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Environmental Risk Management

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PRIMO PUBLIC RISK MANAGEMENT ORGANISATION

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ABOUT FERMA

The Federation of European Risk Management Associations (FERMA) brings together 22 national risk management associations in 20 European countries. FERMA has 4,500 individual members representing a wide range of business sectors, from major industrial and commercial companies to financial institutions and local government bodies. These members play a crucial role for their organizations with respect to the management and treatment of complex risks and insurance issues.

ABOUT PRIMO

The Public Risk Management Organisation (PRIMO) was established with the aim of advancing the knowledge about and use of risk management within the local governmental sector and the public sector at large in Europe. To achieve this purpose PRIMO Europe will provide a comprehensive Web library with risk management information, newsletters, education, and conferences.

PRIMO's long-term aim is to establish risk management as a natural and integral part of good public governance. It comprises a pan-European umbrella organization of independent PRIMO national chapters and other organizations within the public sector from sixteen European countries, covering 16,000 managers.

Environmental Risk Management

Executive Summary

IN 2010, the last EU member state adopted legislation transposing the Environmental Liability Directive (ELD), meaning that for the first time there is an EU-wide framework for preventing and remedying environmental damage. Over half (56%) of respondents to a recent Harvard Business Review Analytic Services survey said their organization has experienced some or significant impact from the ELD over the past five years, and almost one-third (31%) said it was instrumental in prompting them to undertake environmental risk mitigation efforts.

For companies that may be liable for environmental damage, remediation for biodiversity and water damage comes in three varieties: primary remediation to restore the damaged resources to their baseline condition; complementary remediation, additional measures companies must take if primary action does not fully restore damaged resources or provide a similar level of natural resources; and compensatory remediation, for interim loss of natural resources, pending recovery.

At what level of government the ELD is enforced varies geographically depending on, for some member states, whether they have a federal system.

Companies subject to the ELD are hoping some aspects of the directive will be clarified in the review scheduled for next year. The Federation of European Risk Management Associations (FERMA) would like to have more ELD cases collected at the EU level to measure the directive's impact. FERMA is also lobbying against efforts to incorporate mandatory insurance coverage in the ELD, as well as a proposal to establish an EU-wide fund to cover environmental liability and losses resulting from industrial accidents. That said, strengthening environmental risk management in response to the ELD can reduce the cost associated with operating and responding to environmental events, and helps to maintain a positive brand image for the company's stakeholders.

Adapting successfully to the ELD means taking a proactive approach to environmental risk. This starts with a facility-by-facility environmental assessment. Sixty percent of organizations have now implemented an environmental risk assessment, and more than half (54%) said they conduct one either annually or biannually.

Companies are affected by third parties' ELD compliance as well. To minimize uncertainty, they should make sure all their suppliers are certified under ISO 14001, the international standard setting out criteria for an environmental management system.

Self-insurance remains the primary tool for covering the costs of environmental damage among European organizations—56% say they do so through self-insurance. Environmental insurance policies address the key change in liability introduced by the ELD—expansion to include activities or operations that do not cause a pollution event but result in environmental damage. Many policies include coverage for loss prevention costs, which addresses the ELD's requirement that companies take preventive measures against an imminent threat to the environment and to prevent further damage.

SURVEY HIGHLIGHTS

46%

of respondents' organizations have implemented an organization-wide environmental risk management program.

61%

of respondents' organizations have implemented a crisis management/crisis response plan to respond in the event of an environmental emergency.

56%

of respondents say their organization's costs were impacted by the enactment and enforcement of the Environmental Liability Directive (ELD) during the past five years.

The operating environment has changed, and it has imposed new responsibilities on operators within Europe.

Close to two-thirds (65%) of survey respondents said their environmental initiatives have a positive or very positive impact on profitability. By far the most widespread environmental initiatives mentioned in our survey involve energy and resource conservation (67%), followed by crisis management and response plans (61%).

However, organizations have difficulty quantifying the impact of environmental risk on their balance sheets; more than half (55%) said they cannot do so. Many companies lack a full view of their environmental risk profile, in part because their process is separated into silos, while the corporate-wide environmental function is responsible for sustainability and other concerns as well.

