GEMI 3rd Quarter 2007 Benchmarking Survey:

Risk Management

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This presentation regarding the risk management survey is organized around the following topics:

- Risk Process—In General
- Risk Identification and Evaluation
- Risk Management
- Organizing for Risk Management
- Risk Communication
- Climate Change
- Next Steps
- Summary
- Appendix

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Risk Process—In General

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This survey explored how GEMI members manage environmental, health, and safety risk.

- Survey response rate was approximately 46%
  - 19 out of 41 member companies responded to the survey
  - Not all companies completed all questions
- Broad industry coverage
- Wide range in company size
  - Annual sales of participants ranged from $2.7 billion to $53.3 billion, with an average (mean) of $23.1 billion.
- Thank you to all participants!

Almost all companies use a definition of risk similar to the one included in the survey instructions.

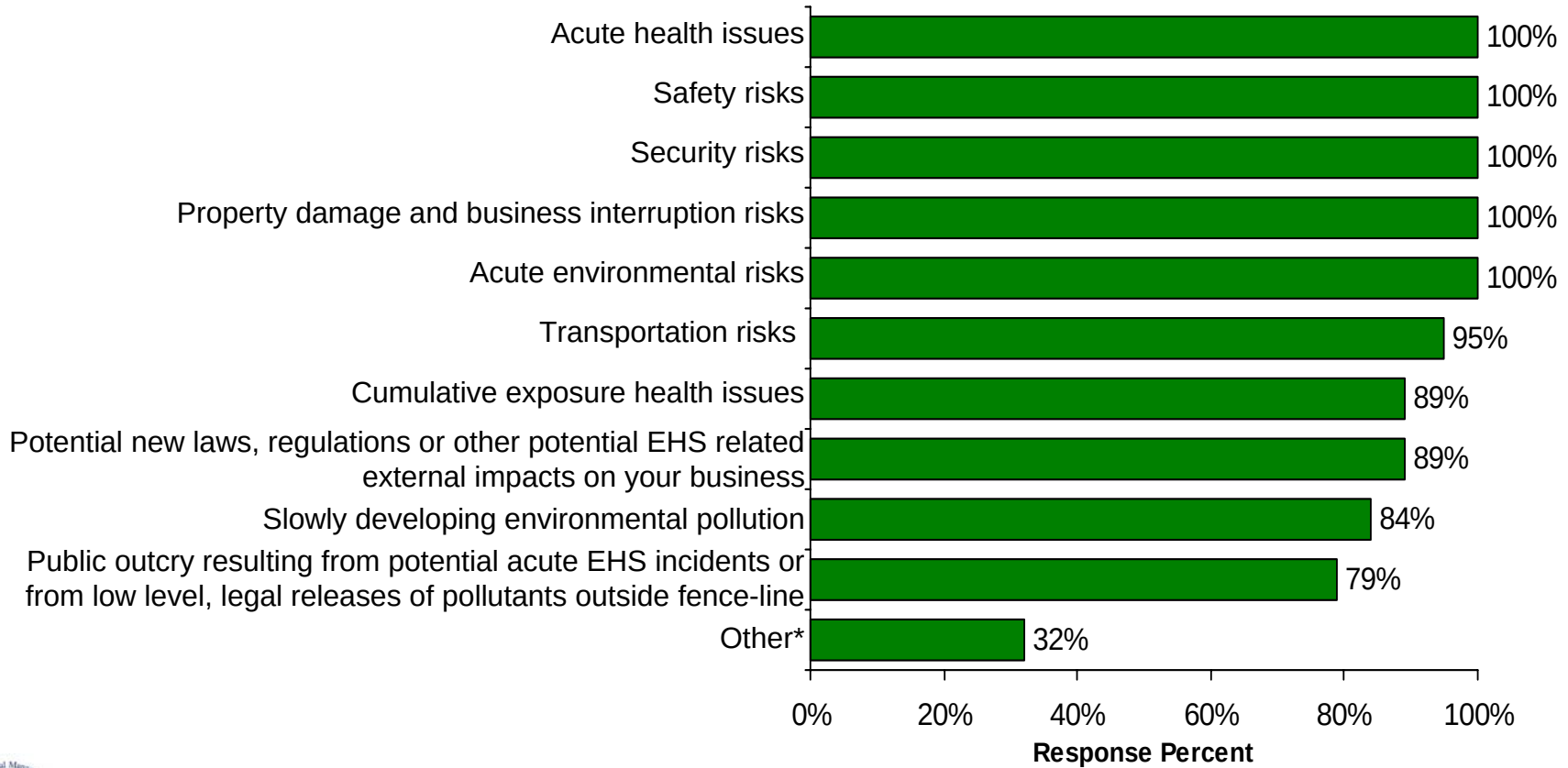
Survey Definition
"Risk": the potential for realization of an undesired event in terms of event likelihood and severity of consequences. **Unless otherwise indicated, the types of risks encompassed by this survey are those related to adverse environmental, health, or safety consequences. This includes environmental risk, health risk, occupational safety risk, process safety risk, product safety risk, and transportation safety risk.**

Q1. If your company uses a definition of risk materially different from the one stated above, please indicate your definition in the space provided. (n=3)

- A measure of uncertainty. The likelihood of an adverse effect occurring and its severity. Both hazard and exposure influence risk.
- We consider risk in the same terms as defined above but have not come out with a formal definition.
- Any business activity that has a reasonable potential, either abruptly or from cumulative exposure, to cause injury to people, environmental impairment, damage to facilities or unplanned production interruption.

Overall, companies are similar in the types of EHS risks that they consider and evaluate.

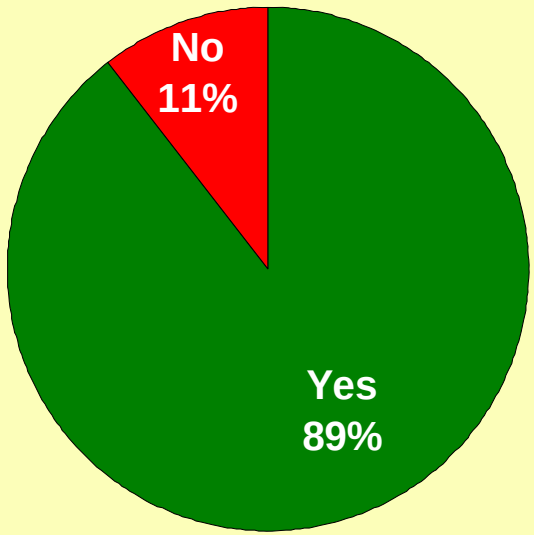
Q2. What kinds of risks does your company consider and evaluate? (n=19)



***Other includes: 1)** Supplier, reputation, CSR, ethical sourcing, "food issues" such as trans fats, allergens or obesity; 2) Risk to reputation and brand, product-related risk; 3) Biosafety (bacterial/viral risks); 4) Business continuity planning; 5) Risks associated with product design and supply chain; 6) Environmental aspects' impacts on costs of goods sold and sales*

Almost all companies (89%) follow a formal risk management process, although it is not necessarily a company-wide process, and the nature of the process may depend on the risk in question.

Q3. Does your company follow a formal risk management process? (n=19)



Comments

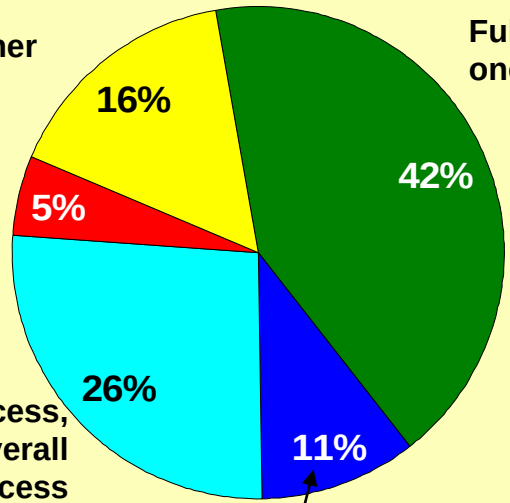
- We have several formal risk management processes, not one formal process.
- There is not one formal process. Different processes are used depending on the type of risk.
- There are several narrowly focused risk management processes operating in parallel. There is no formal corporate risk management system.
- There is a formal EHS risk analyses/mgt process, there is also a link into our integrated planning process and crisis mgt process.
- The Company utilizes a formal enterprise level risk management process. HSE & Sustainable Development risks are integrated into this corporate framework.
- For some processes but not all.
- In many cases. Formal standards are not in place.
- We have begun piloting an environmental business risk analysis looking at environmental aspects' impacts on costs of goods sold and sales.

**** See Appendix for additional comments related to this question.***

A number of companies (42%) fully integrate EHS risk management processes with overall risk management processes.

Q4. To what extent is your company's EHS risk management process integrated with the overall risk management process? (n=19)

- The Company utilizes an enterprise wide process with central control as well as organizational processes with decentralized administration.
- There is a formal EHS risk analyses/mgt process, there is also a link into our integrated planning process and crisis mgt process.
- Integrated on projects as needed.



- Risk Management is undertaken throughout the company at all levels by different functions. It is coordinated by Risk and Compliance Committees at group level and in each region. At each site, a full EHS risk assessment program is required. In addition there are business continuity and risk engineering activities at each site.
- 2006 formal Enterprise Risk Management process analyzed EHST risk in detail.

- We coordinate with other functional groups but do not use the same risk assessment methods.

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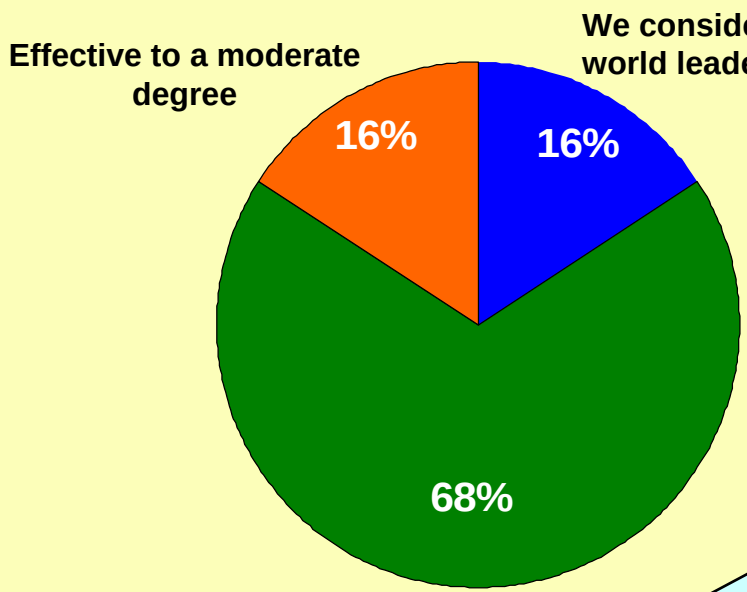
All companies report that their risk management processes are effective; three consider themselves world leaders.

Q5. How effective do you consider your company's risk management process? (n=19)



- We have begun piloting an environmental business risk analysis looking at environmental aspects' impacts on costs of goods sold and sales. We anticipate being a leader by year-end.
- The degree to which risk management processes are implemented varies across the organization.
- On the high hazard side of the business, the effectiveness would be world leader in process.

**** See Appendix for additional comments related to this question.***

However, all companies identified aspects of their processes that could be improved, particularly those related to dealing with the outside world.

Q6. Which aspects of your company's risk management process require improvement? (n=19)

Additional Comments

- Process for hazard identification at site level could be improved in some cases.
- Prioritizing of resources could be improved.
- Better coordination within various departments that are evaluating various aspects of EHS risks and scenario planning, completion of integration of processes after last major merger.
- We have begun piloting an environmental business risk analysis looking at environmental aspects' impacts on costs of goods sold and sales.

- Exposure / likelihood assessments
- Group and regional level processes are highly developed. Some individual processes at site level could be improved.
- Improvement in quantifying risk in relation to EHS risk
- We have a solid SHE risk management process. However, it has not extended fully to other enterprise risks such as legal, quality, HR, etc.
- Potential impacts from future laws/regulations are evaluated using a separate system that could be integrated into main program.

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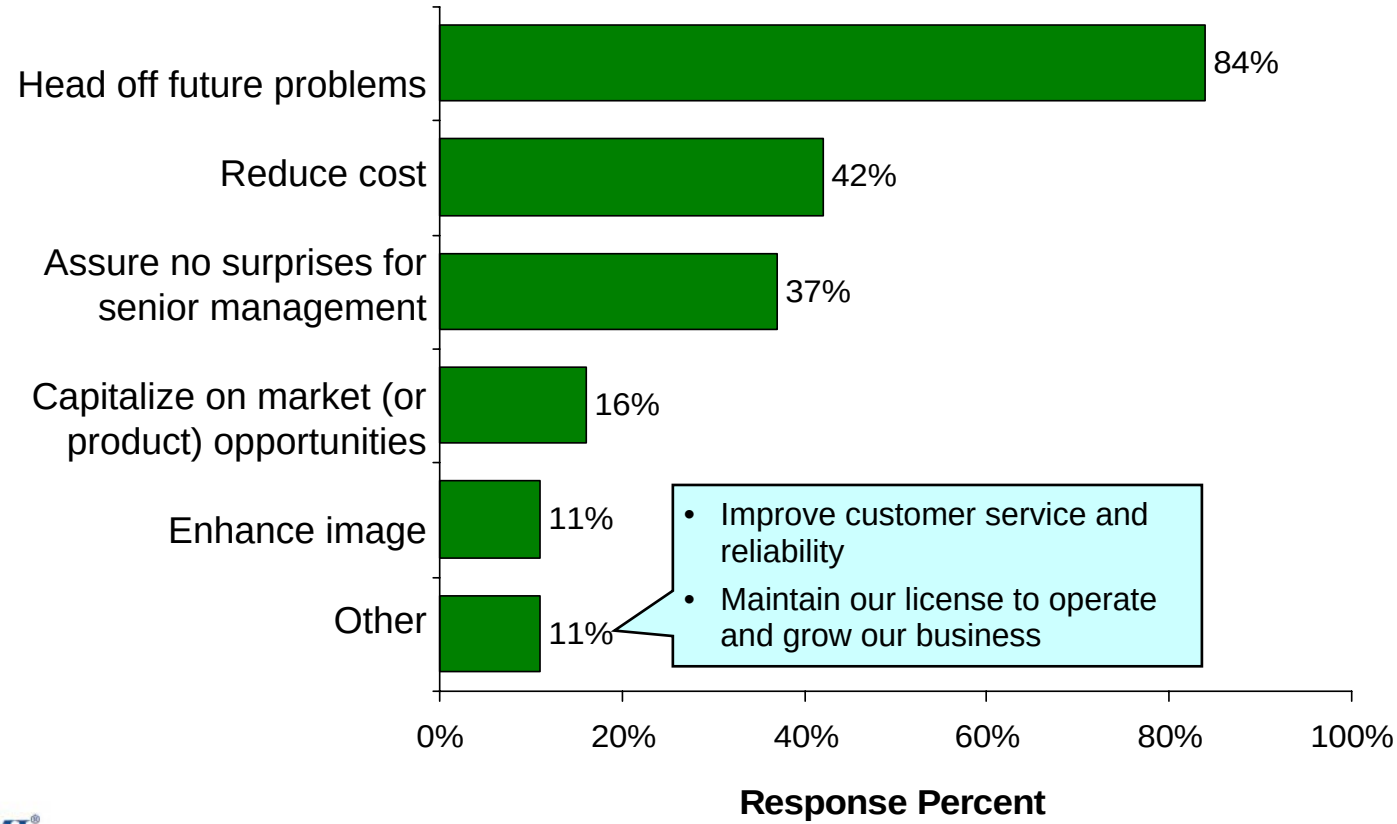
Most companies (84%) saw managing risks as a valuable way to head off future problems.

