



# Planning for a Sustainable Future

FEBRUARY 2016 Ideas that Will Shape EHS&S Management in the Year to Come



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If the arc of business progress is long, it is now starting to bend toward sustainability. The questions for the corporate leaders of this movement today are not whether or not sustainability adds value to their business, but how to integrate these considerations more deeply into the fabric of their organizations.

As we did two years ago, NAEM spent the time to look closely at what companies are doing, and more importantly, how they are thinking about these new programs and initiatives. What emerged from our conversations is a portrait of a business community on the precipice of change. By talking candidly with EHS & Sustainability leaders about their latest ideas, we glimpsed a future where corporate success will be assessed and measured by impact, and where the boundaries of a company's sustainability efforts will go well beyond their gates.



These changes won't be easy, and the wins won't be quick. Indeed, the path forward from here is one in which innovation will continue, but much of the real progress may go unseen, as companies seek to reduce their impact across the full value chain, or collaborate with others to shift entire systems in support of their sustainability goals. The horizon also may involve a new voice for business in advocating for the broader system changes that are needed.

Consistent with the progress they've made internally, we expect this leadership role to prove transformational in how civil society might structure our economy, measure business value and how we understand the role of business in society.

I found it fascinating to be part of this conversation and I hope that this report will incite dialogue between you and your peers.

Sincerely,

A handwritten signature in black ink that reads "Carol Singer Neuvelt".

**Carol Singer Neuvelt**  
**Executive Director**  
**NAEM**



## 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 and an active network for sharing solutions to today's corporate EHS and sustainability management challenges. Visit NAEM online at [www.naem.org](http://www.naem.org).

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# Introduction

The following report is a synthesis of the key issues that are on the minds of corporate environment, health and safety (EHS) and sustainability leaders today. When NAEM first published the emerging trends in EHS and sustainability management in 2014, the leaders we spoke with described programs focused on product compliance, supply chain management and employee engagement. They also shared insights into some of the strategic conversations that were taking place behind closed doors, as their companies prepared their next generation of goals.

In the two years hence, we have seen many of these programs evolve and this emerging thinking transform into action. Where companies were once engaging suppliers to reduce sustainability risks, they are now starting to establish business requirements associated with environmental, social and governance ESG performance. Where they were once privately assessing their exposure to climate risk, companies are now publicly advocating for policy solutions. Where they were once recognizing the limits of existing systems, they are now partnering with others to change the rules of the game altogether. At the same time, the demand for transparency in a global context continues to influence business practices at all levels. Participants described a landscape shaped by:

**Customer requirements:** Since every company not only has a supply chain but belongs to a supply chain, customer requirements are a strong motivator of change. Walmart's sustainability goals, for example, are driving changes across the business ecosystem for advancements in green chemistry, fertilizers and supply chain transparency. This trend is going beyond consumer-facing brands as business customers increasingly expect suppliers to provide transparency and operate in a way that aligns with their own sustainability goals.

**Stakeholders expectations:** Stakeholders not only expect companies to improve their ESG performance; they now expect companies to set the pace for change. Participants described the influence of both employees and external advocates on the process of identifying material issues, shaping sustainability programs and driving public communications.

**Supply chain risks:** Given the risks of noncompliance, leadership companies are looking more closely at their supply chain relationships and strengthening those requirements accordingly. These risks are also extending beyond product stewardship into new areas, such as global labor concerns, which might have previously fallen outside of the scope of a company's programs.

**Investor interest:** Mainstream investors increasingly recognize the importance of sustainability as a strategy for risk management and value creation. From 2006-2015, the assets under management by signatories of the United Nations' 'Principles for Responsible Investment' increased from \$4 trillion to \$59 trillion, with a third of that growth occurring in the last 12 months of that period. Investors are also paying closer attention to how companies are positioning themselves vis-à-vis environmental risks. In May 2014, for example, Barclays downgraded the entire U.S. electricity sector for not accounting for the growing competition from solar energy.

**Emerging cultural norms:** The Pope's 2015 encyclical on climate change was another significant harbinger of a broader shift taking place in terms of society's expectations for business, according to participants. "It's no longer simply an environmental issue, or no longer a business issue...it is a larger moral discussion that changes the game," one participant said. This new norm was also reflected in the record number of government and corporate leaders participating in the international Conference of Parties (COP)21 climate talks in Paris which received primetime attention on the global news.