Even for larger companies, however, ELD compliance can be difficult. In most countries, accounting standards do not allow companies to put provision in their balance sheets for environmental liability. The ELD complicates matters further with its distinction between primary, complementary, and compensatory remediation.

Awareness of and detailed knowledge about the ELD itself varies greatly among companies operating in Europe. Less than half (40%) said they are knowledgeable or very knowledgeable about the ELD. While larger companies tend to have a good knowledge of the ELD, many small to medium-sized enterprises do not, and they have done less to implement or update their environmental risk management systems. However, given that the ELD was only fully transposed into national law in the EU three years ago, adjusting to the new regime is still a work in progress—and many companies are making progress.

The Environmental Liability Directive and Its Impact

European companies—and companies operating in Europe—entered a new era in environmental risk management in 2010, when the last EU member state adopted legislation transposing the EU's ELD. The ELD—properly titled Directive 2004/35/EC of the European Parliament and the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage—for the first time established an EU-wide framework for preventing and remedying environmental damage, based on the "polluter pays" principle. What it did not do was to simplify adherence to environmental laws and regulations, or do away with legal uncertainties in the environmental field. The ELD is the subject of ongoing reviews, including one next year, and enabling legislation differs in important ways from country to country.

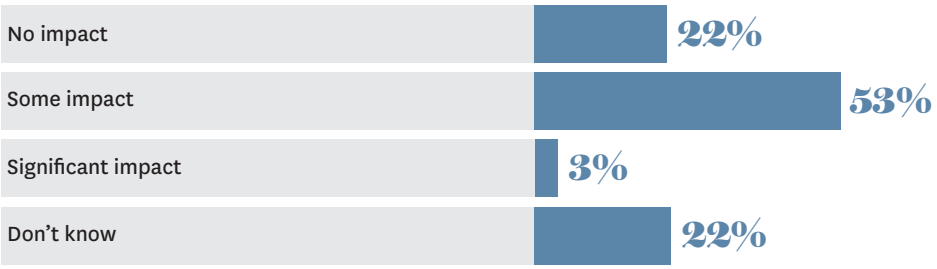
Not surprisingly, a recent survey by Harvard Business Review Analytic Services found that companies' concerns about risk created by environmental laws and regulations have increased in the period since the ELD became broadly effective. Sixty percent of respondents said they believe environmental risks are important or extremely important to their company's success or failure.

Over half of survey respondents (56%) said their organization has experienced some impact or a significant impact from the ELD over the past five years, and almost one-third (31%) said it was instrumental in prompting them to undertake environmental risk mitigation efforts, while more than half (52%) have obtained an insurance policy or other financial security against environmental liabilities as a result. figure 1

Figure 1

Impact of the Environmental Liability Directive

QUESTION: TO WHAT EXTENT HAS ENACTMENT AND ENFORCEMENT OF THE ENVIRONMENTAL LIABILITY DIRECTIVE (ELD) IMPACTED YOUR ORGANIZATION'S COSTS DURING THE PAST FIVE YEARS?



Christopher Robertson, head of environmental insurance (Global Corporate in Europe) at Zurich Insurance Company, at a June 2013 Harvard Business Review webinar stated, "The operating environment has changed, and it has imposed new responsibilities on operators within Europe. There are certainly some challenges in preparing for this new risk landscape."

Those challenges are already translating into costs for companies that have not yet caught up with the new rules. Forty percent of survey respondents said they have had to pay the cost of risk identification, assessment, and compliance with environmental laws during the past five years, for example, while a substantial number of groups have also paid for cleanup from pollutants (28%); costs to manage and mitigate risks, including insurance premiums (25%); third-party losses and claims (23%); and costs from regulatory requirements in geographic areas they had expanded into (21%).

The costs are only going up, organizations believe. More than half of respondents (56%) said that environmental rules in the countries where they operate have become more onerous in the past five years, and an overwhelming 74% said that they expect them to become more so. Europe itself, moreover, was cited as the region imposing the most onerous environmental laws and regulations, with 51% of respondents saying EU laws and regulations are stringent or extremely stringent, with North American laws and regulations (35%) following distantly and other regions far behind. This is not expected to change much. Fifty-one percent also said their organization has a high level of concern regarding European environmental regulations and risks associated with them—far more than for North America, in second place with 34%.

What Does the ELD Actually Do?