Q7. Indicate the top two potential sources of business value to be gained through managing risk (n=19)



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Risk Identification and Evaluation

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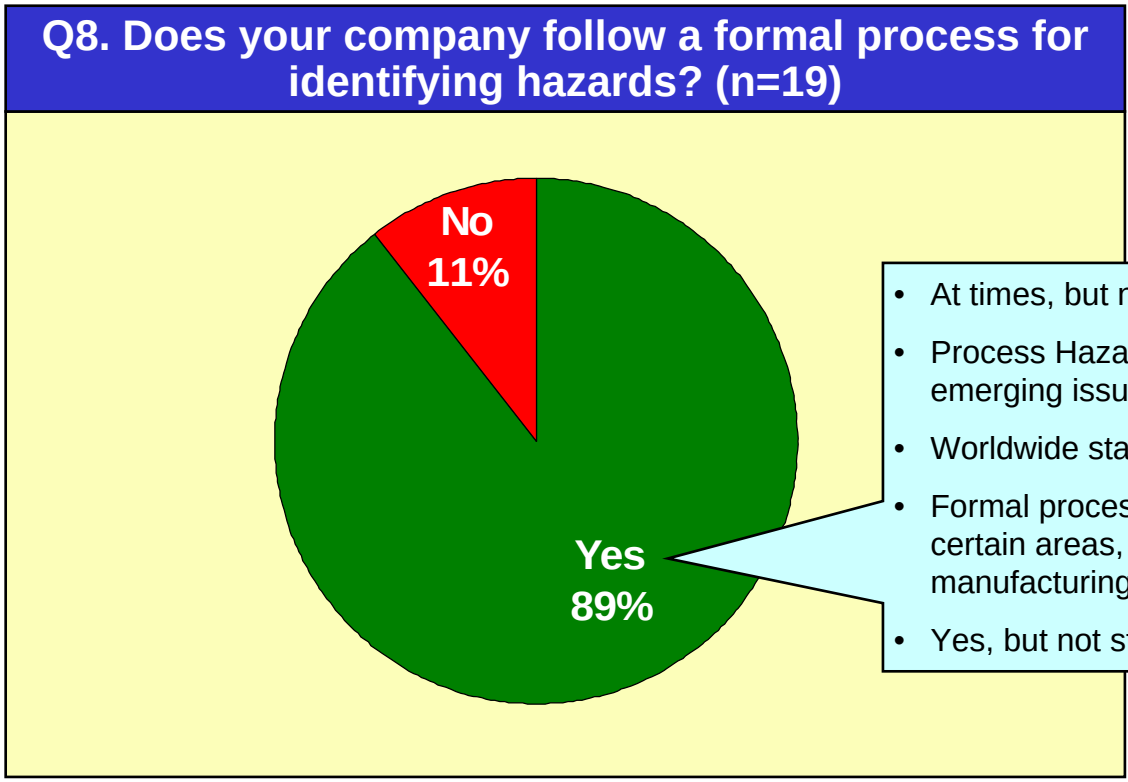
Almost all companies (89%) follow some type of formal process(es) for identifying hazards.



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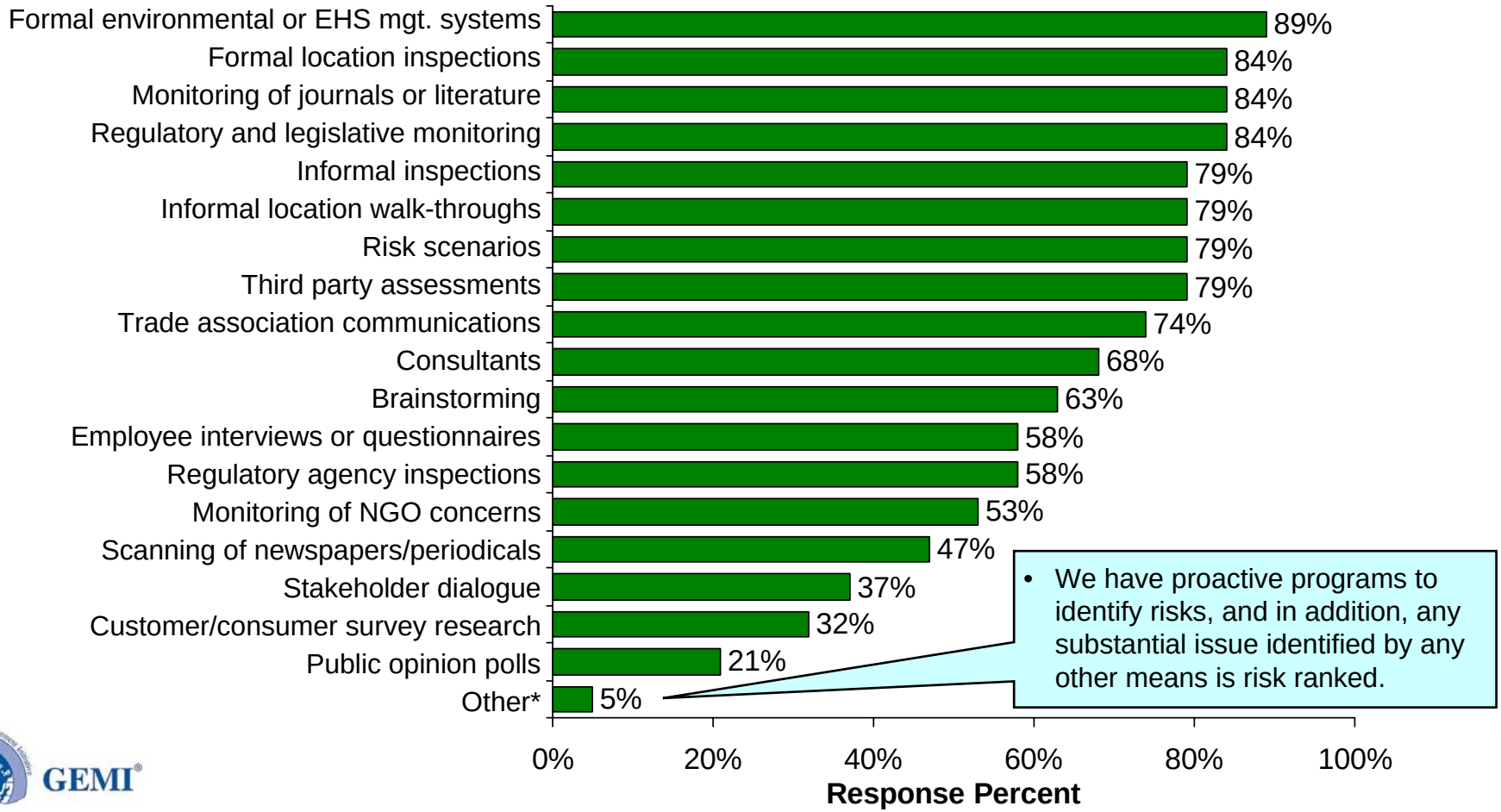
Companies use a wide range of techniques to identify hazards.

Q9. What are the principal techniques your company uses to identify hazards that give rise to risk (n=19)



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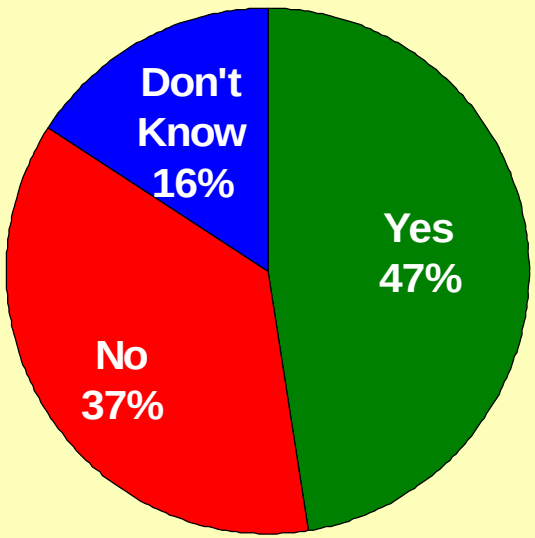
Almost half of respondents (47%) use quantitative thresholds to determine which risks to evaluate/assess.

Q10. Does your company have quantitative thresholds in place to determine whether particular risks should be evaluated?



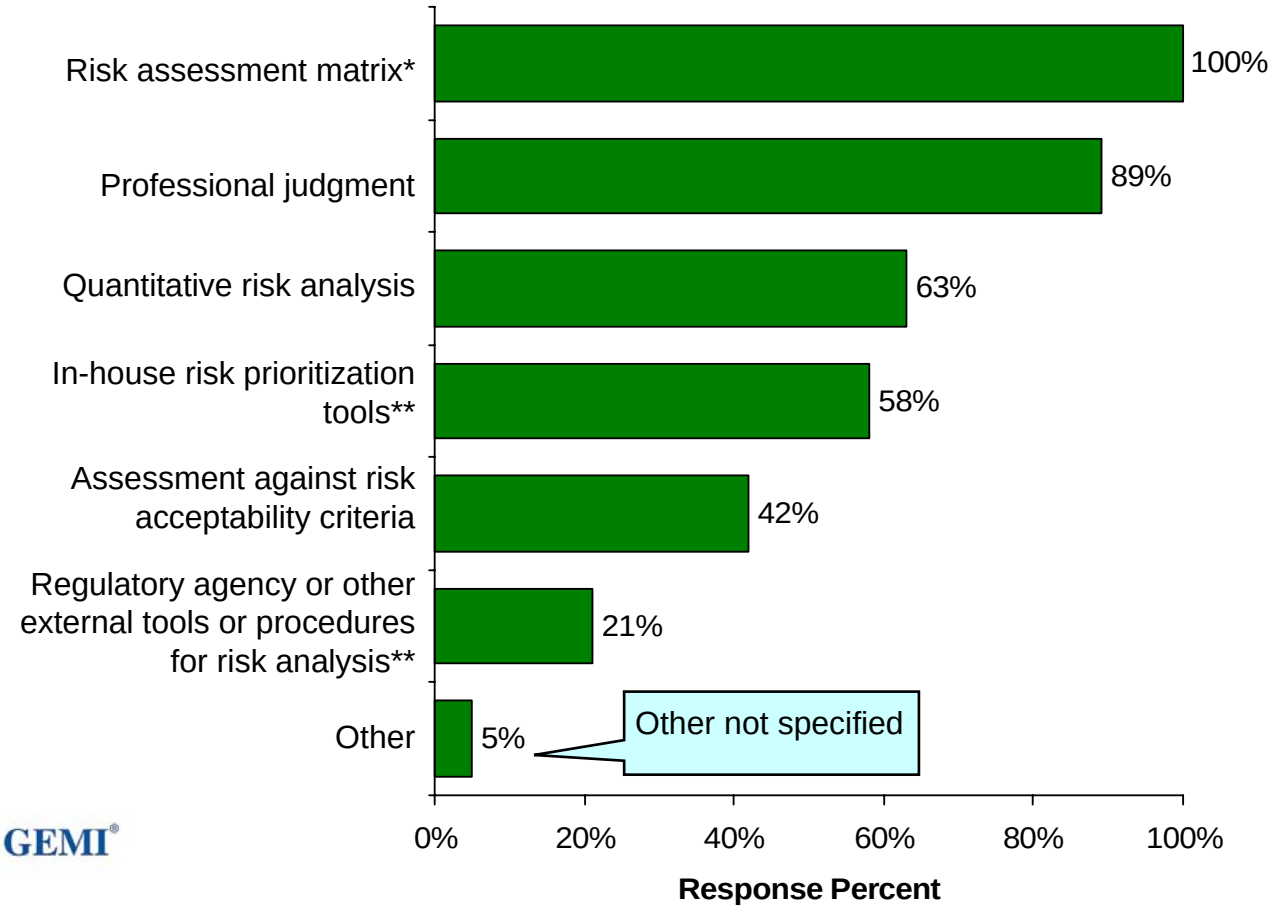
n=19

If yes, please describe briefly (n=9)

- The nature of the quantitative threshold depends on the risk being evaluated. For example, when conducting a due diligence review for a potential acquisition there is a specific material threshold that determines whether to continue with the acquisition. Also, the ERM Committee completes assessments across the world based on risks that would have an impact of 5% or more of shareholder market value.
- Our program requires teams of multi-discipline HES experts to develop potential scenarios and risk rank the scenarios. Until a scenario or issue is identified, a quantitative threshold cannot be established. Once a scenario or issue is risk ranked, our program, depending on the risk ranking, specifies: 1) actions that must be taken to better define the risk, 2) that risk mitigation options must be identified, and for higher risks, 3) the level of management that must review the risk and consider potential mitigation opportunities.
- Quantitative thresholds are used in certain cases but not in all.
- Financial materiality and business interruption.
- Severity ($$) and probability (# of engineering & administrative controls)
- Established hierarchy of decision-making steps for the Risk and Compliance Committees
- Process safety management
- Regulatory limits
- In some instances, the Corporate HSE performance standards provide quantitative thresholds for further evaluation.

All companies use the standard risk assessment matrix to evaluate risks; most (>50%) also use professional judgment, quantitative risk analysis, and in-house risk prioritization tools.

Q11. Indicate the principal tools or techniques your company uses to evaluate or assess risk (n=19)

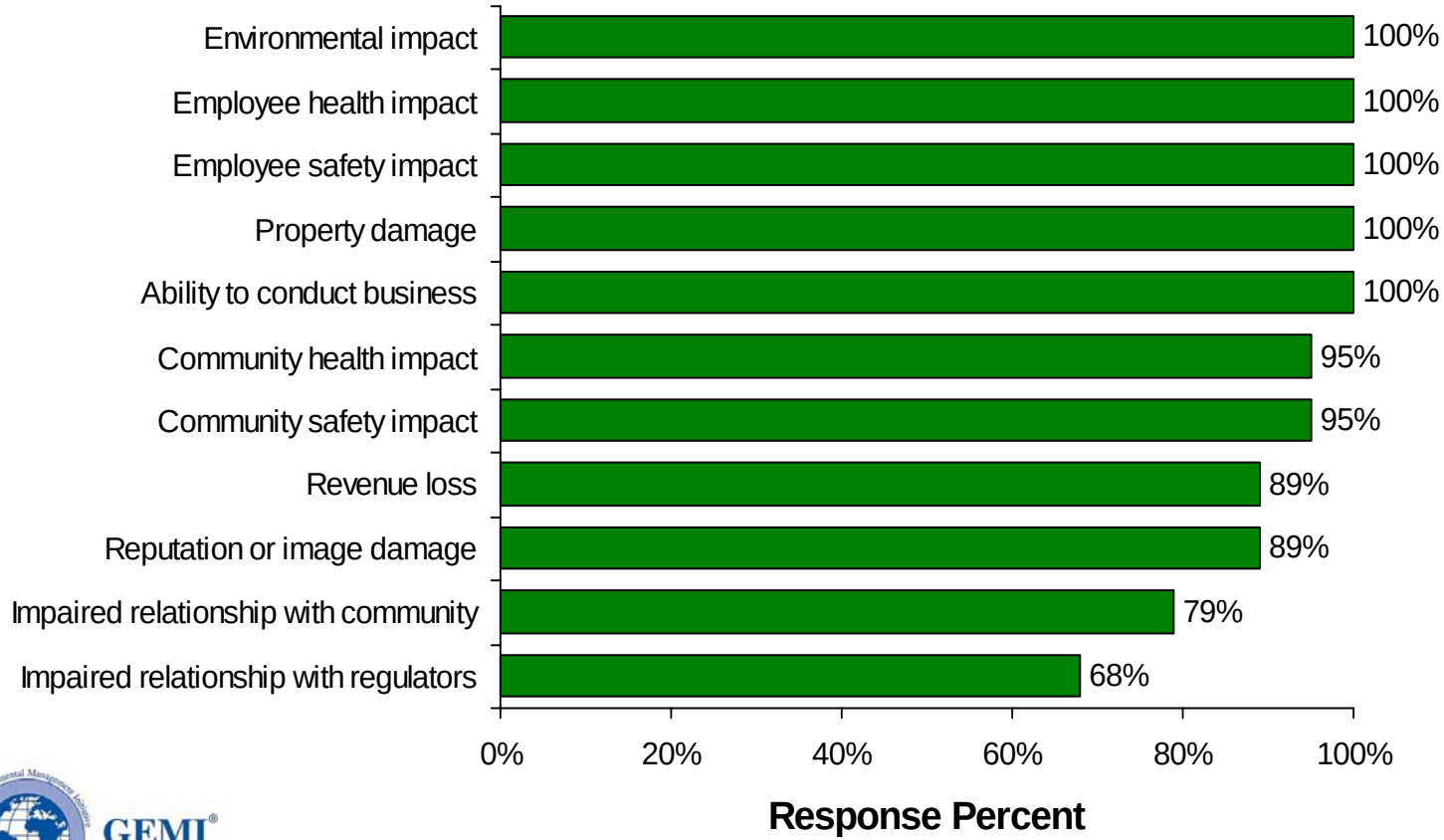


***A risk assessment matrix is a qualitative analysis of probability and severity of consequences in matrix form.**

****See Appendix for a description of in-house risk prioritization tools and external risk analysis tools used by respondents.**

All companies consider a wide range of possible adverse consequences when assessing risk.