Finally, it's important to note that we conducted the interviews for this research in the summer of 2015, when many of those with whom we spoke were at the outset of a new period of goal setting and growth. These new goals outline the evolution of existing programs, as well as emerging areas of concern for EHS and sustainability leaders. Because we are still at the beginning of this cycle, though, some of these new goals do not yet have specific strategies or tactics associated with them; many of them will require new practices and even new business models to achieve. As such, this report reflects the broad conceptual areas that these new targets address, along with some of the challenges associated with breaking new ground.

In the following sections, we will examine these ideas in further detail with an eye toward what they will mean for EHS and sustainability managers and how they will shape business in the year to come.

# Methodology

## Background

As the leading association for corporate EHS and sustainability decision-makers, NAEM conducts regular benchmarks among its membership to remain current with the salient issues for the profession. This research includes annual outreach among its leadership companies to reveal the plans they are making for the future. In NAEM's experience, a structured one-on-one conversation offers a more predictive portrait of the future than a quantitative survey, which is better suited to documenting existing initiatives. In 2014, NAEM published key insights from those conversations in the "2014 Planning for a Sustainable Future" report. Since NAEM members tend to represent those at the forefront of their industries, the report served as a forecast of emerging practices in corporate environmental management.

## Objectives

The objectives of this research are to:

- Identify organizational priorities for leadership companies over the next 12-18 months
- Understand the emerging issues that are on the minds, if not yet in the budgets of, leadership companies
- Establish a benchmark for the maturity of EHS and sustainability programs within leadership companies

## Participants

To capture a portrait of the future NAEM interviewed 16 corporate EHS and sustainability leaders and six recognized experts from the broader EHS and sustainability community. The companies represented in this report come from a variety of industries, sizes and positions within the supply chain.

## Approach

NAEM conducted a one-on-one interview with each participant. Each interview lasted approximately one hour and followed a common discussion guide, which included open-ended questions about the environmental issues and the projects that respondents are either working on, or plan to address, in the coming 12-18 months. NAEM also gave respondents the latitude to shape the direction of the conversation based on the issues that were driving their strategies. Using transcripts of the conversations, NAEM then analyzed the conversations for macro trends, program priorities and common themes. In exchange for candid input, NAEM agreed to anonymize all comments in the results.



# The new generation of goals drive toward tangible outcomes on material issues



For many companies, 2015 marked the beginning of a new set of goals, which serve as a good barometer of program maturity, and where sustainability is headed next. What makes this latest generation particularly noteworthy, however, is the focus on material issues, framed by intended outcomes rather than actions alone.

## *Stakeholders expect companies to lead*

Stakeholder engagement is a core part of most corporate sustainability programs, and according to participants, their new goals reflect the areas where stakeholders expect them to lead. “One of the things that we discovered as we talked to our [advisory panel]...is that they expect us to lead,” one participant said. “They expect us to lead in the blueprint, developing the blueprint, and the expectation that we will all implement a blueprint together. Not that it’s [our company’s] blueprint but that society needs to have a blueprint, and industry needs to lead that and [we] as a major sustainability leader in industry needs to lead that.”

While external stakeholders continue to pay close attention to corporate ESG performance, the most important stakeholders for many companies are their employees, for whom sustainability remains an important asset for recruitment, engagement and talent retention. “Our main focus is to meet the needs of our internal stakeholders,” one respondent explained. “What they think and what they need is extremely important to our business. They feel that in order for them to produce as much as they could they want to feel that they’re not wasting plastics or Styrofoam cups in the cafeteria. Then we make that change. That’s not a risk in the traditional line of thinking. That’s certainly not life savings. But it’s risk from an employee retention respect.”

## *Refining the focus through the lens of materiality*

To focus their efforts on the areas of greatest impact, many of those we spoke with started the goal-setting process with a materiality assessment. This quadrant analysis provided a filter for refining priorities, identifying business risks and suggesting areas where companies can have an impact.

According to one respondent, whose company completed its assessment within the past year, the process was a valuable tool for putting its new programs into the language of business continuity. “It’s more of a mindset change,” he said. “It’s not necessarily a major shift in what we’re doing, but it’s a little bit of a major shift in how we talk about what we’re doing.”