While the ELD has been written into all EU member states' laws for at least the past three years, governments—and businesses—still have some distance to travel on the learning curve. The ELD "is a brand new directive, and there is a lot of inexperience within administration and local authorities as to even determining whether pollution or an accident will fall under the ELD or not," said Pierre Sonigo, secretary general of FERMA. "From the accidents which have been reported, a lot of them don't really fall into the ELD category. They are just standard pollution, which we've been aware [of] and known for a long time."

What, then, does the ELD actually mean for companies? Valerie Fogleman, consultant at Stevens & Bolton LLP and professor at Cardiff University School of Law, said, "If operators—including companies—know they are liable for environmental damage—and there are a lot of contaminated sites in the EU—they must adopt measures and practices to minimize those risks." Annex 3 of the directive, for example, includes

Corporate boards, in particular, have good reason to make adaptation to the ELD a priority, because they can be held liable in case of a major environmental catastrophe.

industrial emissions. Operators that fall under Annex 3 "are strictly liable for preventing or remediating an imminent threat of environmental damage as well as actual environmental damage for all natural resources—protected species and natural habitats, water, and land."

If there is an imminent threat, and the operator's measures don't dispel it, the operator must notify the "competent authorities without delay," said Fogleman. If an actual instance of environmental damage takes place, the operator must take short-term emergency action, then take long-term remedial measures—including for damage to nearby sites as well as their own.

Remediation for water and protected species and natural habitats comes in three varieties: primary remediation to restore the damaged resources to their baseline condition; complementary remediation, additional measures companies must take if primary remediation does not fully restore damaged resources or provide a similar level of natural resources; and compensatory remediation, for interim loss of natural resources, pending recovery. The degree of liability companies can face is not uniform across the EU, either. While most EU countries apply joint and several liability under the ELD, for example, countries such as France and Italy apply proportional liability.

At what level of government the ELD is enforced varies geographically as well, depending for some member states on whether they have a federal system. In this respect, EU states have some flexibility as to how far liability under the ELD extends, with some applying it to nationally as well as EU-protected species and natural habitats. "Poland has over 400 cases," noted Fogleman, while "other member states—the Netherlands and the UK, for example—have said they're not gold-plating the directive, they're coming out with a bare minimum."

Likewise, six member states have adopted legislation to impose mandatory financial security on companies, meaning that they must provide evidence of a secure source of funding for a specific risk. Fogleman noted that the member states are Bulgaria, the Czech Republic, Greece, Portugal, Slovakia, and Spain, although the legislation is not implemented in some of them as of yet.

Companies subject to the ELD and the new legal and regulatory regime it ushered in are hoping some aspects of the directive will be clarified in the review scheduled for next year. "We would like to have more ELD cases collected at the EU level to really measure the impact," said Sonigo. "We should work on getting a better definition of the ELD concept of the threshold for 'significant environmental damage,' and how compensatory and complementary damages are to be calculated. How do I define a baseline? When are we going to be held liable, and when not? And we would like to have better cooperation between the member states, which is not really the case right now. It's time to consolidate—not to introduce new changes."

FERMA is also opposing efforts to incorporate mandatory insurance coverage in the ELD, as well as a proposal to establish an EU-wide fund to cover environmental liability and losses resulting from industrial accidents. "We think that it's really another tax which could be imposed on the industry that would make it less competitive," Sonigo argued.

What Do Risk Managers Need to Do?

Corporate boards, in particular, have good reason to make adaptation to the ELD a priority, Sonigo noted, "because they can be held liable in case of a major environmental catastrophe. And I think most of the boards now in the risk community put environmental risk at the top of their priority list."

Adapting to the new regulatory landscape starts with knowing better your company's liabilities and potential liabilities. "To properly assess damage to biodiversity—which is the new thing that the ELD demands—you have to do a proper environmental impact study for each of your facilities," noted Sonigo. Sixty percent of organizations have now implemented an environmental risk assessment, and more than half (54%) said they conduct one either annually or biannually. figures 2 and 3

The next step, said Robertson, is for the organization to prioritize the risk management measures it needs "in the event of an environmental incident. Each company has a different process or matrix to help prioritize these risks, which may include considerations such as cost, the resources required to implement them, and the time required, as well." Steps should include "assessing compliance with environmental laws, regulations, and permits to identify violations—or potential for violations; preventing pollution and

Figure 2

Environmental Risk Assessment Implementation

QUESTION: HAS YOUR ORGANIZATION IMPLEMENTED AN ENVIRONMENTAL RISK ASSESSMENT?