Q12. If characterization of the severity of consequences is part of your company's risk assessment process, what types of consequences does your company consider? (n=19)



Additional Comments

- These are all logical consequences that most would consider in any risk assessment. Most business decisions on risk would have to involve all of these areas.

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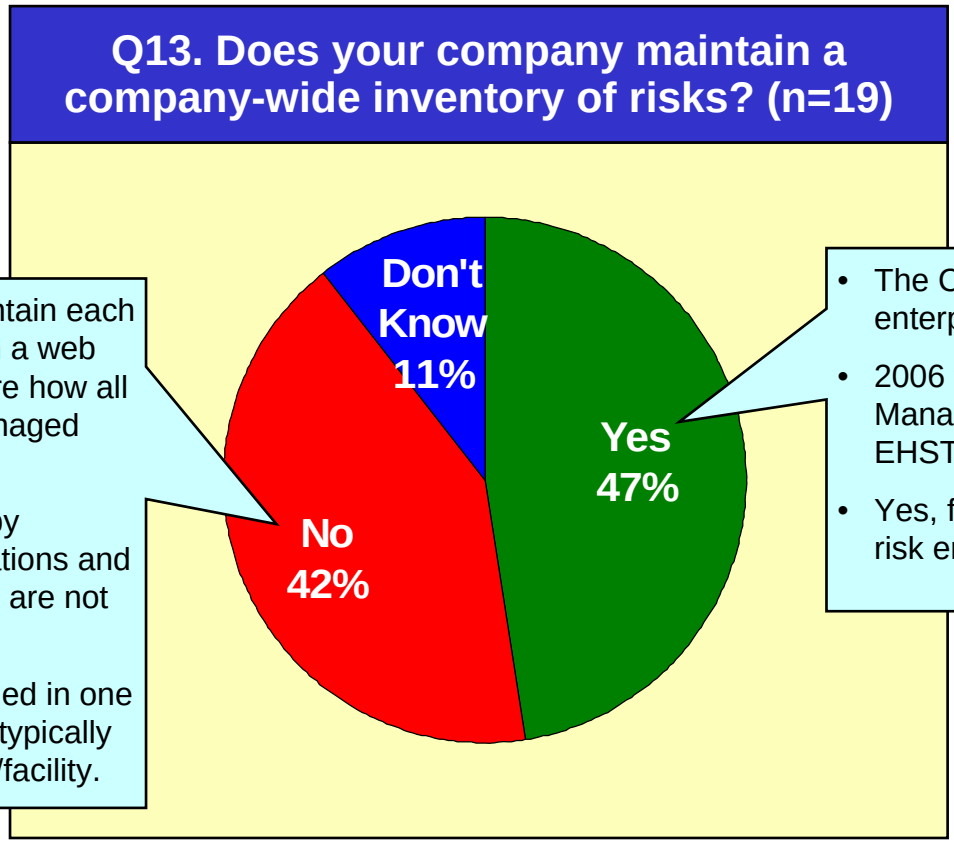
Almost half of respondents (47%) maintain a company-wide inventory of risks.

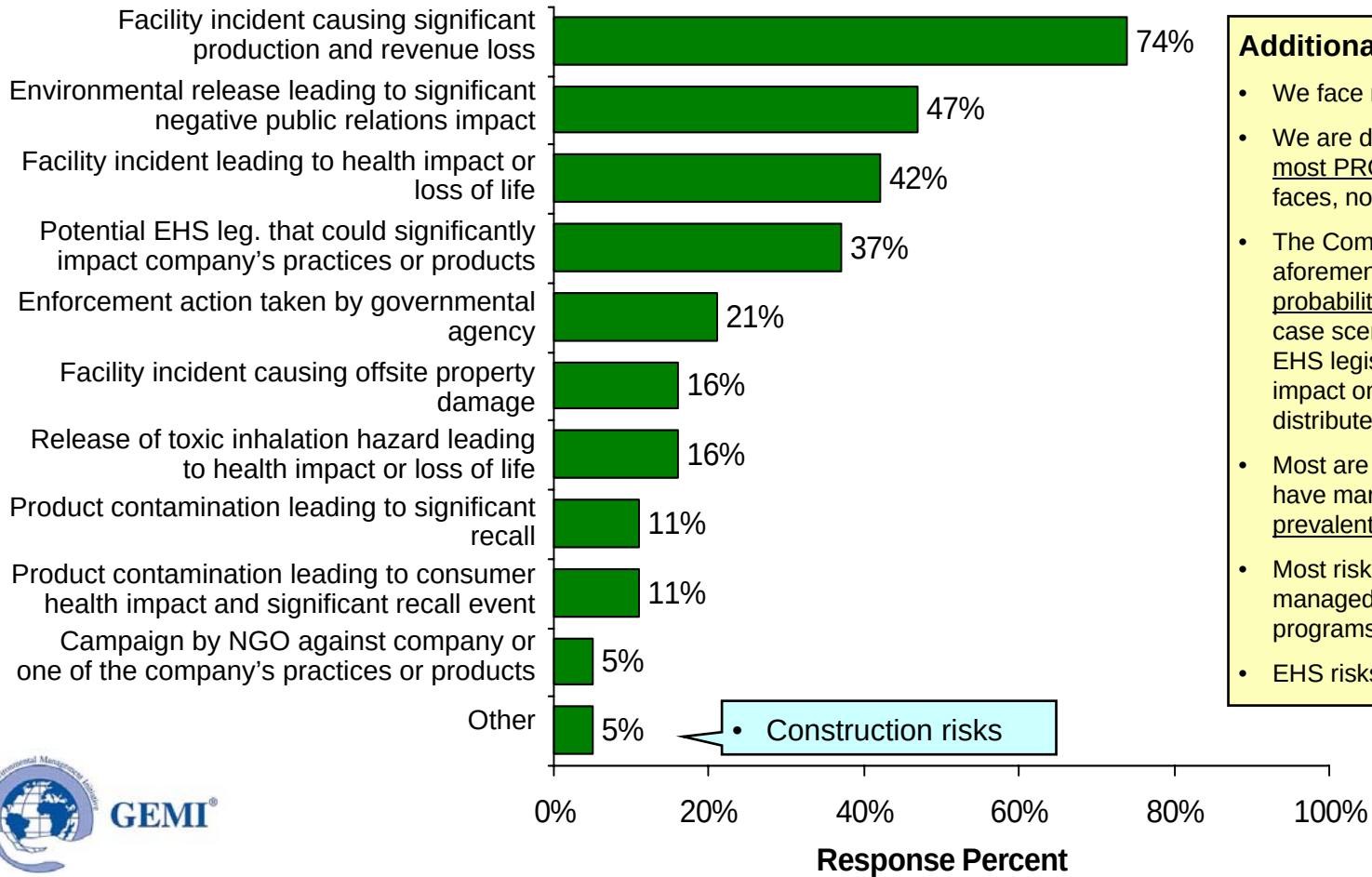


- The EHS risk tool does maintain each site's risk assessment within a web based tool; however, not sure how all other business risks are managed from a records standpoint.
- Inventories are maintained by separate functional organizations and businesses, but overall risks are not managed comprehensively.
- These have not been compiled in one place for entire corporation; typically maintained by business unit/facility.

- The Company maintains an enterprise level risk map.
- 2006 formal Enterprise Risk Management process analyzed EHST risk in detail.
- Yes, for business continuity and risk engineering issues.

The principal risk faced by most companies (74%) is a facility incident that causes significant production and revenue loss.

Q14. Please indicate the principal risks your company faces. Specify no more than three. (n=19)



Additional Comments

- We face many more than 3 of these.
- We are defining this question as the most PROBABLE risks our company faces, not principal risks.
- The Company could face any of the aforementioned risks; however, the probability of occurrence and worst-case scenario varies widely. Pending EHS legislation could have a significant impact on the company's ability to distribute products in particular markets.
- Most are a risk to our company, but we have marked the three that are most prevalent on our risk inventory.
- Most risks listed above are effectively managed through company EHS programs and business systems
- EHS risks are not that significant

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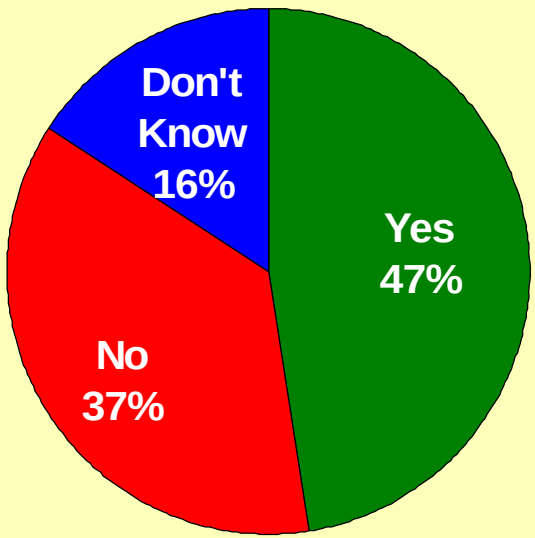
Almost half of respondents (47%) use risk assessment techniques to evaluate opportunities for cost savings or avoidance.

Q15. Does your company use risk assessment techniques to evaluate opportunities for cost savings or cost avoidance? (n=19)

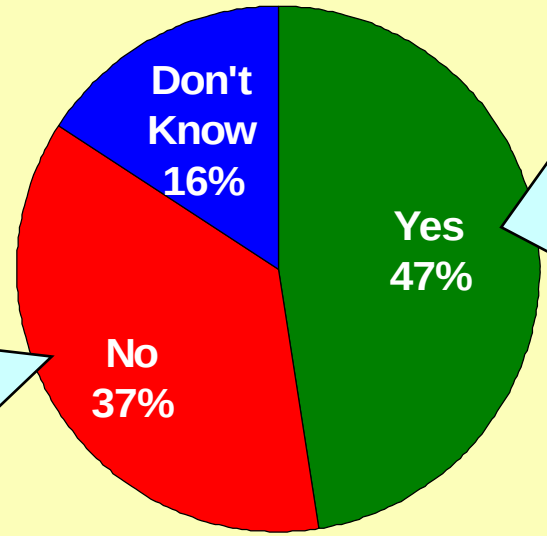


If yes, please describe briefly

- We have begun piloting an environmental business risk analysis looking at environmental aspects' impacts on costs of goods sold and sales.
- The Company's HSE Risk Management methodology utilizes potential cost estimates for property damage, revenue at risk and supply chain interruption as worst-case severity considerations.
- Cost avoidance is a major driver for risk reduction.
- Recently piloted a risk based approach to address loss prevention recommendations. The LOPA tool has been evaluated to help identify cost avoidance/cost savings based on risk.
- Risk assessment matrix and professional judgment used to prioritize risk and assess opportunities.
- Part of risk management
- Judgment is applied to trade-off costs versus "high" risks (severity and probability) and schedule impacts. We do not have a fixed formula.
- We identify risk reduction measures early on in a project.

Almost half of respondents (47%) also have a process to identify and evaluate risks that could impact their customers.

Q16. Does your company have a process in place to identify and evaluate risks that could affect your company's customers? (n=19)



- We are moving towards implementing such a system at this time.
- Trying to standardize.

- But not related to EHS.
- We consider our wholesalers as our customers.
- Today, our customers, shareholders, and other stakeholders are increasingly interested in how our products contribute to sustainable development. Over the last year, we have had several inquires from investors and key customers about the environmental profiles of its products and how they fit into the company's larger sustainability strategy including products that can be used towards green building certification and greenhouse gas/energy management. *[See Appendix regarding Comments to Q. 5 for additional discussion on this subject.]*

Risk Management

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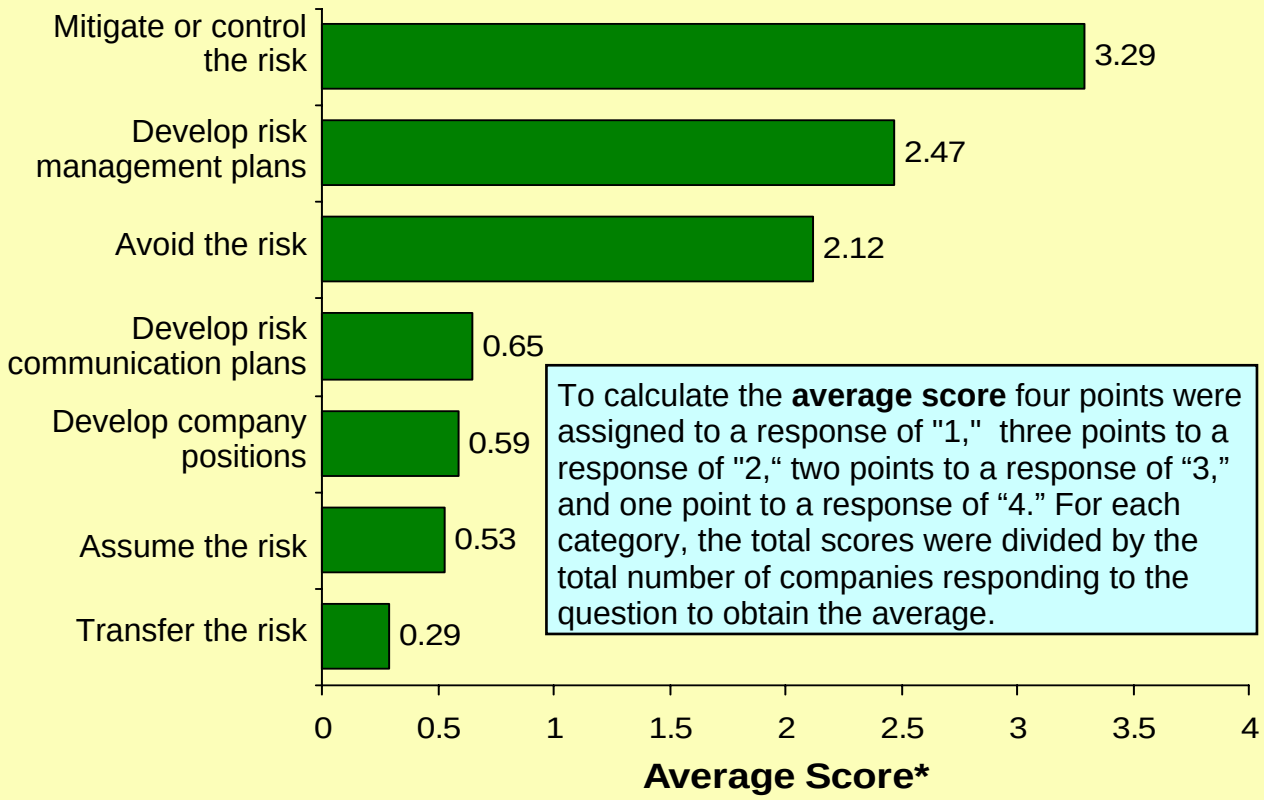
The two most common techniques used to manage risk were mitigating the risk and developing risk management plans.

Q17. Indicate the principal techniques your company uses to manage risk (select and rank your top four). (n=17)



To calculate the **average score** four points were assigned to a response of "1," three points to a response of "2," two points to a response of "3," and one point to a response of "4." For each category, the total scores were divided by the total number of companies responding to the question to obtain the average.

Additional Comments

- The most common technique is actually a combination of mitigation, assumption and transfer.
- Avoiding the risk is preferred, but is often not feasible in the short term. We do include pertinent learnings into the RD&E program so that identified risks can be avoided in the medium- long term.
- Prioritize risks to mitigate
- No formal process for transfer and avoidance reporting. Current risk listing is updated on a continuous basis, including deletion of resolved items.
- This prioritization applies to HSE risks.

