"They [the company] seemed to think that any manager can manage anything so the people that are managing the EH&S department have zero knowledge of EH&S," the participant said. "You knew they were in there for their two years...and then they would be gone and you would still be stuck there managing all of [the undesirable tasks] and they gave you zero support."

A corporate culture such as this may prompt an ambitious EHS&S professional to change jobs, as it did in the case of the interviewee quoted above. The same may likewise be true of a weak organizational commitment to EHS&S, as one iterview respondent pointed out. "I think one of the critical things is... understanding what the management commitment is to environment... you are somewhat limited by what the priorities of the management group are," the interviewee said.

Roles and Responsibilities: Diverging Career Paths

As described before, the role of a corporate EHS&S professional for the first 10 years is that of a technical expert who uses leadership skills to drive process improvements and ensure compliance. Around the 11-15 year point, however, an important split starts to take place between those who continue in a technical direction and those who start to gain responsibility for overall strategy and program management. This divergence reflects both organizational dynamics as well as individuals' own inherent interests and demonstrated skills.

In Figure 17, the titles of the survey respondents demonstrate a mix of those with a more technical focus (Specialist, Engineer) and those who are developing along a management path (Senior Manager, Coordinator, Vice President).



While the sample sizes are too small to correlate job titles to roles and responsibilities, the titles themselves suggest that even for those who work within a combined EHS&S function, emerging leaders may be assigned to sub-specialties such as environment, product stewardship, safety or industrial hygiene.

Perhaps because of the diversity of the survey audience, the data on the top responsibilities among those at this level (Figure 18) demonstrate a mix of more specific focus areas (e.g., environmental compliance and chemical management) and broad program areas (e.g., management information systems, setting EHS goals and internal health and safety communications).

Respondent Leads and Shares Responsibility or is Directly Responsible: 11-15 Years Figure 18

Responsibility	Percentage
Reporting to meet internal and external requirements	70%
Regulatory tracking	60%
EHS management information systems	58%
Information management	47%
Setting EHS goals	46%
Environmental compliance	44%
Chemical management	42%
Auditing	42%
Internal health and safety communications	40%
Health and safety training	39%
Incident and safety management	39%
Identifying key performance indicators for EHS	39%

N = 57

An important distinction among this group is that the full spectrum of their responsibilities extends well beyond their areas of direct leadership or responsibility. In fact, EHS&S professionals at the 11-15 year career stage are the most likely group to be involved without responsibility compared with all others included in the survey results (Figure 18).

Involved Without Responsibility by Years of Experience Figure 19

Activity Categories	0-5 Years	6-10 Years	11-15 Years	16-20 Years	21+ Years
Prevention and Disposal	33%	20%	28%	29%	22%
Tracking and Monitoring	25%	19%	28%	25%	22%
Compliance	28%	21%	30%	23%	20%
Health, Safety and Security	29%	28%	32%	18%	25%
Energy Management	15%	26%	29%	25%	25%
Products and Purchasing	9%	25%	30%	29%	29%
Reporting, Strategies and Communications	19%	27%	27%	27%	26%
Fleet Management and Transportation	8%	16%	16%	10%	18%
N=	29	46	57	64	290

Among the areas that rise to the top of involved without responsibility (Figure 19) are those that span both traditional EHS&S programs (e.g., emergency management preparedness and workers' compensation) as well as those that are associated with sustainability programs (e.g., supply chain engagement, product compliance, employee engagement, product stewardship and corporate annual reports). The broad scope of responsibilities at this stage reveals the growing scope of the emerging leader's role, for those called upon to share technical expertise as well as for those managing broader programs.

Responsibility for Top Activities: 11-15 Years

Figure 20

Activity	I am responsible but not involved with executing this activity	I lead this activity and I am directly responsible	I lead this activity but share responsibility with others	I am involved without responsibility
Supply chain engagement	2%	2%	9%	44%
Product compliance	2%	4%	9%	42%
Setting EHS goals	0%	18%	28%	40%
Emergency management preparedness	5%	12%	23%	40%
Employee engagement	4%	12%	14%	39%
Workers' compensation	2%	5%	5%	37%
Auditing	12%	28%	14%	35%
Due diligence	5%	23%	9%	35%
Identifying key performance indicators for EHS	4%	14%	25%	35%
Security/property protection	5%	9%	4%	35%
Health and safety compliance	5%	19%	25%	33%
Corporate annual reports	4%	11%	14%	33%
Setting sustainability goals	2%	11%	4%	33%
Process safety	4%	9%	14%	33%
Wellness programs	4%	5%	5%	33%
Building energy efficiency	2%	2%	7%	33%
Product stewardship	0%	2%	14%	33%
Procurement standards	2%	0%	11%	33%