For another participating company, the materiality assessment was also an opportunity to align employees around where the company is headed next. To do so, it convened 20 working groups, which discussed and winnowed a list of 70 potential issues. “It was the first time that we included as many people as we did,” the respondent said. “So if nothing else, if you ended up with a goal that you might not be wild about, but at least you and your peers had the opportunity to be heard.” The exercise in engagement not only created greater buy-in, but it yielded better results, too. “What we came up with were much more meaningful and have a lot more impact...than what we used to have,” he said.

Maintaining a disciplined focus on core issues is key, another participant explained, to ensure companies have the capacity to actually effect a change. “[I was] on a panel discussion years ago, and someone said, ‘What’s your biggest worry? And she said, ‘My biggest worry is that we’re going to spend so much time doing things that are good that we’re not going to do the things that are great.’”

Going through the thoughtful process of prioritizing issues also gives companies confidence to remain strategic in the face of new stakeholder inquiries. “There’s a lot of stuff stakeholders will come to us for...and we’re looking at it going, ‘We’re the wrong people,’” one respondent explained. “There are other issues where we go, ‘Yeah, we are the right people and we do have influence on that and it is important to us.’”

### *Setting goals that deliver impact*

This focus on the highest-impact areas also extends to how many companies framed their new goals, too.

To clarify the intended outcome, some companies couched their product sustainability goals in business-relevant terms, calling for resource reductions on specific products based on percentage of revenue. The emphasis on impact also shows up in how one participating company set a new goal for the use of renewables, which speaks to the company’s ultimate intention to reduce its carbon footprint: “In other words, there’s people that would say, ‘Okay, it’s great that we’ve said that energy efficiency goal that we want to reduce how much energy we use. Does that benefit from a fossil fuel base?,” the respondent reflected.

For other companies, science-based measurements provided a tangible yardstick for impact. “The difference between science-based goals and other goals is simply that we set the goal based on what we think has to be done rather than what we think we can do,” one respondent explained. “So our GHG reduction goal is based on what scientists are telling us we need to do and identifying what we believe our fair share to be.”

Thinking about the end results, however, means that true success may not be measured by numbers alone. “I’m hoping to get to the point soon where we have no goals, anymore,” one respondent explained. “We may end up with some longer-term visionary goals that may not be based on numbers, metrics. That may be based more on conditions or results. A factory that commits no energy or that uses 100 percent renewable energy that sends no waste to a landfill...So that’s a goal that’s less about numbers and more about conditions or results.”

# Companies continue to seek opportunities to reduce the impact of their operations



Energy, water and waste programs continue to evolve as companies seek new opportunities to minimize their environmental footprint.

## *Energy*

For many companies, the ambition to deliver tangible impacts with their sustainability investments begins within their own four walls. Not surprisingly, then, the new goals for most participants includes a focus on evolving the horizon for energy efficiency and consumption.

This is playing out in a range of ways, including one company's goal of using renewable energy to power its manufacturing facilities. It's also being incorporated into new building construction, as in the case of one participating company, which considers energy-saving design for each new building it constructs. If the payback period for the energy-efficiency attributes is three years or less, the project is greenlighted.

At another participating company, energy efficiency is similarly part of the capital improvements planning process. For any project that exceeds \$3 million, the project team has to evaluate the cost of energy for that region and incorporate tactics from a central database of energy-saving ideas. They are then required to present their analysis of the lifecycle for the project as well as their proposed solutions to the executive management before the money is approved. Examples of projects that resulted from this process include on-site solar energy production at several facilities in Europe and a partnership with a green power company in Mexico to supply wind energy. The long-term agreement with the green utility envisions the purchase of 45,000 million metric tons of CO<sub>2</sub>, the equivalent of the energy consumption of 43,000 people in Mexico, the respondent said.

The more programs mature, however, the more difficult it becomes for companies to achieve dramatic new gains. "As one of my team members says, 'The easy stuff is gone,'" one respondent reflected. For another participating company, which has achieved carbon neutral status internally, the next horizon is related to identifying innovations to reduce the environmental footprint of product ingredients. For another company with a mature energy efficiency program, the new goals are about maintaining existing success, even as the company grows. To achieve deeper footprint reductions, the respondent said, would require broader system changes in the availability of renewable energy.



### *Zero waste programs are ramping up*

In their evolution toward greater operational efficiency, participating companies are also taking a fresh look at how they manage waste. A number of participating companies have included zero waste goals in their latest targets, which brings with them the challenge of articulating the desired impact and exactly how success will be measured.