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Q18. Which risks not currently being actively managed by your company do you believe will become an important area for your company to manage in the next five years? (n=14)

- Green product initiatives, global expansion of chemical management regulation and risk reduction efforts based on precaution
- Water shortages
- We consider that the upcoming carbon tax and nanotechnology could become important risks; however, we are currently managing those potential risks.
- While we are actively managing security risks, we think government/public perception of the risk of a terrorist attack is likely to require additional mitigation in order to meet their expectations.
- License to operate our facilities, impact of company operations on customer sites (license to operate, brand risk, etc.), global consistency of labor management.
- Unknown, but potentially: 1) preserving intellectual property in developing countries; and 2) talent management/skilled labor acquisition and retention in developing countries
- Environmental business risk or environmental aspects' impacts on costs of goods sold and sales.
- Off-site groundwater issues
- Interaction of chemicals (human and ecological impacts) to a more sophisticated degree than today
- Pharmaceuticals in the environment and clean water
- Business continuity
- Risks anticipated to be a priority over the next 5 years are being actively managed
- Not EHS
- Don't know

Organizing for Risk Management

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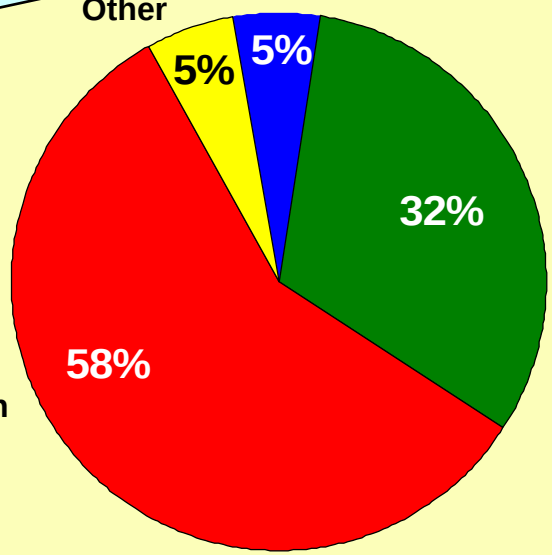
Organizing for Risk Management *Centralized/Decentralized?*

In most companies (58%) risk management is decentralized; multiple processes are engaged in by different functions of the organization without coordination.

Q19. Is risk management at your company predominantly centralized or is risk management engaged in at different levels of the organization? (n=19)

The Company utilizes an enterprise wide process with central control as well as organizational processes with decentralized admin.

In reality there are multiple processes under central and regional control



- There exists some coordination between the functions.
- Each facility manages risks at their location based on their own assessment of local risks. Global SHE function assesses and manages risks that may have more significant impacts to company as a whole.

- Internal standards and guidelines used
- The process is centrally controlled and mandated, but program implementation is managed at the BU level.

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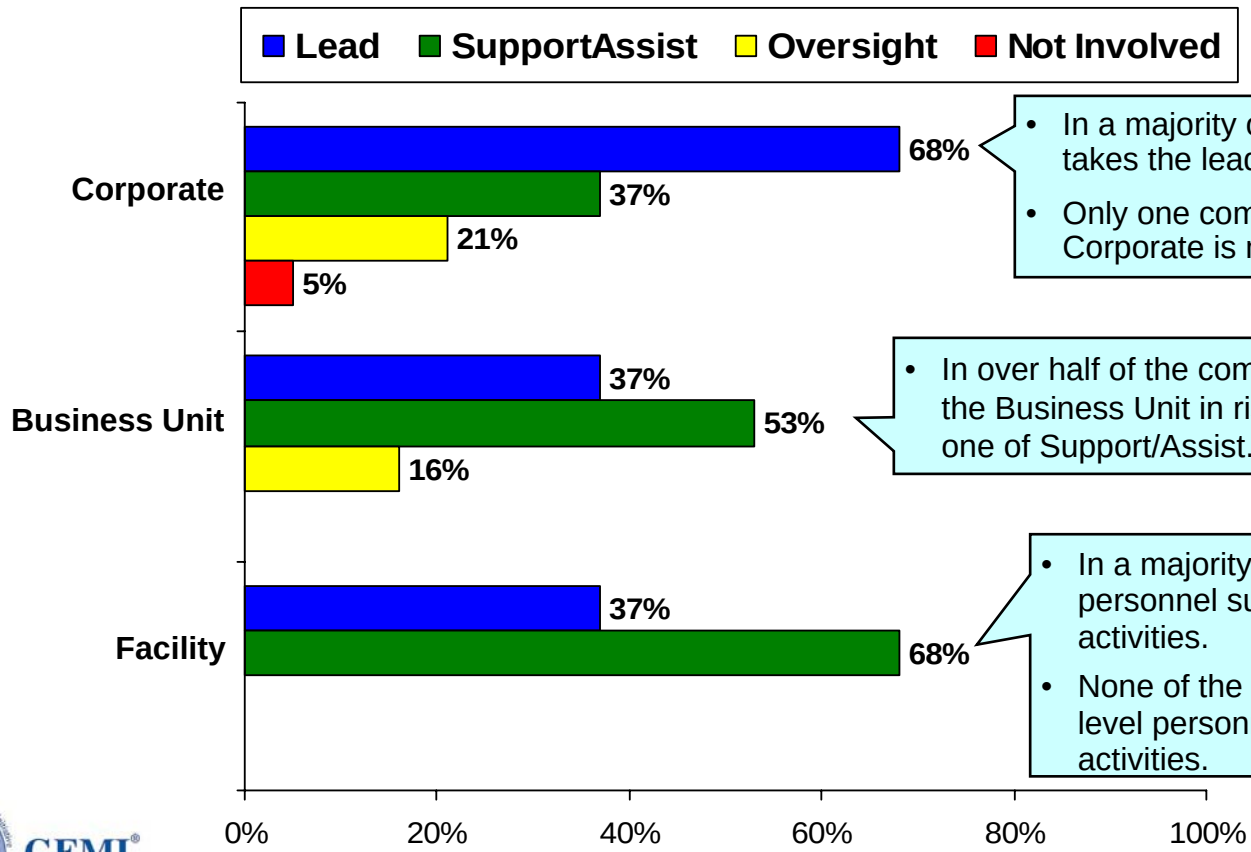
Organizing for Risk Management

Org. Level Roles

Companies indicate that all levels of the organization are involved in risk management. Generally, corporate level personnel lead risk management efforts and BU and facility-level personnel support them.

Q20. If risk management at your company is engaged in at different levels of the organization, which levels are involved and in what manner? (n=19)



- In a majority of companies (68%), Corporate takes the lead in risk management.
- Only one company (5%) indicted that Corporate is not involved at all in risk mgt.

- In over half of the companies, the role of the Business Unit in risk management is one of Support/Assist.

- In a majority of companies (68%), facility-level personnel support or assist risk management activities.
- None of the companies indicted that facility-level personnel oversee risk management activities.

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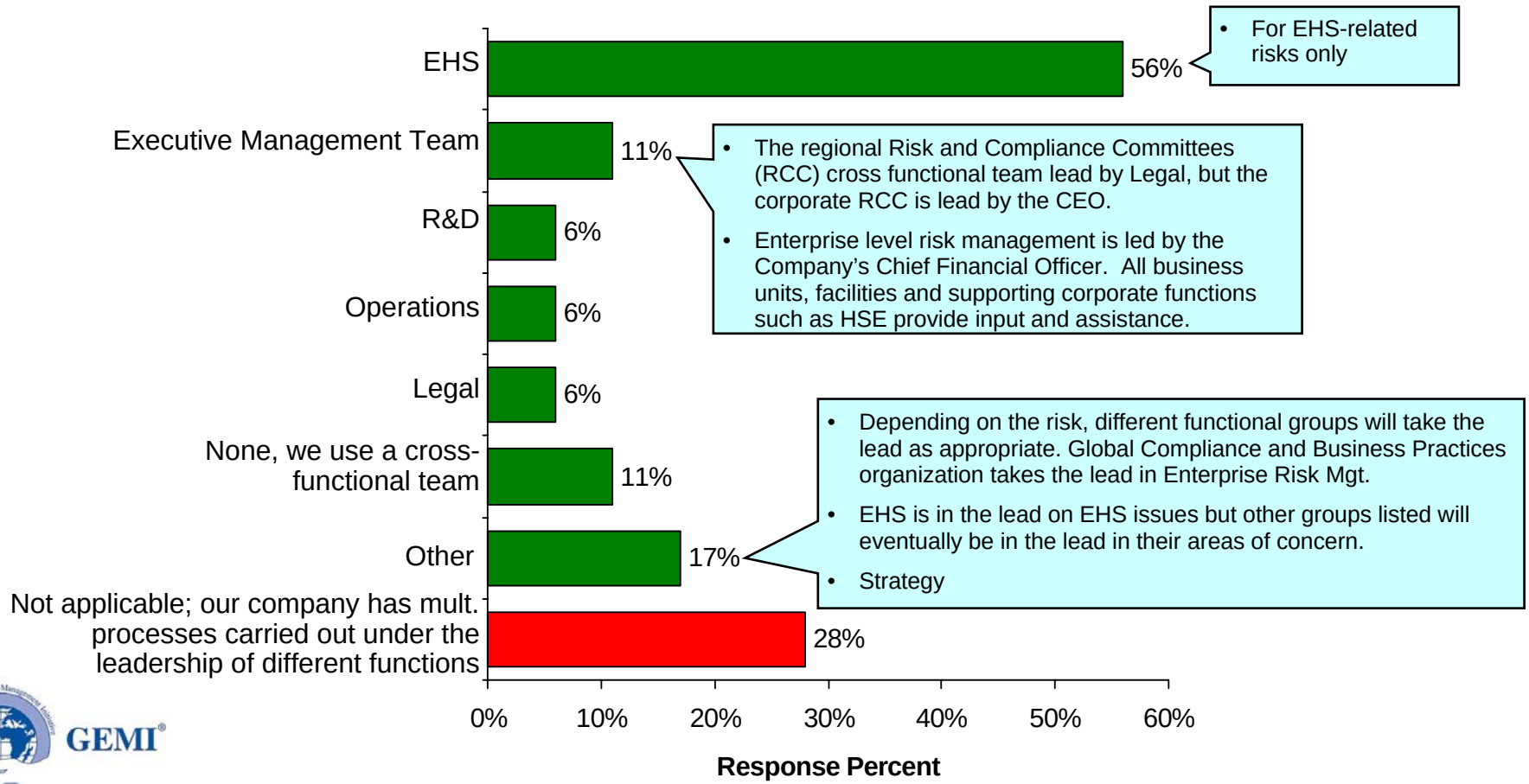
For the most part (56%), EHS takes the lead in the risk management process.

Q21. Which functional group typically takes the lead in the risk management process? (n=18)



- For EHS-related risks only

- The regional Risk and Compliance Committees (RCC) cross functional team lead by Legal, but the corporate RCC is lead by the CEO.
- Enterprise level risk management is led by the Company's Chief Financial Officer. All business units, facilities and supporting corporate functions such as HSE provide input and assistance.

- Depending on the risk, different functional groups will take the lead as appropriate. Global Compliance and Business Practices organization takes the lead in Enterprise Risk Mgt.
- EHS is in the lead on EHS issues but other groups listed will eventually be in the lead in their areas of concern.
- Strategy

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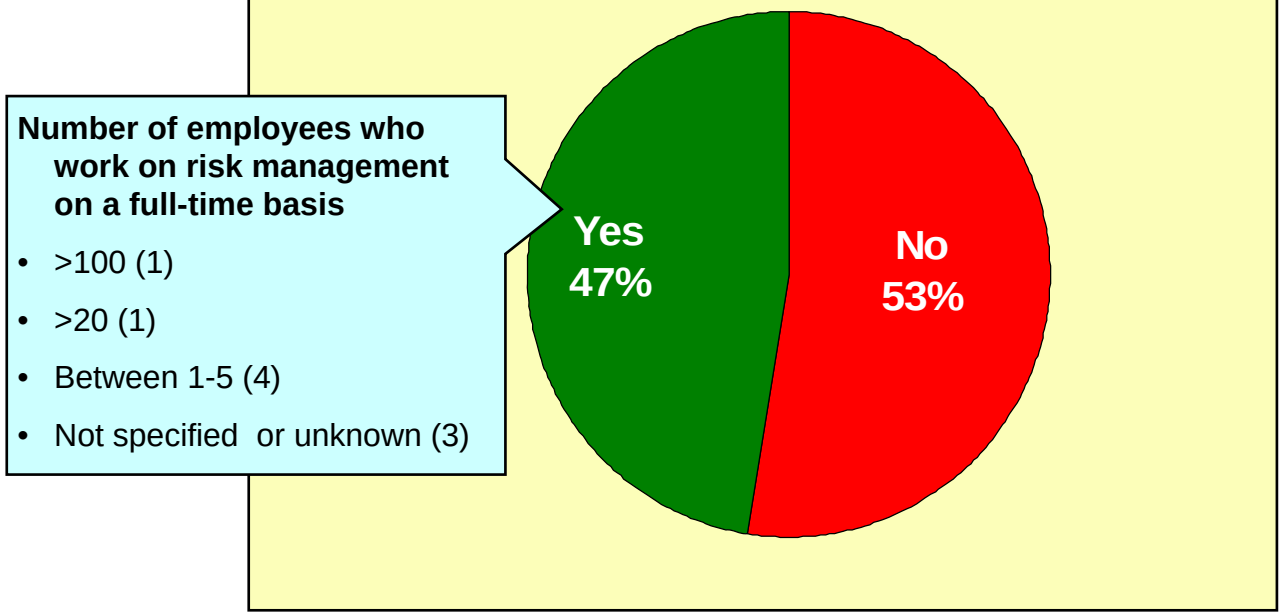
Organizing for Risk Management

Full-Time Staff?

Most companies (53%) do not have full-time risk management staff.

Q22. Does your company have employees who work on risk management on a full-time basis? (n=19)



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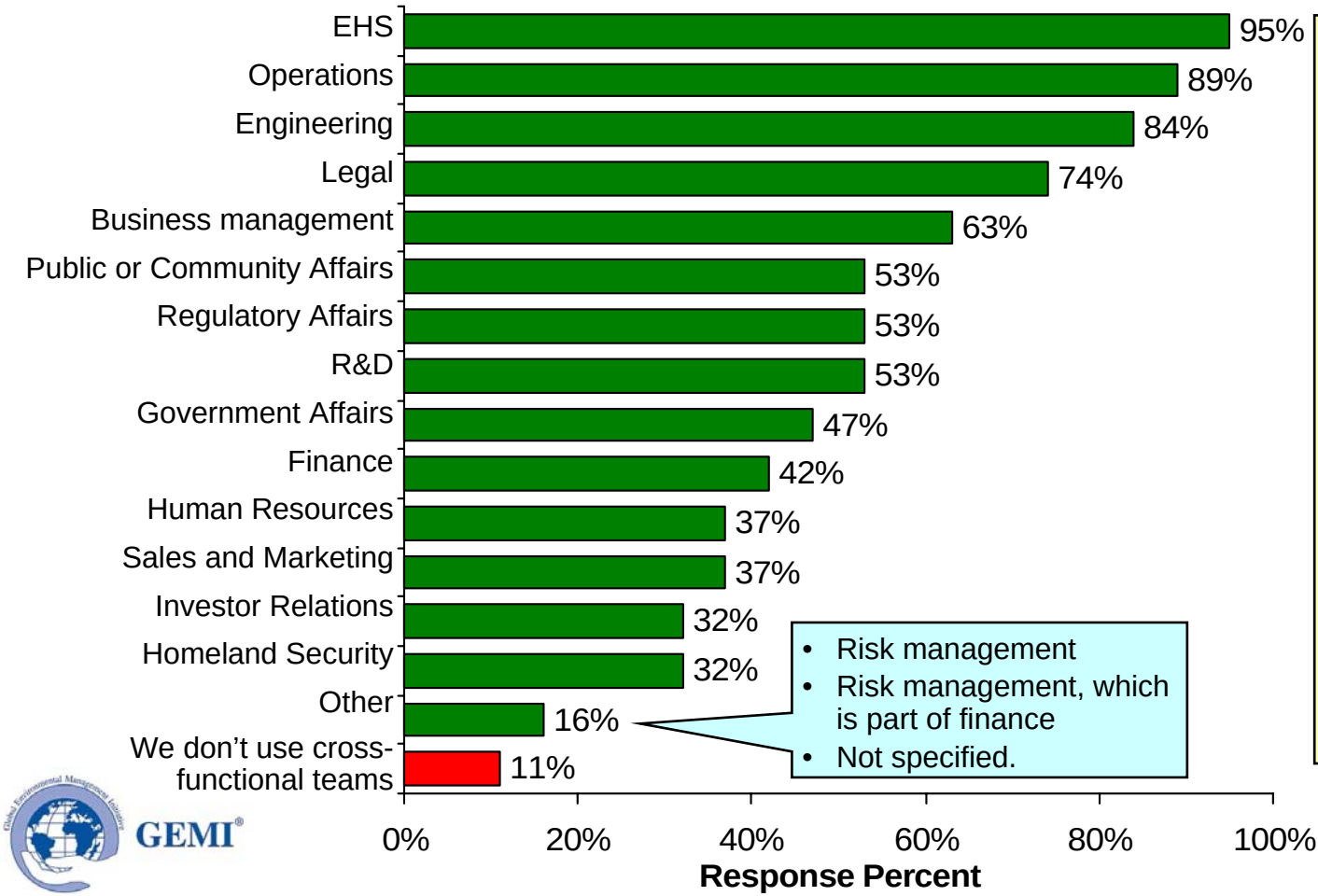
EHS, Operations, and Engineering are the functions most often used on cross-functional risk management teams.