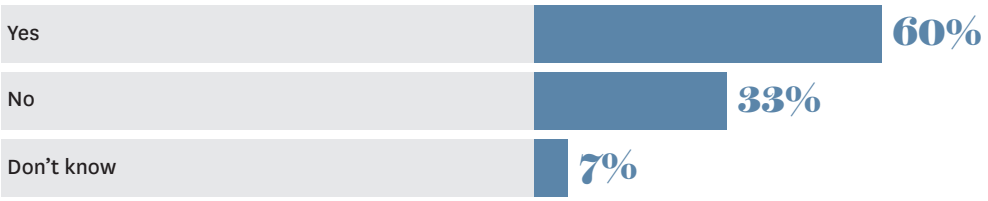
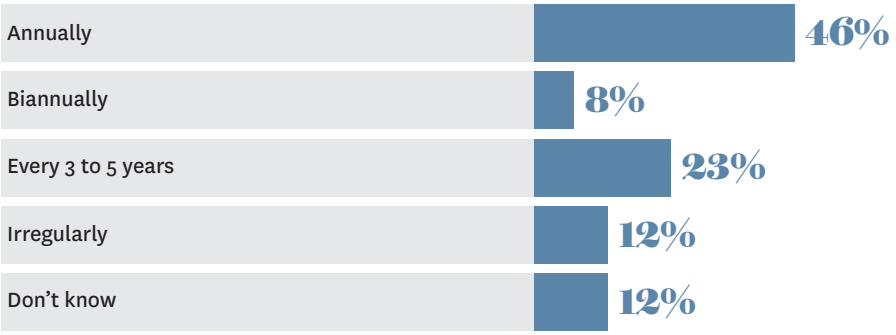


Figure 3

Frequency of Environmental Risk Assessment

QUESTION: HOW OFTEN IS YOUR ENVIRONMENTAL RISK ASSESSMENT CARRIED OUT?



SPECIFIC STEPS COMPANIES HAVE TAKEN SINCE THE ELD WAS ISSUED (FILL-IN SURVEY RESPONSES):

- Review of impact on variety of sites owned and/or rented
- Fire water containment considerations, crisis management plans, environmental incident checklist, and annual checking of underground tank near habitats
- Environmental impact assessments at all locations
- Global EIL insurance
- Road shows and workshops
- Reviewed our environmental policy, sought support from contractors, and incorporated the review into all development projects
- Written specific insurance terms for corporate clients to cover the ELD risk
- Global insurance program; separate departments for environmental loss prevention and for historical pollution
- New insurance and a responsible person appointed to observe effects

environmental damage, which may include installing or upgrading secondary containment measures; updating policies and procedures to reduce the risk of loss; training of employees; and potential capital expenditures to upgrade equipment."

A good risk management plan, Robertson said, "will also lay out a plan to respond when the unforeseen occurs and there is an imminent threat of pollution or environmental damage." Since the onus is on the operator, "it will also be important to have the necessary response to effect a cleanup or remediation over a longer period. And it's important as well to manage the different stakeholders that are at risk. For a plant manager, this might include informing the risk manager or other direct reports, informing the appropriate regulatory agencies when required, as well as potentially responding to environmental incidents when they occur."

The company's action plan "cannot sit passively on the shelf," Robertson added. "It requires ongoing monitoring through your network to ensure that you're prepared in the event of the unforeseen. For example, if a manufacturer sees an opportunity to increase production or start producing a new line of products, this may mean larger quantities of raw materials, which may require increased fire protection, increased secondary containment measures, or training of those handling the materials."

Survey respondents detailed a variety of other measures they have taken in response to the ELD, ranging from writing new coverage into their insurance and taking out new environmental liability policies to reviewing the organization's overall environmental policy, reviewing the impact on physical sites, and stepping up efforts to protect habitats during development projects. One respondent noted that the organization holds internal road shows and workshops. Another enumerated a menu of actions: "think, inventory, think again on the most possible scenario, value, plan/prioritize—and convince the board to act."