N=57

The interviews also shed light on the transition from executing work to overseeing the work of others. One interview participant, for example, described her oversight of her company's auditing program, which is a core responsibility for those at the 11-15 year stage (Figure 20). "I'm busy developing our protocols for our auditing programs for this year," she said. "They're technical specialists... I don't do the audit. I follow up with the audit report and I support the teams that are put together to develop action plans for the audit findings."

This management role may mean interacting with facility-level EHS&S employees to ensure compliance or advance continuous improvement. "Now I manage six people, making sure that they are doing what they need to do to support the plant on a day-to-day basis," said one interviewee on a management track. "I still have to do the work, but most of my job is focused on making sure that I make the people that report to me successful in their roles and get what we need to get done."

In some cases, this can mean improving continuity between EHS&S programs at the plant level. "We just revised one of our best practices in January, so one of the things I do is attend their health and safety and environment meeting and do presentations on this particular best practice," one interviewee said. "I'm presenting to them on what the changes are to help them understand what their responsibilities are and how that impacts them."

Emerging leaders may also be responsible for managing the work of contractors, who perform some of the tasks that require specialized expertise, as one interview participant described: "I manage and support the response people so that when we have [contamination] that must be dealt with, we work with contractors to clean that up and deal with the management of incidents."

For another emerging leader with a sustainability role, her responsibilities include a stronger focus on program management and strategy. "Now that I have the community engagement work under me, a lot of my time is focused on maintaining everything [sustainable products and packaging, communication, employee engagement] but building a new strategy on engagement, alliance... and the public-private partnership and really using that as a platform for how we do business."

Knowledge Areas and Skills

According to survey data, this transition from direct responsibility to oversight of EHS&S programs is likewise reflected in the skills and knowledge areas that are most important to this career stage.

Technical Knowledge Areas and Skills

As might be expected, there is a strong correlation between the responsibilities of EHS&S professionals at this level and the knowledge they deem most important to their roles. In particular, the centrality of responsibilities such as reporting to meet internal and external requirements and regulatory tracking (Figure 18) aligns with the importance of knowledge of EHS risks (70%) and regulatory compliance systems (61%). Similarly, in the list of technical skills, interpreting regulatory requirements (57%) and risk assessment (43%) rise to the top.

Top Technical Knowledge Areas and Skills: 11-15 Years Figure 21

Technical Knowledge	Percentage	Technical Skill	Percentage
Environment, health and safety risks	70%	Interpreting regulatory requirements	57%
Regulatory compliance systems	61%	Written communications	52%
Waste management	30%	Oral communications	45%
Industrial hygiene	25%	Risk assessment	43%
Management systems	25%		45%
Behavioral safety	21%	Interpreting technical concepts into accessible language	41%
Information management	18%	Training	34%
Wastewater	18%	Auditing	32%
Air	16%	Additing	32 /0
Chemistry	12%	Innovation development	20%
Environmental science	12%	Quantitative analysis	14%
Ergonomics	12%	Process safety management	11%

N = 57

During this stage, interview participants described their technical skills as serving more as a context for their work than the work itself. According to one interviewee on a management track: "I'm a generalist at this point in my life...If I had to get back into the nitty-gritty of general task management, I could... I was a technical person. But at this point, my teams are specialists. I've got my energy guy... I've got my community engagement communications person... I've got a guy that comes from R&D."

Another interview participant described her technical skills as a core competence, but less important to her daily management role than other skills. "My core strengths, my technical skills... I couldn't do a lot of things without those, but at the same time I think those are easier to come across," she said. "What gets me through the day are soft skills, that's personal skills. I mean, I can be as technically competent as I want to be, [but] if I can't get this information to the people that need it in a way that they feel comfortable and that they'll use it, it doesn't really matter what I've done on a technical level."