In one case, the company developed two associated goals on waste: one that focuses on waste generated and another that measures the amount it sends to the landfill. Introducing a zero-waste-to-landfill goal at another participating company involved starting with criteria for how the company will categorize waste itself. With the goal of having 100 zero-waste-to-landfill sites within the next three years, the company now requires that facilities recover or recycle at least 99 percent of its metal; beyond that, only three percent of the facility's waste can go to the landfill. Sending waste to incineration is not counted as a reduction, the respondent said, unless there is energy being recovered "in a responsible fashion."

As with so many other sustainability initiatives, though, the pursuit of these new waste reduction goals will likely influence other aspects of how companies do business. This could mean designing products to be biodegradable, altering manufacturing processes to create less waste or making use of new byproduct synergy networks, such as the U.S. Business Council for Sustainable Development's 'New Materials Marketplace'.

### *The focus on water is starting*

While water management is not a new area of concern, it remains top-of-mind among participating companies, particularly given the growing scarcity in many of the world's manufacturing hubs and the expected impacts of climate change on operations and suppliers in those areas. In addition to improving the efficiency of HVAC systems and introducing water-saving measures within their facilities, some companies are also looking at the water footprint of individual products, and introducing new products altogether. It was, indeed, this new awareness that helped give birth to Unilever's new dry shampoo, which addresses the needs of consumers in water-scarce areas.

Many participants have also conducted detailed water risk assessments to understand how disruptions could affect business continuity. Armed with this information, one company set an overall water reduction goal of five percent per year at all its sites around the world. Those facilities located in a water-constrained locations are now required to adhere to certain engineering requirements to ensure continuity despite the short supply. These measures, the participant said, are part of the organization's broader adaptation to what's ahead. "The whole idea of preparing the organization for operating in a more water-constrained world is something that we're continuing to work on and it's going to be more and more important as you see more and more examples of places where water really is becoming a problem," the respondent said.

As attention to the issue mounts, it is likely to affect the costs of doing business, where companies choose to locate their manufacturing facilities and even the viability of their sustainability claims. "Should we base our next significant manufacturing facility in northern China or India because it's cheaper, but where water is an issue?" one respondent reflected. "Forget about saving money for the company. Is it socially responsible?"

The specter of competition for fresh water also introduces other business continuity risks, including access to labor, increased regulations and potential civil instability. "We are certainly aware that drought and the increasing impacts of climate change and other sorts of drought cycles have profound impacts...on the economy, on the communities in which we operate and on civil societies," one respondent said."

# External reporting strategies are maturing to better balance stakeholder expectations with business needs



As a cornerstone of most sustainability programs, transparency remains a core commitment for participating companies. Their strategies for external reporting are evolving, however, as they gain confidence in their ownership of core issues, their performance in those areas and the potential consequences of reporting on their own terms.

## *Questioning the rules of engagement*

Even as companies are directly incorporating stakeholder concerns into their goal-setting process, they are taking a critical look at how much information they share and with whom. Without a more critical focus, some respondents pointed out that the demand for transparency could easily subsume internal resources. “More companies are going, ‘Wait a minute,’” one participant said. “The reporting tail is starting to wag the sustainability dog. Let’s figure out how we continue the best value of reporting while not consuming all our resources in doing it.”

To manage the demand, participating companies are more closely scrutinizing the purpose of the information requests they receive. Transparency schemes without a materiality screen or those that don’t drive behavior change, for example, may not make strategic sense. “I’m hearing pretty much the same thing from everybody,” one respondent said. “We think reporting is really important...it’s just becoming onerous...You’re starting to get more and more companies, I think, that are asking how important it is to meet all of these standards or really more important to leverage reporting for the improvement of performance, which is what it was intended for in the first place.”

Even the Global Reporting Initiative’s G4 guidelines, which were intended to streamline the process may not go far enough in reducing complexity. “Quite honestly, the G4, I just threw up my hands and said, ‘This is insane’, and I still have a lot of reservations about that,” another respondent said.

### *Sharing information in new ways*

One outcome of this critical look at reporting strategies at some companies is a move toward shorter, more focused communications.

“Over the last two years, we’ve made a ton of change. The team that was working on a lot of our reporting was trying very hard to meet every external stakeholder expectation that could conceivably be out there and we have pulled back substantially from that,” the respondent said.

“We’ve tried to really focus it on making sure things are visual and understood and I’m not worrying about if I don’t have a specific metric that somebody thinks we should have.”