One thing companies can do to minimize uncertainty, Sonigo suggested, is to make sure all their suppliers are certified under ISO 14001, the international standard setting out criteria for an environmental management system. "This will ensure you that they have done a proper risk analysis and that all their environment risks have really been taken care of," he said. "That doesn't mean that there is zero risk, but it will really tell you that they have an environmental approach which is satisfactory."

The current slow economic recovery compounds the challenge of bringing companies' practices into conformity with the ELD and the various national laws and regulations, Robertson noted. Risk managers and environmental officers must "juggle the objectives and demands of the various stakeholders, including regulators, enforcement agencies, shareholders, and the boards of directors, all of this in a somewhat challenging economic environment where balance sheets may be stressed, companies may be struggling to find ways to grow, and resources are scarce."

Updating Risk Management for the ELD Era

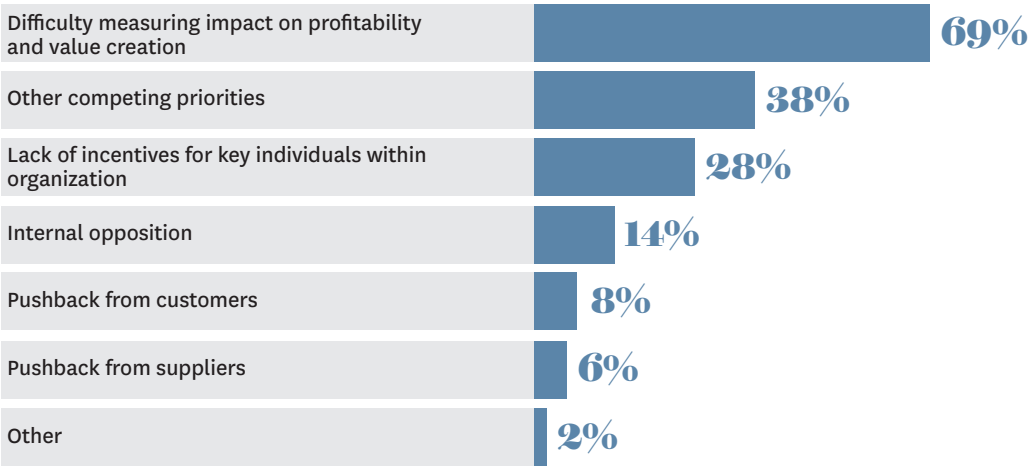
Organizations have difficulty quantifying the impact of environmental risk on their balance sheets—more than half (55%) said they cannot do so. Indeed, more than two-thirds (69%) cited difficulty measuring the impact of environmental risks on profitability and value creation as the greatest obstacle they face in implementing an organization-wide environmental risk strategy—the largest of any category. Troublingly, more than one in four (28%) said there is a lack of incentives for key individuals within the organization to push for an organization-wide strategy. There are indications, however, that proper measuring of environmental risk impact on profitability is being looked at in some countries. France and Spain have started to develop their own tools that help to quantify environmental risks, and there are indications that other countries in Europe will do likewise in the future. figure 4

Currently, "most companies are really operating in silos when managing environmental risk," said Sonigo. Often, an environmental director is responsible for environmental issues as well as sustainability and other things. And next to it is the risk management department, which most of the time handles the insurance. Those two departments don't talk to each other very often, and they don't work very well together. My recommendation would be to break the silos—to have real enterprise-wide risk management, where environmental risk and all the types of risk are handled by one single department."

Figure 4

Obstacles to Implementing Environmental Risk Strategy

QUESTION: WHAT DO YOU CONSIDER TO BE THE GREATEST OBSTACLES TO IMPLEMENTING AN ORGANIZATION-WIDE ENVIRONMENTAL RISK STRATEGY?



This is easier when top management is actively involved. Said Robertson, "In order to break down those silos, it's helpful to get buy-in for environmental risk management from the top down, and to have a risk management function that has more involvement with insurance, participating in a cross-functional group."