Business Knowledge Areas and Skills

Business knowledge and skills are increasingly at the core of EHS&S professionals' success as they progress through their careers. At the top of the list of importance among survey respondents was communications skills (82%), which one interviewee explained as follows: "I would make any new hires come in and do a 20-minute presentation because we live in PowerPoint and being able to speak effectively is still critical," she said. "Sometimes I have to take a 35-minute presentation and boil it down to 2-5 or five talking points for my CEO."

Top Business Knowledge Areas and Skills: 11-15 Years Figure 22

Business Knowledge	Percentage
Communications	82%
Business operations	59%
Training	57%
Budgeting	46%
Stakeholder relations	25%
Marketing	11%

Business Skill	Percentage
Decision making	54%
Program management	51%
Change management	39%
Strategic planning	37%
Policy development	32%
Project management	32%

N = 56 N = 57

The top business skills, such as program management, change management and strategic planning, also line up closely with respondents' list of responsibilities and their evolving roles as leaders in their organizations. Of cardinal importance to those at this level, however, is decision making (54%), which one interviewee explained like this: "I don't think you can succeed, at least in the EH&S world, if you choose not to make a decision," she said. "Having to make decisions and work with operations to get them aligned with where they need to go is a huge thing... We are supposed to [support the facilities] and make their life easier. It doesn't [always] happen, but the least we can do is give them a decision that will help them."

Interpersonal Skills

As EHS&S professionals become more involved with activites across their function, influencing across silos becomes more important, increasing from 53 percent among those with 6-10 years of experience to 58 percent among the emerging leaders. One interviewee explained it this way: "I had to prove my abilities, so I did that early on from a technical standpoint. But to get to where I am and be successful, it's the people [skills]. You have to relate to people, you have to be able to deal with people below, peers above and be able to manage up and manage down to get them to think differently," she said.

At the same time, as the scope of their involvement with EHS&S-related issues continues to grow, survey respondents identify managing without authority (47%) and motivating others (47%) as among their top skills.

Top Interpersonal Skills: 11-15 Years Figure 23

Interpersonal Skill	Percentage
Influencing across silos	58%
Managing without authority	47%
Motivating others	47%
Influencing upward	46%
Conflict management	30%
Managing unpredictability	30%
Team-building	26%
Managing others	25%
Negotiation	14%

N = 57

Getting to the Next Career Stage

During the next stage of their careers, those who have achieved a level of success and recognition will face more choices about how to proceed. According to the survey respondents, those who advance will continue to shed some of the technical aspects of their job (Figure 21) as their roles start to emphasize management systems, hiring and staffing, external relations and team-building.

The following table summarizes the responsibilities and competencies that are more important to professionals at this level than to others at other stages of their careers.

Important Competencies during 11-15 Years

Figure 24

Responsibilities

- · Worker rights
- · Process safety
- · Incident and safety management
- Ergonomics

- · Product compliance
- · Health and safety compliance
- · Health and safety training

Knowledge

Technical

- · Regulatory compliance systems
- · Environment, health and safety risks

Business

- Marketing
- Budgeting
- Communications

Skills

Technical

- Risk Assessment
- · Innovation development

Business

• Timeline management

Interpersonal

- Managing others
- Negotiation
- Conflict management

Attributes

- · Objective
- · Respectable
- · Sense of Humor
- Compassionate

Behaviors

- · Customer service-oriented
- · Business acumen
- Delegates

As EHS&S professionals advance, new skills will gain importance. To help provide guidance to those who are seeking advancement, the following chart summarizes the responsibilities and competencies that will be important at the next stage.

Important Competencies for Progressing to 16-20 Years

Figure 25

Responsibilities

- · Energy and carbon data management
- · External sustainability reporting
- · Air pollution
- Waste recycling
- Storm water

- Wastewater treatment
- · Setting sustainability goals
- · External marketing communications
- Employee engagement

Knowledge

Technical

- · Management systems
- Environmental remediation
- Air
- · Radiation safety

Business

· Stakeholder relations

Skills

Technical

Training

Business

- · Project management
- · Hiring and staffing

Interpersonal

- Influencing across silos
- Team-building

Attributes

Trustworthy

Behaviors

- Multi-tasking
- · Provides constructive criticism

Those who have reached a plateau in their careers might look to mentoring or new program areas to keep themselves engaged. "I need some more stuff to do because [my current role] is not challenging anymore," one participant said. "I have gotten to this point and now it's just maintaining; that's kind of boring. I have never done that before, so I need more activity to keep my time active."