Q23. If your company uses a cross functional team to manage risk, which functions typically are parts of the team? (n=19)



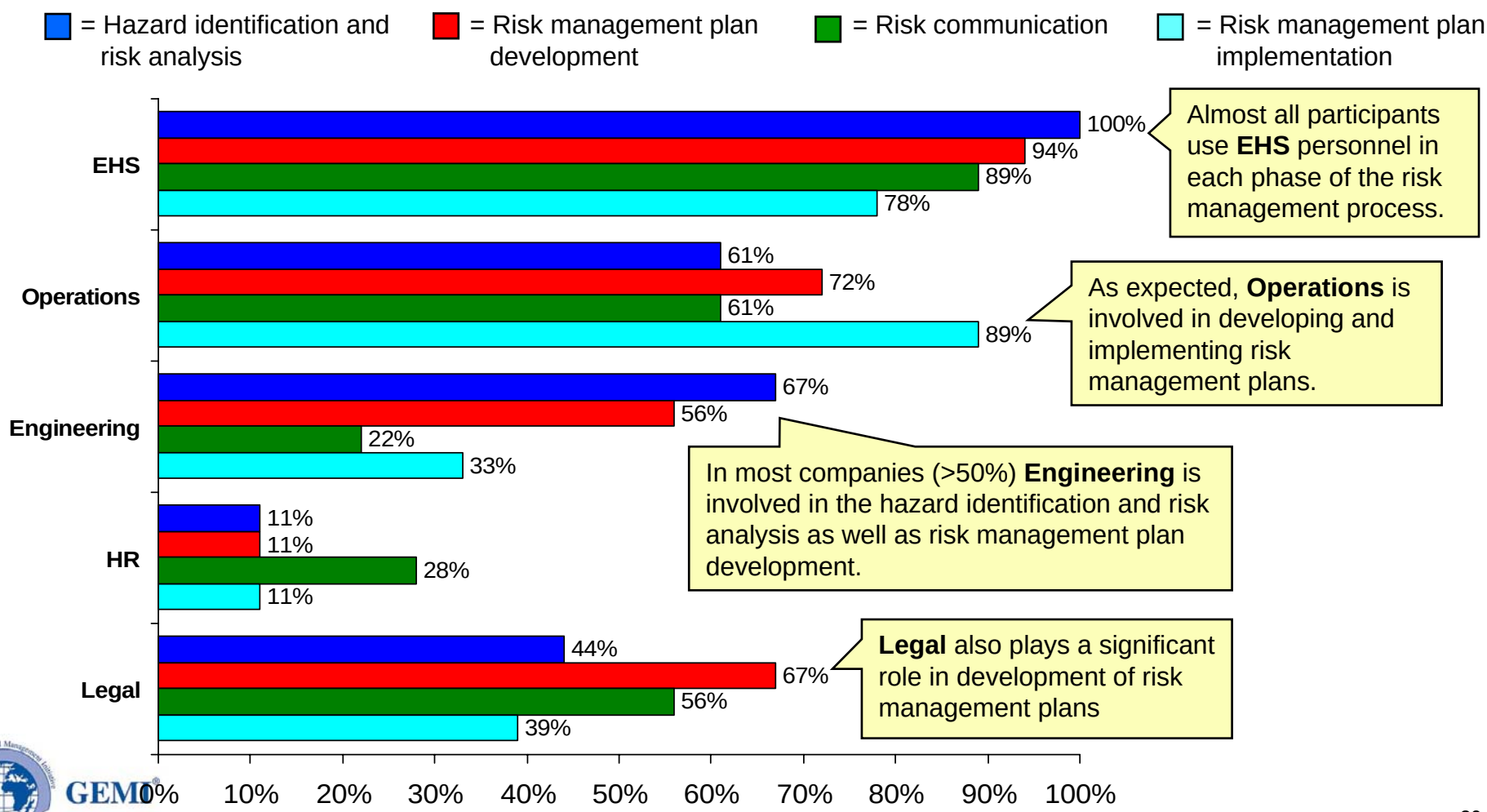
Additional Comments

- For environmental business risk analysis pilot, EHS, Operations and Engineering were involved as a cross-functional team.
- Public affairs = Corporate communications
- Depending on the type of risk being evaluated, any of the above staff could be included on a team.
- Risk Management is integrated with the management chain responsible for identifying, mitigating and communicating HES risks.

Organizing for Risk Management

Functional Roles

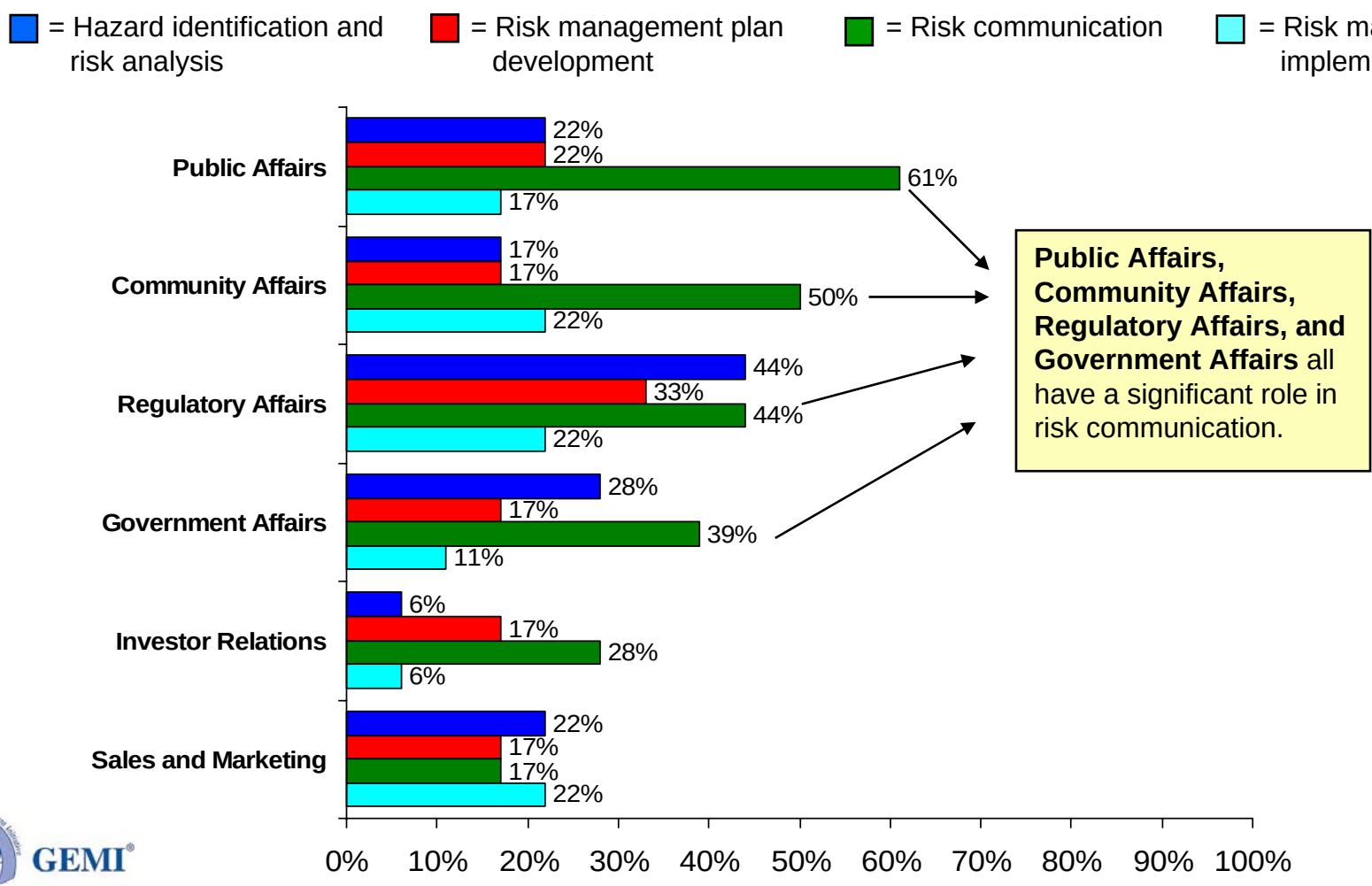
Q24. Indicate which functions typically play a significant role in these various aspects of issues management (n=18)



Organizing for Risk Management

Functional Roles

Q24 (Continued). Indicate which functions typically play a significant role in these various aspects of issues management (n=18)



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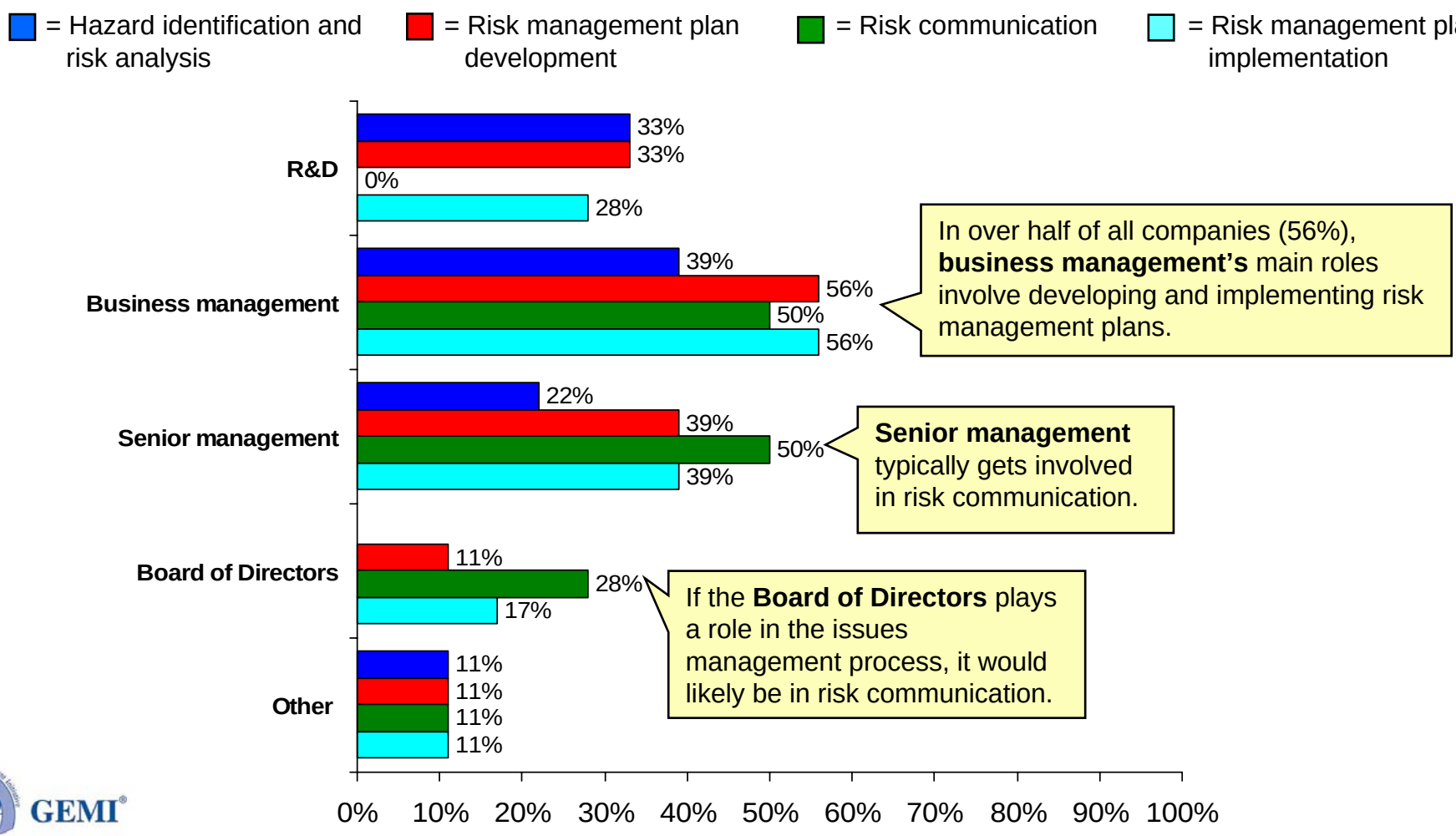
Organizing for Risk Management

Functional Roles

Q24 (Continued). Indicate which functions typically play a significant role in these various aspects of issues management (n=18)



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Risk Communication

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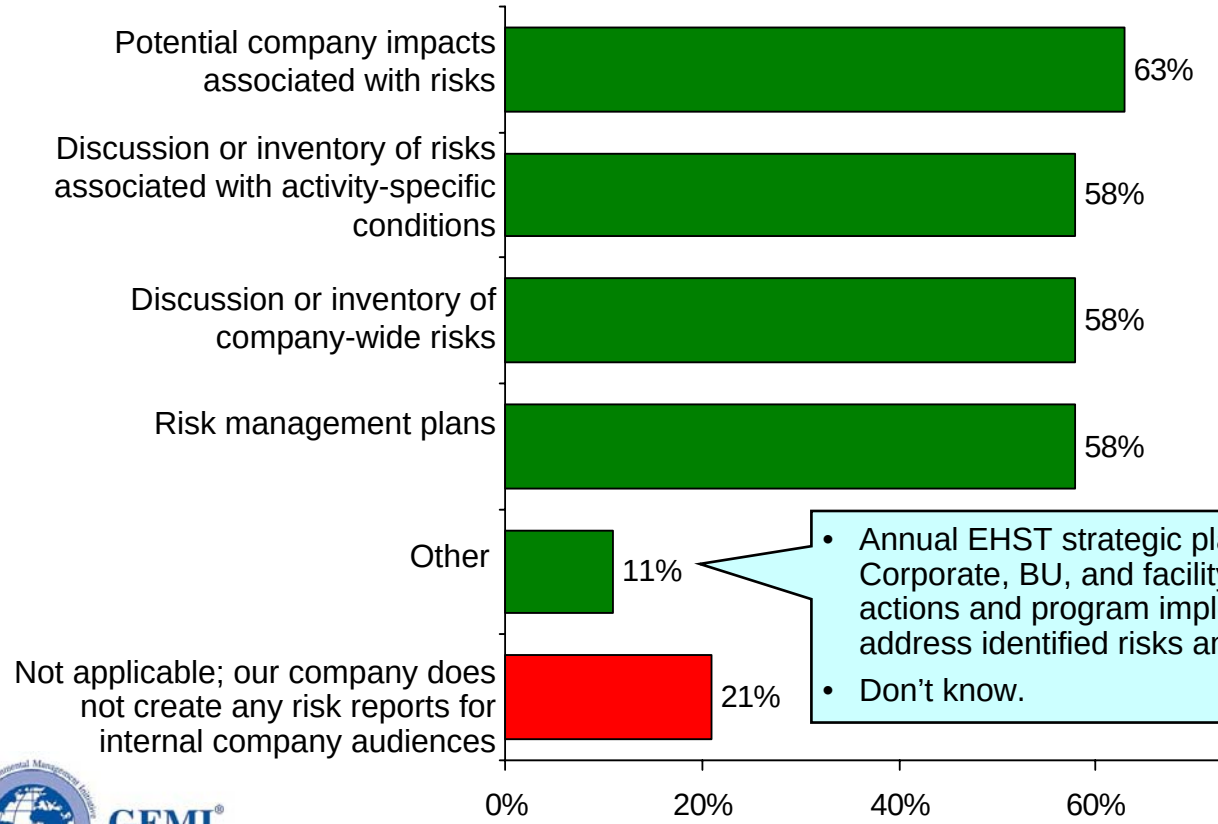
In most companies (>50%), internal risk reports include a discussion or inventory or risks, the potential company impacts associated with these risks, and associated risk management plans.