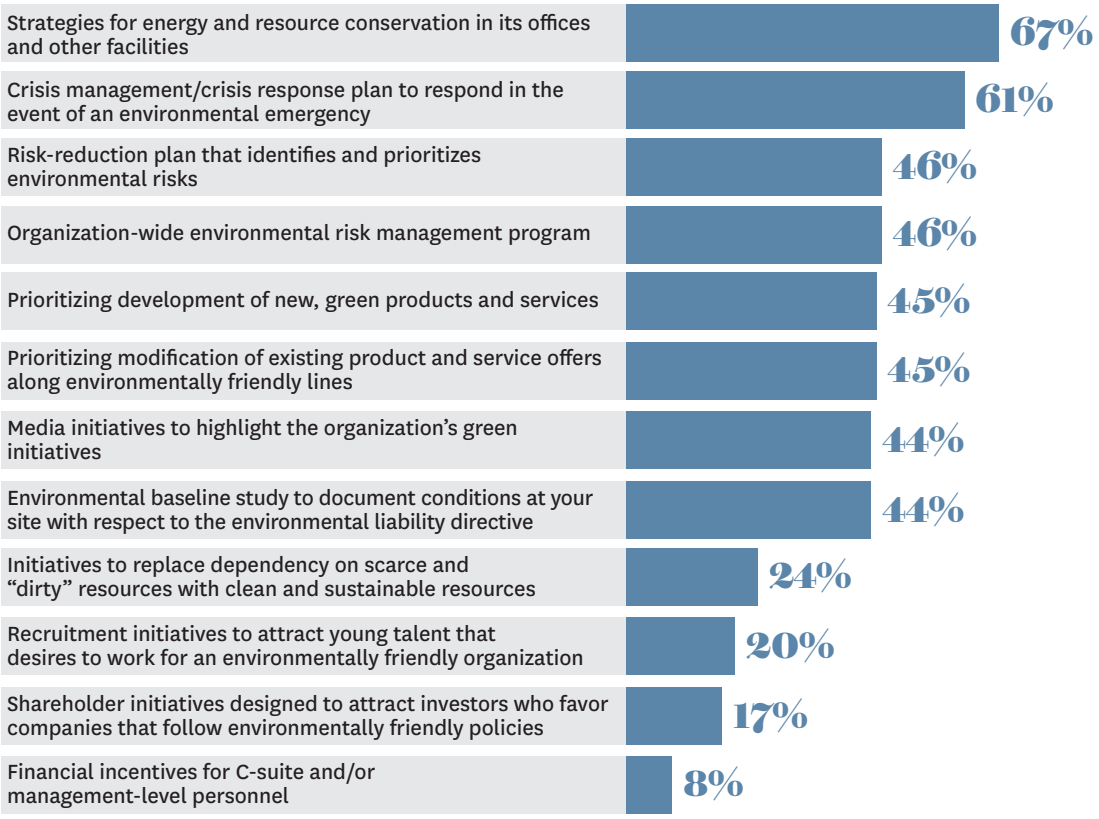
What sorts of environmental initiatives are European companies carrying out? By far the most widespread involve energy and resource conservation (67%), followed by crisis management and response plans (61%). But substantial numbers are also devoting effort to improving their understanding of and ability to manage environmental risks. Almost half (46%) are implementing an organization-wide program and/or creating a risk-reduction plan that prioritizes environmental risks, while 44% are conducting an environmental baseline study. figure 5

Survey respondents largely believe their efforts are good for the company more generally, not just as a way to reduce regulatory risk. Close to two-thirds (65%) of respondents said their environmental initiatives have a positive or very positive impact on profitability. Overwhelmingly (87%), respondents also described the resources their organization commits to environmental sustainability and risk management as ample (12%) or adequate (75%). And while more than two-thirds (67%) of companies said the level of resources devoted to environmental sustainability and risk management has remained the same, the identical percentage expects the level of commitment within their organization to increase either somewhat or significantly over the next five years.

Figure 5

Initiatives That Have Been Implemented

QUESTION: WHICH OF THE FOLLOWING INITIATIVES HAS YOUR ORGANIZATION IMPLEMENTED?



Funding Environmental Risk Management

Self-insurance remains the primary tool for covering the costs of environmental damage among European organizations—56% of respondents said they do so through self-insurance. However, companies' insurance-buying strategies vary greatly. Survey respondents came from a variety of industries including accounting, banking, business services, media, energy, telecoms, industrial manufacturing, and engineering. As such, they represent both organizations that generally incur minimal environmental liabilities, and also those that typically are much more vulnerable or have a greater environmental risk. Accordingly, some respondents plan ahead through self-funding, insurance, or factoring potential remediation into the budgets for their capital projects. Others anticipate no problems or expect to cover whatever costs arise out of their operating budgets.