For some, that next step might bring new opportunities to use their foundational knowledge to create management systems or advancing to a corporate role where they can harmonize processes across the company. "I don't know how many people have been coming to the small plants to say, 'Hey, let's look at this holistically and let's start putting some systems together," one interview participant said. "I think it really helps to have some of that cohesion with all the different facilities... because all of the OSHA stuff is the same, so why I'm creating a first-party audit for lockout if somebody else already has a good one, but I just can't find it?... That's where I would love to go."

Others might seek to apply their EHS&S skill sets to new challenges, particularly in the area of sustainability. "I would like to expand and learn a little bit more about the whole aspect of sustainability," one interview participant said. "I find that interesting. There's an environmental component but also some beyond-environment [aspects, including] economics and human rights."

One interviewee who had started this transition, for example, described her satisfaction with her emerging responsibilities that blended a technical foundation with an increasingly external-facing role. "The stuff I'm working on is so inspiring to me," she said. "I'm very happy with how my career has evolved. At the end of day, I have no idea what's going to happen to me, but it's sort of an interesting path I took. And I think this connection around water and climate change impacts [makes it] really exciting working [in this field] right now."

Supplemental Information

The full survey included questions on respondents' education, professional background, salary and the behaviors and attributes that are critical to success in their role. Below are supplementary figures for professionals with 11-15 years of experience.

Salary: 11-15 Years
Figure 26

25th Perc	entile	50th Percentile	75th Percentile	100th Percentile	Average
\$78,15	53	\$98,000	\$111,500	\$235,000	\$98,120

N = 38

Bachelor's Degrees: 11-15 Years Figure 27

Degree	Percentage
Environmental Science	19%
Biology	16%
Environmental Engineering	12%
Chemistry	11%
Chemical Engineering	9%
Business	5%
Civil Engineering	5%
Occupational Safety	5%
Industrial Hygiene	5%
Industrial Engineering	4%
Mathematics	4%
Other	16%

N = 57

Top Certifications: 11-15 Years Figure 28

Certification	Percentage
Six Sigma Green Belt	21%
CSP - Certified Safety Professional	18%
CIH - Certified Industrial Hygienist	12%
CHMM - Certified Hazardous Materials Manager	11%
LEED – Leadership in Energy and Environmental Design	7%
CEA - Certified Professional Environmental Auditor	5%
EMS-LA – ISO 14001 Environmental Management Systems Lead Assessor	5%
REM - Registered Environmental Manager	5%
Six Sigma Black Belt	5%
PE - Professional Engineer	4%
Other	11%

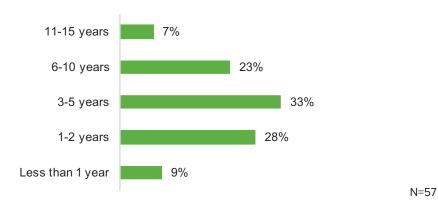
N = 57

Years in an EHS&S Role: 11-15 Years

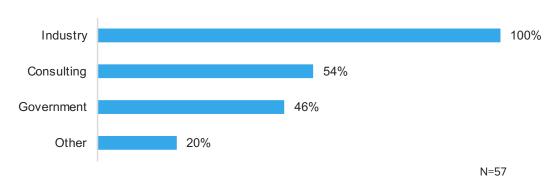
Figure 29 11-15 years 68% 6-10 years 16% 3-5 years 9% 1-2 years 4% Less than 1 year 2% N=57

Years in Current Job: 11-15 Years

Figure 30



Sector Experience: 11-15 Years Figure 31



Most Critical Behaviors and Attributes for Being Effective in Current Role: 11-15 Years Figure 32

Critical Behavior	Percentage	Critical Attribute	Percentage
Action-oriented	47%	Approachable	47%
Attention to detail	35%	Accountable	44%
Considers stakeholder interests and concerns	35%	Callah anakhua	4.40/
Multi-tasking	35%	Collaborative	44%
Positive attitude	32%	Committed	37%
Business acumen	30%	Ethical	33%
Customer service-oriented	30%	Flexible	33%
Systems thinker	28%	Respectful	32%
Good listener	26%		
Long-term thinker	26%	Objective	28%
Deals well with ambiguity	23%	Trustworthy	28%

N = 57

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