Q25. If your company creates one or more risk reports for internal company audiences, what do they include? (n=19)



- Annual EHST strategic plans at Corporate, BU, and facility levels address actions and program implementation to address identified risks and mitigate.
- Don't know.

Additional Comments

- The environmental business risk analysis pilot may change how risks are reported.
- The level of risk determines the information that must be communicated and the level of management that must be engaged (i.e. lower level risks are managed at the facility level - highest level risks require more documentation and are communicated up to the HES Committee of the Board).

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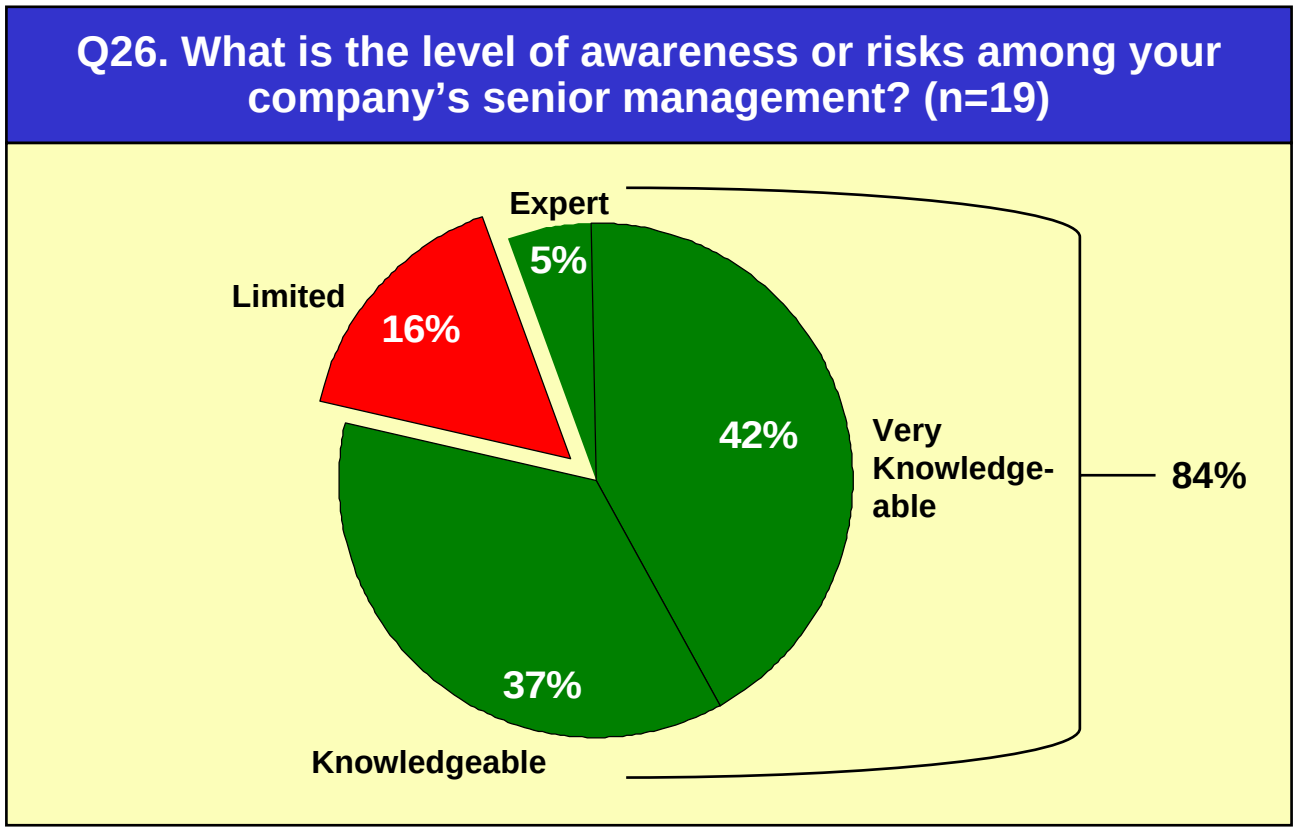
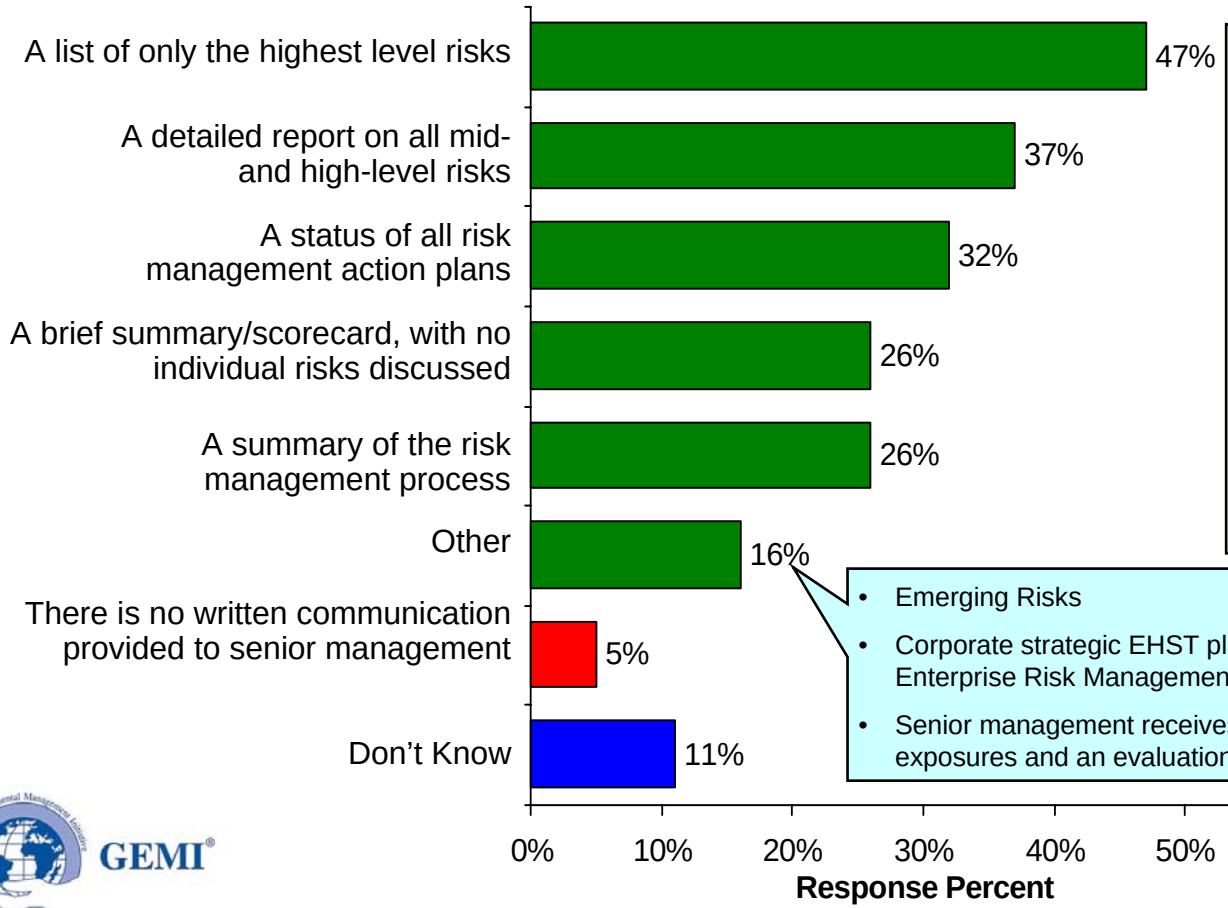
Almost all companies (84%) believe that senior management is at least knowledgeable about the company's risks. Only 16% thought that their level or awareness was limited.



Senior management is most likely to receive information on the highest level risks.

Q27. In what form is risk management communicated to senior management? (n=19)



Additional Comments

- Various methods depending on the subject.
- EHS quarterly ops reports to senior management and EHS R&D group reports to research mgt.
- A management team presents a potential risk to the ERM committee (senior management). The committee makes an assessment of whether sufficient actions are being taken. The committee then consolidates their observations into a corporate list of issues that they share with the Board.
- Verbal communication of mid- and high-level risks

- Emerging Risks
- Corporate strategic EHST plans are reviewed with Sr. mgt. 2006 formal Enterprise Risk Management process analyzed EHST risk in detail.
- Senior management receives a list of risk universe categories, potential risk exposures and an evaluation of management controls.

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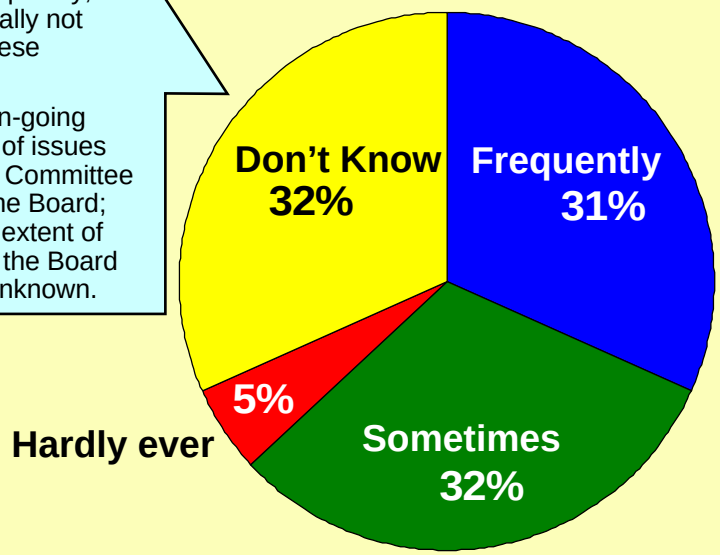
In most (63%) companies, risks are discussed at the Board level at least sometimes, with risks being discussed frequently in 31% of companies.

Q28. To what extent are risks discussed at the Board of Directors Level? (n=19)

- Presumably they are discussed frequently, but EHS is generally not involved in these discussions.
- There is an on-going corporate list of issues that the ERM Committee shares with the Board; however, the extent of discussion at the Board meetings is unknown.



Q29. Briefly describe the kind of risk information provided to the Board of Directors? (n=9)

- Summary of high levels risks, status of actions against critical risks, general description of mid-level and emerging risks.
- High visibility risks (to public)
- Detailed risk and compliance review
- Risk inventory (biggest risks)
- Discussions of highest level risks
- General EHS background and successes.
- There is an on-going corporate list of issues that the ERM Committee shares with the Board of Directors; however, the extent of discussion at the Board meetings is unknown.
- The Board of Directors is provided with an overview of HSE/Sustainability priority issues for the Company. Topics include product stewardship, supply chain, regulatory affairs, external relations and corporate compliance verification or governance.
- A risk discussion in is included in every HES audit report – the members of the HES committee of the board get a copy of all HES audit reports. Periodic (average about every 1 ½ yrs.) presentations of all higher level risks to the HES Committee of the Board.

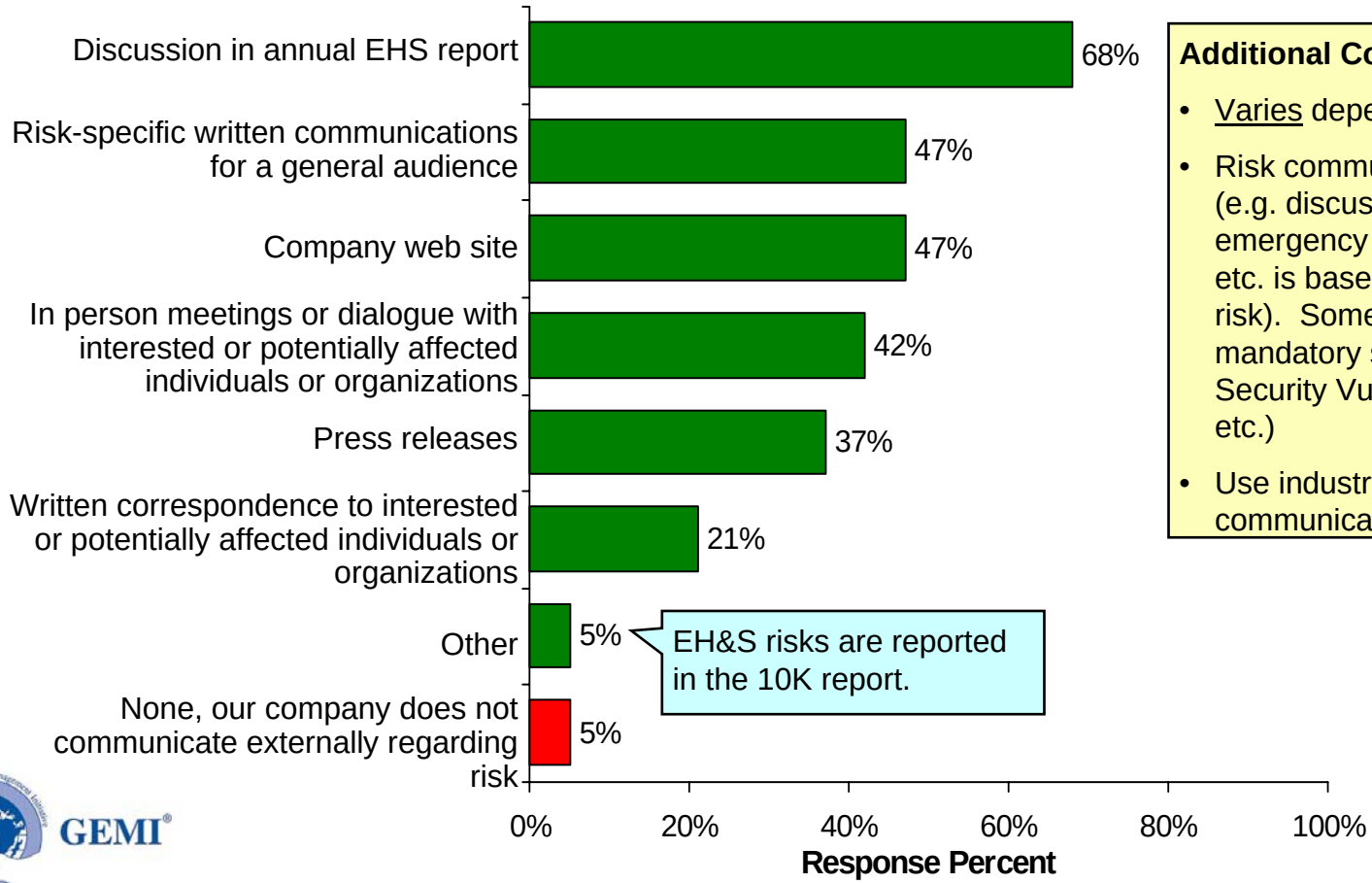
Generally, companies appear to be still in the process of reviewing the BP (Baker) report and determining how it may impact their risk communication processes.