Essentially one-fifth (20%) feel that the ELD's expansion of environmental damage to include protected species and habitats creates a real or potential threat to their organization. It is notable that more than one-quarter (28%) said they did not know whether this expansion poses a threat. Although directional, about half—52%—of survey respondents said the ELD was instrumental in prompting them to obtain financial security against environmental liability, including bonds, escrow accounts, and insurance policies. When respondents were asked to describe specific steps they have taken since the ELD was issued, one of the most frequent answers was that they have purchased additional Environmental Impairment Liability (EIL) insurance (other steps included more active protection of habitats around their sites during development, assessment of known and potential liabilities, and informational road shows and workshops).

These differences reflect the strategic decisions companies have to make in determining how to manage environmental risk. Asked Sonigo, "Are you going to be covered on occurrence or on the claims-reported or claims-made basis? This is very important, as is the policy period. From my experience, in the case of an environmental and ELD risk, damage to diversity can take sometimes ten to fifteen years before the case is considered settled. Is your insurer going to be available to pay for this loss for such a long period?"

"Partnering with an insurer can be a valuable tool to demonstrate to your stakeholders that you have a backup plan to protect your balance sheet in case your existing measures go awry," said Robertson, "to transfer the cost of environmental damage or pollution events, and to ease the process of mergers or acquisitions or divestitures. It also helps to provide additional support and expertise for pre-loss planning, to help assess and mitigate your exposures, and evaluate the hazards faced by your business." Robertson added, "Many deals have gone sour because of the inability to reconcile the risk-reward relationship during an acquisition where there is concern about unknown historical environmental liabilities."

Currently available general liability policies already contain some protections against environmental loss, Robertson noted. However, "they are normally limited to claims for environmental losses to third parties for damages, such as bodily injury or property damage. They respond to pollution events, and not typically to environmental damage as broadly defined within the ELD. And coverage is limited to pollution events that occur on a sudden, unexpected, and unintended basis. In addition, certain exclusions apply for owned damages or damages to the insured's property—which would preclude coverage for cleanup costs on the insured's location."

The good news is that within the market for specific environmental insurance, "there's certainly more capacity and appetite than ever," Robertson said. In addition, companies who self-insure risk through the formation of a captive insurance company may wish to consider including EIL coverage within the captive. New environmental policies address the key change in liability introduced by the ELD—expansion to include activities or operations that do not cause a pollution event but also result in environmental damage. They also do so by covering not just primary remediation but compensatory and complementary remediation. Policies now will often provide coverage for Loss Prevention Costs to mitigate an actual or imminent threat to human health or the environment. "As the ELD imposes responsibilities to take

preventative measures, to mitigate an imminent threat of environmental damage, and to prevent actual environmental damages," Robertson noted, "policies often provide an element of loss prevention costs and emergency response costs."

Many policies include coverage for loss prevention costs, which addresses the ELD's requirement that companies take preventive measures against an imminent threat to the environment. They also provide extensions and optional coverage for transportation loss, business interruption, contractors' operations and losses arising from the insured's operations away from their own premises.

Looking Ahead

"Environmental risk management is really a balancing risk act," said Robertson. "Strong risk management creates a positive operating environment for companies, minimizing or eliminating damage to the environment, or to neighbors. It also reduces the cost associated with operating and responding to environmental events, and will help to maintain a positive brand image for the various stakeholders."

Not surprisingly, oversight of environmental risk at European organizations is focusing itself in the C-suite. Some degree of reporting of environmental risks to top management is now nearly universal, with almost two-thirds (62%) of respondents saying this is done regularly, while another 34% said it is done ad hoc.

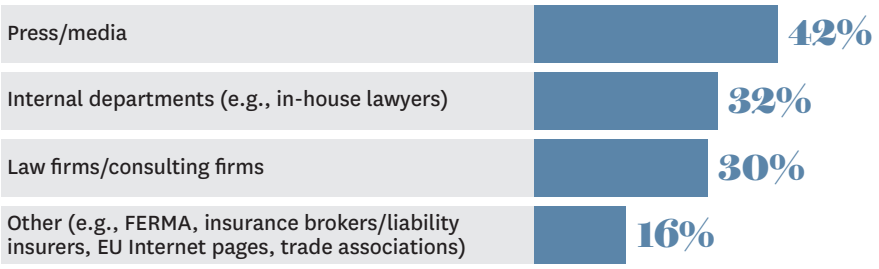
Awareness of and detailed knowledge about the ELD itself varies greatly among companies operating in Europe. Less than one-fourth (22%) said they are knowledgeable or very knowledgeable about the ELD. Almost two-thirds (62%) said they are getting information about the directive from in-house or outside counsel. But respondents also mentioned a wide variety of sources helping them to learn about the initiative: insurance brokers, insurers, trade associations, FERMA and other professional associations, and media and the Internet, among others. figure 6

"The larger companies seem to have a very good knowledge of the ELD," noted Fogleman. "But what we found in studies that I carried out with BIO Intelligence Service, a French consultancy, is that quite a few of the SMEs [small to medium-sized enterprises] have not heard of the ELD. And so they've basically done nothing, really, to change the environmental management systems, if any exist, at their company."

Figure 6

Sources of ELD Information

QUESTION: FROM WHICH OF THE FOLLOWING SOURCES DID YOU ACCESS INFORMATION ABOUT THE ELD?



> Strong risk management creates a positive operating environment for companies, minimizing or eliminating damage to the environment or to neighbors.

Yet obtaining some idea of the impact of environmental risk on profitability and value creation is becoming increasingly imperative. "External auditors are more and more questioning companies on how much provision they should have, even on small incidents," noted Sonigo. "So companies are working on potential scenarios and trying to evaluate what is the maximum foreseeable loss that they can have. This is important even for knowing how much of a coverage limit you should buy, for example, on the insurance side."

Yet, "In most countries, accounting standards don't allow companies to really put in their balance sheet any provisions for environmental risk unless those risks have been realized. And the ELD does not make it simple," in part because of such complexities as the distinction between primary, complementary and compensatory remediation. "The risk manager and the environmental manager should work with the accountants in order to establish those provisions," Sonigo recommended, although he expects that "accounting standards will move in the future to allow also for potential risks as well as not known risks."

The uncertainty even embraces the ability of companies to add in the value of their insurance coverage. "There is no way that [companies] can include the insurance coverage in the calculation of those provisions," said Sonigo, "because there is still uncertainty under accounting standards and uncertainty whether the insurance policy will apply or not to those provisions."

Robertson remains hopeful, however. "We're largely three to six years" into the process of institutionalizing the ELD across Europe, he noted. "So we're not that far in, and I think it will take some time. There is some good work going on—we just need to continue with that." ◆

APPENDIX

Who Participated in the Survey

A total of eighty-nine respondents from the FERMA membership participated in the environmental risk management survey. The survey audience represents a wide variety of industries. While nearly one in five (19%) came from banking, securities, financial services, insurance, or real estate, and 14% from energy, petrochemicals, mining, and utilities, the bulk are distributed much more broadly, in fields ranging from business services to hospitality to consumer manufacturing to media. Only 11% are from government, education, or nonprofit. More than one-third (36%), however, are from industries that could be regarded as highly exposed to environmental liabilities: energy; engineering, construction, and architecture; healthcare and medical services; pharmaceutical and medical devices; and industrial manufacturing.

Organizations represented in the survey are predominantly large—72% employing 1,000 or more and 41% employing 5,000 or more persons. Likewise, over half (52%) of the organizations reported US$1 billion or more in sales or revenues in 2011. Organizations represented are also heavily multinational in their reach, with almost two-thirds (65%) having a physical presence in more than one country and 42% in 11 or more.

Almost half of respondents themselves are either involved in these decisions in an official capacity (41%) or directly responsible for decisions regarding environmental risk management at their organization (7%). Sixty percent of respondents are CROs or risk managers, while only 8% are other C-suite or board members. Others include departmental and business unit heads or other managers, consultants, and other executives. Likewise, almost half (46%) named risk management as their department or function; together with finance, these represent almost two-thirds (63%) of the total.

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