Q30. If findings and recommendations in the BP report have impacted how risk information is presented to your company's senior management or Board of Directors, briefly describe the nature of the impact? (n=10)

- This incident and the learnings from it have been presented and reviewed with senior management.
- We have scheduled one of panel members to talk with Senior Leadership and executive EHS Steering Team in September
- We presented a comparison of the Baker report findings to our risk management systems to the HES Committee of the Board. They requested a follow up presentation on mechanical integrity.
- Document was reviewed with an understanding of PSM risk
- Still evaluating findings.
- We are in the early stages of conveying the report findings up the management chain. No change has yet occurred but we hope to use the report toward this end.
- We continue to place a high level of importance on Process Safety Management. The Baker report was shared with leaders in the chemical manufacturing and other segments of the company, as the learnings extend beyond Process Safety. Process safety is one of the critical areas reviewed during Corporate Assessments. The results of corporate audits are shared with executives of the company, as has been the practice for many years.
- The findings and recommendations of the BP report have not impacted how risk information is currently presented at our company since the nature of the two businesses are completely different.
- No changes made.
- No impact.

The annual EHS report is the most common mechanism for communicating risk information externally.

Q31. Which mechanisms does your company use to communicate externally regarding risks? (n=19)



Additional Comments

- Varies depending on the issue.
- Risk communication is site specific (e.g. discussions with regulators, emergency responders, neighbors, etc. is based on the nature of the risk). Some communications are mandatory such as RMPs, DHS Security Vulnerability Assessments, etc.)
- Use industry developed communications.

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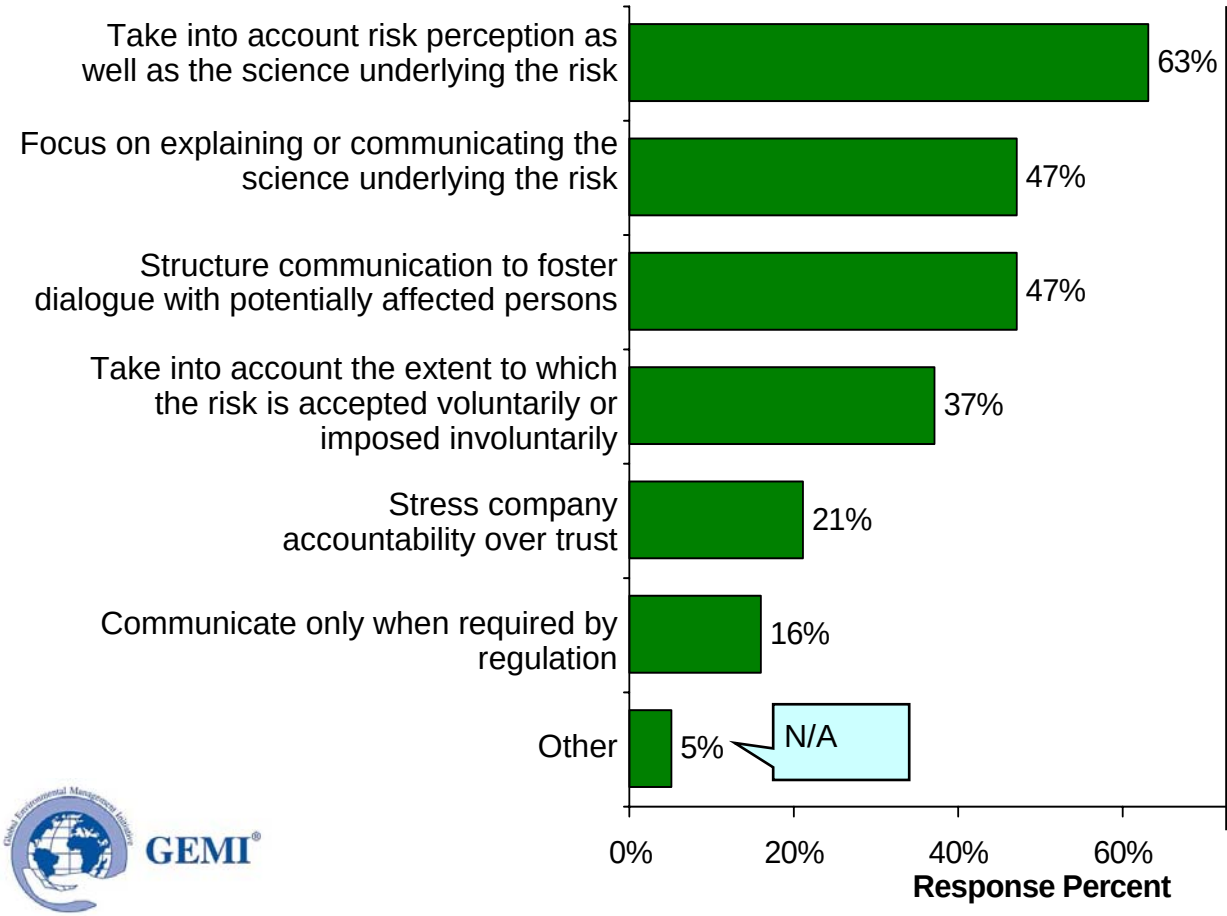
Most companies (63%) consider risk perception as well as the science underlying the risk when communicating with external stakeholders.

Q32. What approach does your company take with regard to external risk communication? (n=19)



Additional Comments

- Our approach is dependent on the audience.
- We strive to meet stakeholder expectations at a global level on global issues, but the majority of stakeholder interaction occurs at the place where our activities touch our stakeholders.
  In 2005, we developed a new, more systematic, local stakeholder engagement process. This new method was developed using Six Sigma tools and is a more formalized process to help facilities identify and anticipate reputation issues and establish a consistent, documented and proactive system to drive implementation. The new system is a required component of our EHS Management System.
  We has taken a largely local approach to stakeholder engagement.

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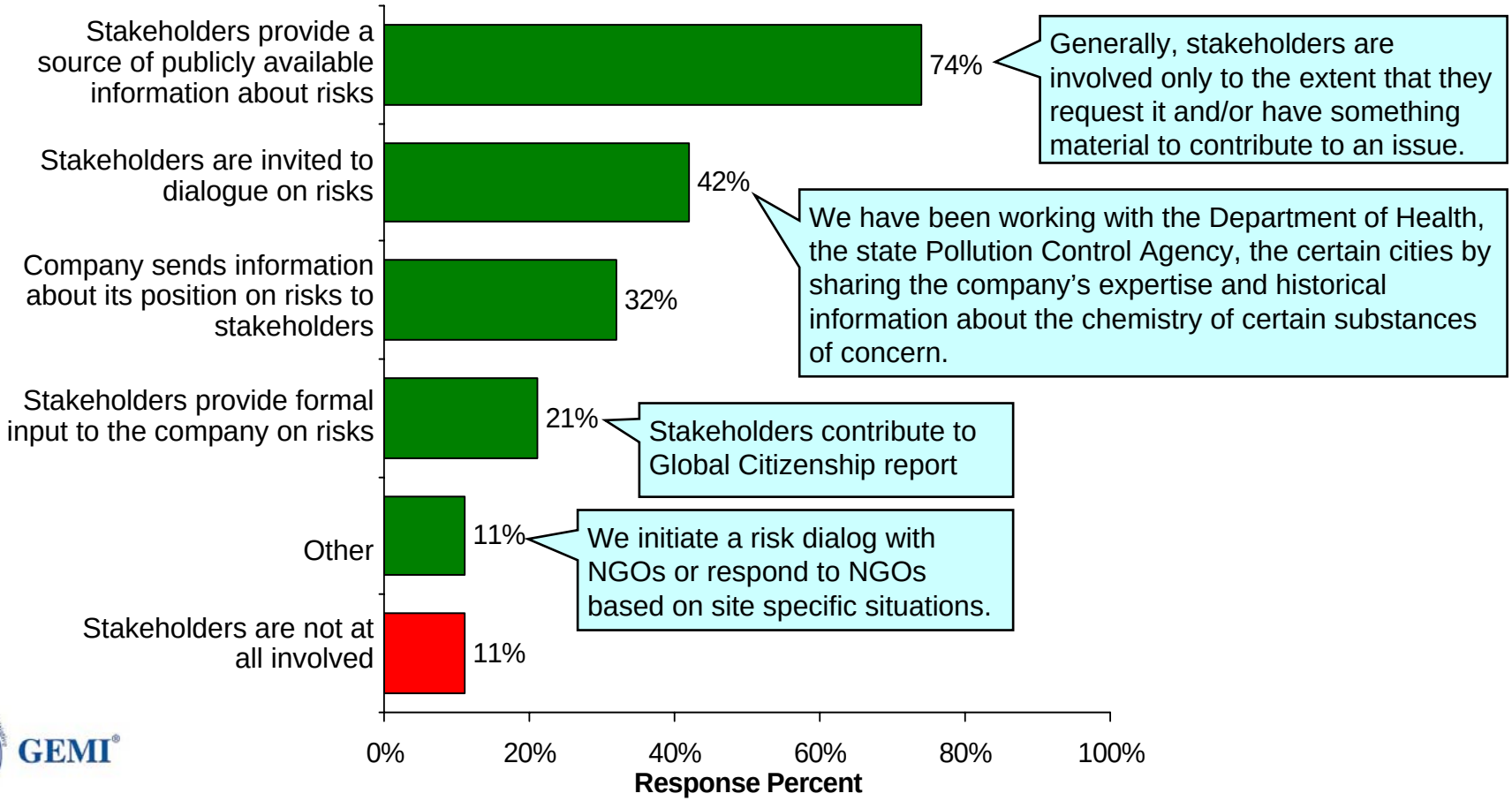
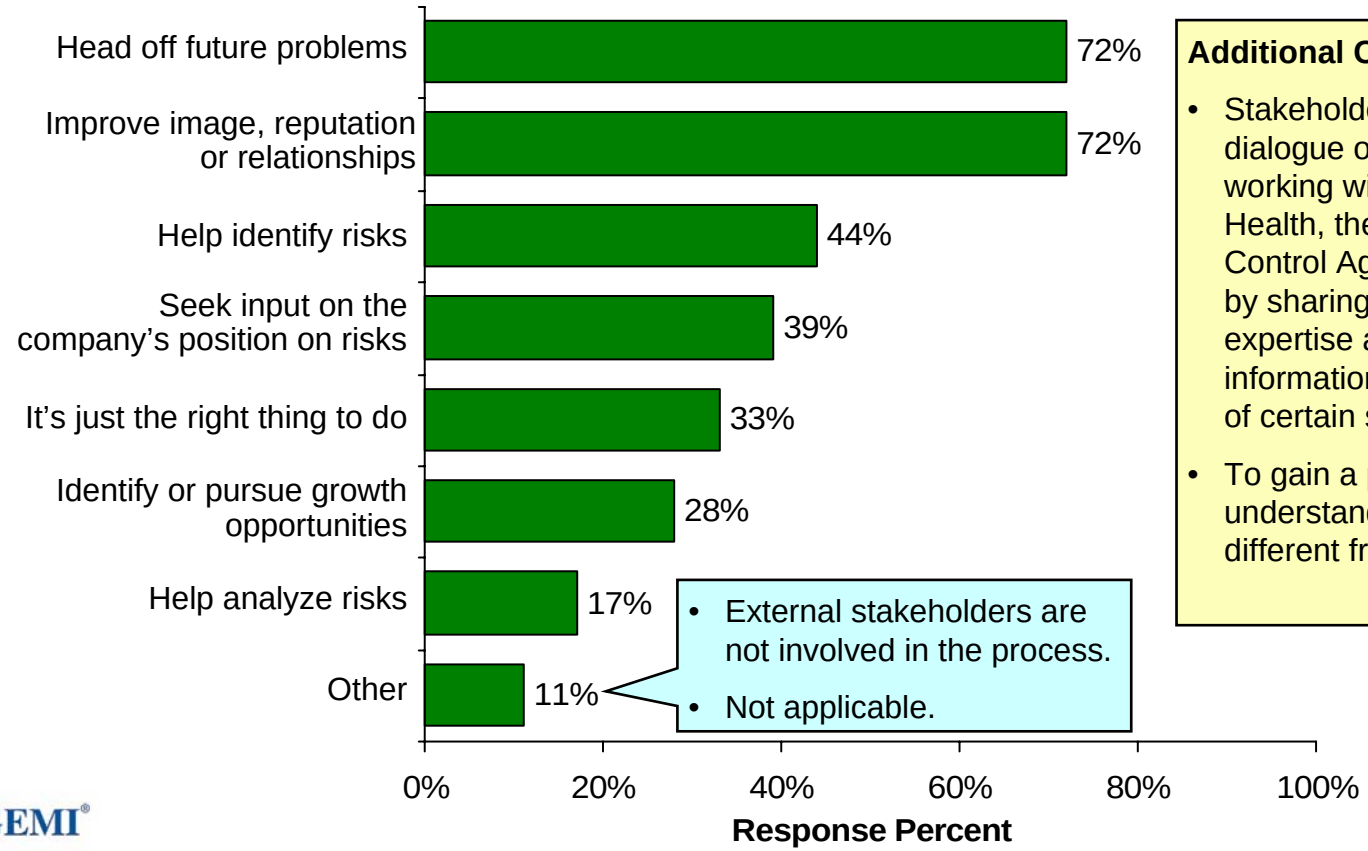
Almost all companies include non-traditional stakeholders as part of the risk management process – primarily as a source of risk information.

Q33. To what extent are non-traditional stakeholders involved in the risk management process? (n=19)



Most companies (72%) engage with non-traditional stakeholders to head off future problems or to improve image, reputation, or relationships.

Q34. What is your company's goal in engaging with non-traditional stakeholders on risk? (n=18)



- External stakeholders are not involved in the process.
- Not applicable.

Additional Comments

- Stakeholders are invited to dialogue on risks: We have been working with the Department of Health, the state Pollution Control Agency, the certain cities by sharing the company's expertise and historical information about the chemistry of certain substances of concern.
- To gain a perspective and understand perceptions that are different from our internal folks.

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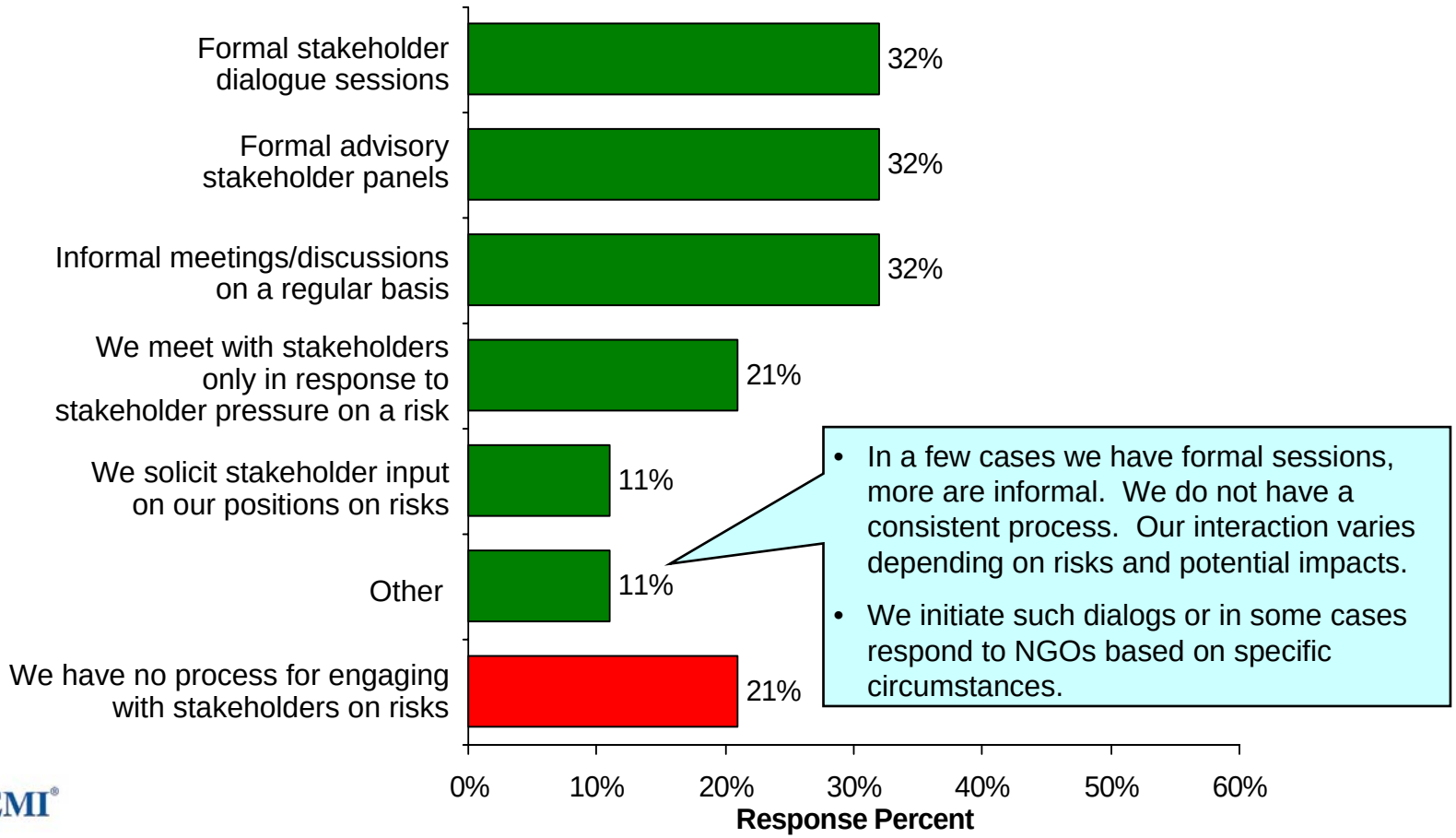
Companies use several different processes to engage non-traditional stakeholders on risks.

Q35. Which process does your company use to engage with non-traditional stakeholders on risks? (n=19)



Climate Change

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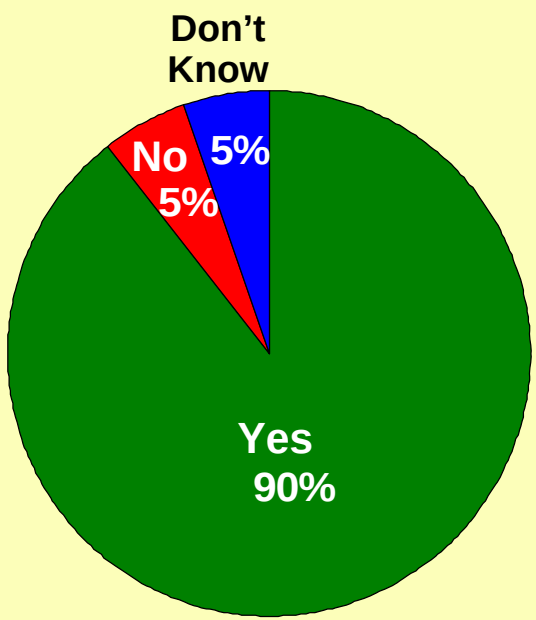
Almost all companies (90%) have evaluated the risks associated with climate change.

Q36. Has your company evaluated the risk associated with climate change? (n=19)

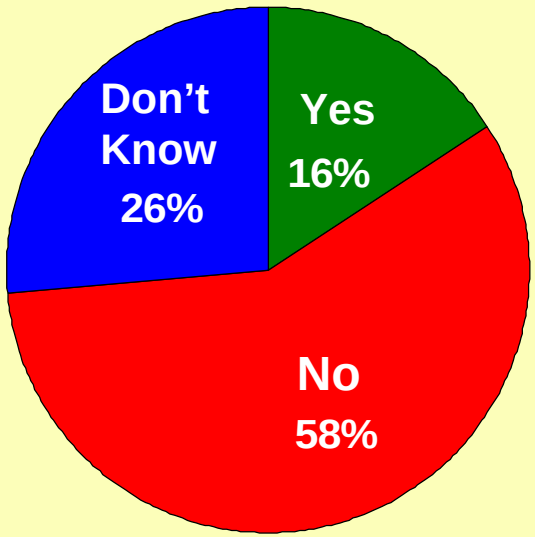


Comments

- Not an in-depth assessment – focused on gross risks (e.g. likely trends in raw material cost and availability, demand for products, etc.).
- To some degree, mainly as a direct impact to energy use and water access and impact on production. Some thought has been given to relative impact on product and business.
- Qualitative discussions.
- The Company has informally evaluated risks associated with climate change, including indirect socio-economic impacts and is in the process of developing plans accordingly. The Company has a long history of reducing greenhouse gas emissions, and has been an industry leader in this area.
- Currently evaluating at the corporate level.

However, in most cases, insurers have not asked companies to perform self-assessments regarding potential impact of climate change on company operations.

Q37. Have any of your company's insurers requested your to perform self-assessments regarding how climate change may affect operating locations? (n=19)



Comments

- Underwriters have asked more general questions regarding probable impact to our operations. Dialogue with them continues.
- Has not happened yet but would not be surprised if it came up in future!

Summary

Summary

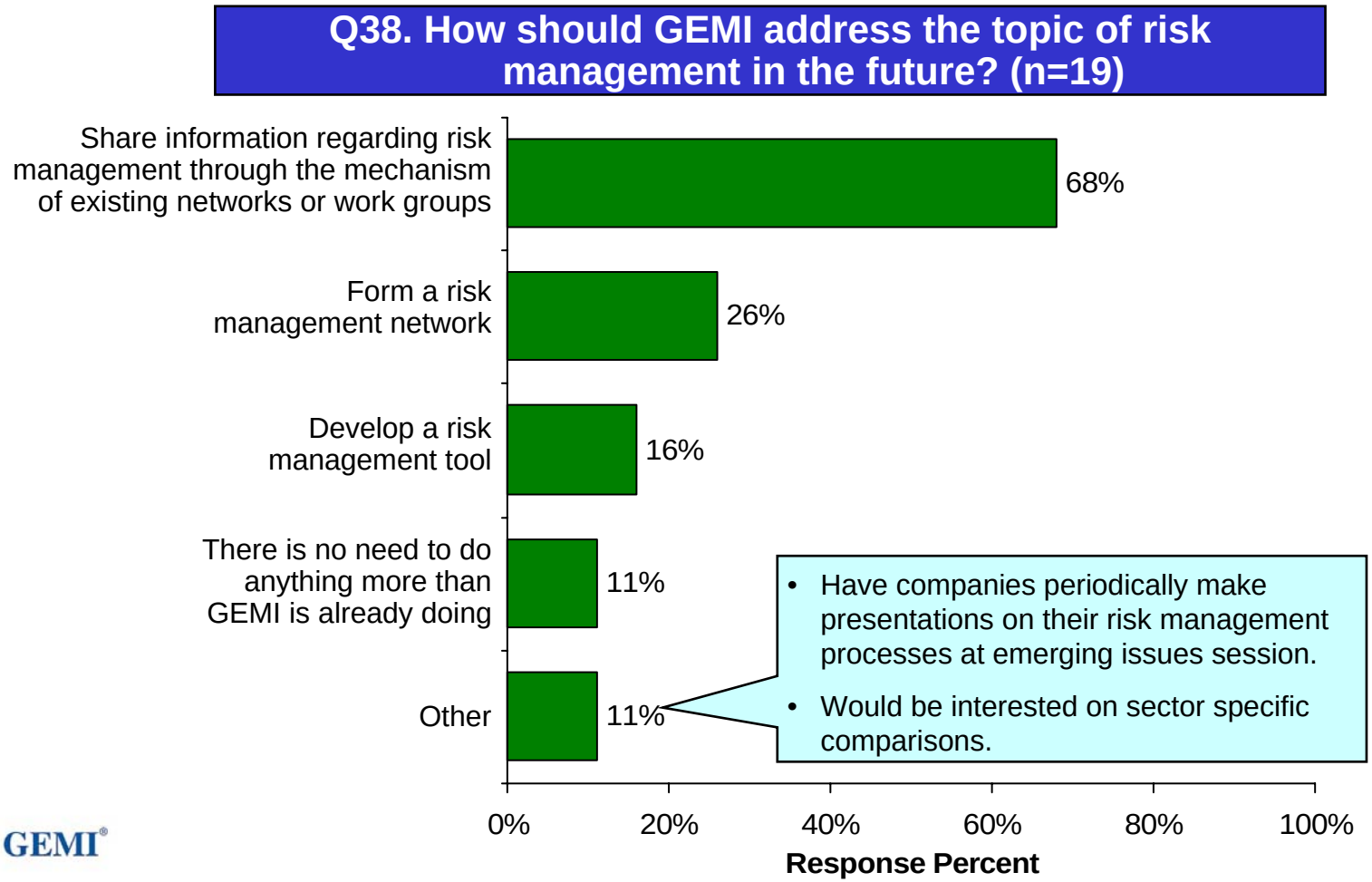
The key learnings from this survey include:

- Almost all companies follow a formal risk management process.
- The risk management processes most in need of improvement relate to those dealing with the outside world (risk communication; stakeholder engagement).
- The principal risk faced by companies is a facility incident that causes significant production and revenue loss.
- Risk mitigation or control is the most favored risk management option.
- In most companies, risk is managed in a decentralized manner, involving a wide range of functions.
- The annual EHS report is the most common mechanism for communicating risk information externally.
- In almost all companies, external stakeholders have a role in the risk management process.
- Almost all companies have evaluated climate change risk.

Next Steps

Next Steps

Most companies (68%) would like GEMI to continue to share information regarding risk management through existing networks and work groups.



Next Steps

Q39. Please indicate any suggestions you have for future GEMI benchmarking topics. (n=3)

- Product Stewardship
- Response to Climate Change
- Global regulatory influencing; top strategic issues

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Appendix

Appendix

Additional Comments—Q. 3

Q3. Does your company follow a formal risk management process? Additional Comments

- There are several narrowly focused risk management processes operating in parallel. For example there is a process for property damage and business interruption, another for safety risk, another for acute health risks, and so on. There is no formal corporate risk management system.
- There is not one formal process. Different processes are used depending on the type of risk. For example we have a formal EHS risk assessment tool and process that supports a formal EHS Management Standard. The standard requires an EHS risk assessment. In addition we have a risk management group in our financial organization that manages various types of risks from a financial (insurance) perspective. We also have a business continuity and crisis management group that have their process to identify and plan for other business-related risks.
- We serve a broad array of markets and continuously manage risk in these markets through existing policy, guidelines, and procedures. Risk is managed by many departments that provide operational/functional oversight, e.g., Corporate Auditing, Office of General Counsel, Environmental Health and Safety Operations. There are also corporate oversight committees that identify and manage risk, e.g., Environmental, Health & Safety Committee, Business Conduct Committee, and Enterprise Risk Management (ERM). These organizations manage risk on a day-to-day basis and communicate these potential risks to the ERM Committee when appropriate. The ERM committee assists senior management in fulfilling their responsibility for the identification, assessment and prioritization of the Company's major risk exposures. The ERM Committee completes assessments across the world based on risks that would have an impact of 5% or more of shareholder market value.
- The Company utilizes a formal enterprise level risk management process. HSE & Sustainable Development risks are integrated into this Corporate framework. Additionally, HSE functions utilize a systematic risk management process relative to people (our employees and communities), places (facility safety/environmental protection), products (life cycle considerations) and partnerships (supplier and contract arrangements).

Appendix

Additional Comments—Q. 5

Q5. How effective do you consider your company's risk management process? Additional Comments

Life Cycle Management:

We formally assesses the environmental impacts of our products through Life Cycle Management (LCM). LCM is program that is integrated throughout our operations and is formally integrated into our New Product introduction process, which involves the research and development, environmental, and marketing functions. Existing products are also being evaluated through the LCM process on a prioritized basis. LCM helps us better understand and manage the environmental, health, and safety (EHS) impacts of and efficient use of resources in our products throughout their life cycle. It guides responsible design, development, manufacturing, use, and disposal. Cross-functional, new product development teams use an LCM matrix to systematically and holistically address the environmental, health and safety opportunities and issues from each stage of their product's life. The life cycle stages include material acquisitions, research & development, manufacturing operations and customer needs for use and disposal. The impact areas are the environment, energy/resources, health and safety. Inherent in our LCM process is the characterization and management both of product risk and opportunity. Risk reflects the potential for exposure and the hazards of the materials associated with the product over its life cycle, as well as the degree of uncertainty and feasibility of controlling exposure. Opportunity addresses finding solutions to these issues.

Risk Management Plans

Risk management plans for facilities that produce, process, handle, or store extremely hazardous substances have a general duty to:

- Identify hazards associated with a potential accidental release, using appropriate hazard assessment techniques;
- Design and maintain a safe facility, taking steps to prevent releases; and
- Minimize the consequences of accidental releases that do occur.

Appendix

Additional Comments—Q. 5

Q5. How effective do you consider your company's risk management process? Additional Comments Continued

Process Hazard Management

Hazards in our workplaces must be well understood and effectively managed to protect our employees, facilities, and surrounding communities. To address these requirements, location personnel must identify the hazards of their processes through a formal hazard assessment, understand the risk posed by the processes through a formal risk assessment and implement a process management system that is appropriate for these risks.

Environmental, Health and Safety Management System

Our Environmental, Health and Safety (EHS) Management System promotes sound environmental management at our facilities worldwide. It helps us address changing customer needs and expectations as we continue to drive sustainable growth. The EHS Management System:

- Builds on the strengths of our previous environmental, health and safety efforts.
- Includes an integrated, holistic system that anticipates and addresses long-term issues and drives continuous improvement (including evaluating potential risk).
- Promotes a strategic planning process that integrates EHS issues into business unit strategic plans.
- Requires each business unit to identity EHS issues, develop formal action plans, set goals and measure results.

Standards for Suppliers: Environmental, Health and Safety, Transportation, and Labor/Human Resources

We have instituted a formal process as part of its Sourcing Policy that sets standards for its suppliers in the areas of environmental, health and safety, transportation and labor and human resources. The standards apply to the selection and retention of all suppliers that provide goods or services to us worldwide and establish a framework that we consider important to a safe and healthy workplace, to the maintenance of fair and reasonable labor and human resource practices, and to the management of manufacturing and distribution operations to minimize adverse impact to the environment.

Appendix

Additional Comments—Q. 11

Q11. Indicate the principal tools or techniques your company uses to evaluate or assess risk? Additional Comments

In-house Tools

- Industrial Hygiene risk assessment prioritization tool.
- Internal developed web based tool to identify, assess and rank EHS risks at a site level. Checklists are used for due diligence and third party manufacturer. Layers of Protection Analysis (LOPA) tool used for Loss Prevention. PHA Pro used for process safety.
- Excel tool that uses qualitative estimates of hazard and exposure / likelihood to prioritize risks. Risks are further prioritized for multiple EH&S areas using semi-quantitative methods.
- Some examples of in-house risk prioritization tools: audit schedules, capital forecasting, risk prioritization tools for EHS, scorecards, etc.
- We have begun piloting an environmental business risk analysis looking at environmental aspects' impacts on costs of goods sold and sales. This is based upon an ANSI std.
- A few examples of "in-house" risk prioritization tools include: "Risk Assessment and Management Controls for Implementing [our] HSE Performance Standards", "Musculoskeletal Disorder Analysis Guide", "Risk Assessment for Machinery and Equipment", "Exposure Assessment Characterization", "HSE Product Assessment and Commercialization" and the "Supplier Environmental Responsibility Risk Matrix"
- Tools are used for PSM as well as for issues management
- Have developed an Risk matrix

Appendix

Additional Comments—Q. 11

Q11. Indicate the principal tools or techniques your company uses to evaluate or assess risk? Additional Comments Continued

Regulatory Agency or External Tools

- SEMI S10 Risk Assessment Criteria
- ISO 14001 environmental aspects analysis tool
- Managements Systems such as RCMS, EPA models for remediation, etc.
- EPRI Tools

Appendix

Additional Comments—Q. 33

Q33. To what extent are non-traditional stakeholders (such as NGOs) involved in the risk management process? Additional Comments

- We have a number of advisory panels on key risks such as health, GMO, and Nano
- Different approaches are taken dependent on the nature of the risk
- The Company engages in informal dialogs with governmental as well as non-governmental stakeholders. Additionally, routine meetings are held with community representatives through the Company's neighborhood information centers.
- This varies tremendously with risk areas. Around air issues there has been discussion with NGOs by senior leadership. There has been a fully integrated/ formal input stakeholder effort with re-licensing of our hydroelectric plants that is currently underway. We do not currently have a consistent approach.