At another company, however, the annual sustainability report has actually gotten longer as it now relies more on storytelling, which was incorporated to provide a more complete portrait of performance than numbers could alone. “Our first report was 16 pages. The one [we recently published] is 99,” the respondents said. “This effort to be more transparent comes across from the perspective of helping [others] understand our programs, our processes, our initiatives better.”

The use of web-based platforms is also expected to transform how and when companies report. One company, for example, recently launched a website that lists every ingredient in one of its product categories down to .09 percent. To achieve this feat, it had to gain greater transparency from its own suppliers. “Obviously working with them to make sure they feel assured that they are able to keep their trade secrets but at the same time tell the consumers as much as we can about what’s in our products, that’s a huge thing for us as transparency being as open as we possibly can.”

The cadence for reporting is likely to change, too. The use of online tools not only provides a deeper level of transparency, but also opens the door to more continuous reporting. “I think the annual report concept probably will eventually go away,” one respondent said. “Our sustainability database is measuring monthly on all criteria so we have the information instantaneously. Are we ready to maybe yet put that out there? Probably not. But ultimately yeah, yeah we probably will be.” And as some companies start to take a longer view of their issues, their communication strategies are likewise adapting. This is the case at one participating company, which recently moved to a ten-year cycle for goals. This transition is driving a strategic conversation about how, when and on which topics they will do their reporting: “It’s going to be a little bit more, management of change communications” he said, “because in some goal areas we’re going to have great progress. In other goal areas it might be flat from year-to-year in a particular area. And that’s okay because that’s part of the nature of this. You can’t get 10 percent reduction year on year on year on year. You just can’t.”



# Product stewardship initiatives are addressing broader value chain concerns



While many companies perform lifecycle analyses of their products, leadership companies now seem to be looking at the environmental footprints of their products from a value chain perspective. “I think that’s going to be a big increasing theme,” one participant observed, “value chain is a slightly bigger version of [supply chain] because that gets to your customers, it gets to end-of-life, not just suppliers.”

## *Integrating sustainability into the design process*

The evolution of lifecycle thinking from analysis to action is consistent with the maturity curve of top-performing companies, according to one respondent with deep knowledge of product sustainability trends. “[Leadership companies] go from lifecycle assessments and kind of playing around with products and maybe a green product, and then start developing an overall product strategy with a product sustainability goal,” he said.

Among participating companies, the new goals likewise reflect more mature strategies to design products with environmental impacts in mind.

One company, for example, created an internal sustainability index to evaluate its product portfolio. Each product is scored based on its lifecycle impacts from raw materials to end-of-life concerns. The company plans to use this system to evaluate its entire research and design portfolio. “I can tell you that those that are scoring poorly on sustainability metrics are examined [internally] very closely for how they need to be changed and modified and rehabilitated...or exited,” the respondent said.



At another company with a large product portfolio, a similar ratings system is slowly phasing out ingredients of concern to the company. “We have a commitment to reduce our energy use, water use, reduce our waste and increase the amount of recycling and then design more sustainable products using a lifecycle assessment as a baseline for the current products so that each subsequent generation of product has a lower environmental footprint.”

### *Aligning suppliers around product goals*

To move the environmental considerations upstream, supply organizations within companies are increasingly being asked to assume greater accountability for the company’s product sustainability goals. At one participating company, for example, the supply chain organization now has defined targets for raw materials sourced, waste reduction, recycling. “Before you didn’t have any ownership on environmental impact from the supply chain because it wasn’t one of the things they’ve been given to do,” the respondent said. “Their job was to buy stuff and make sure it was done low-cost, on time and at high quality.”

As companies assume greater responsibility for the full lifecycle of the products, however, it creates the need for greater engagement with upstream suppliers. “I think a big aha for us is that we set some pretty ambitious goals around the value chain (so supply chain all the way through to consumer use) on water, greenhouse gases,” said one respondent with a large product footprint. “I think what we’re finding, which is not a surprise but it’s worth noting, what we own, control and operate, we can achieve some pretty amazing results. Where we have influence, we can achieve impressive results but...with our suppliers it takes longer.”

To ensure its suppliers are aligned around its goals, one participating company has an ethical supply chain program that embeds aspects such as labor rights, governance, minimum wage and environmental health and safety directly into the contracts.

Another participating company offers incentives for performance, as part of an existing program that financially rewards suppliers for turning in cost-reductions. Not only do suppliers now receive points toward that bonus for their work in reducing water, waste and energy, but their cooperation also strengthens their partner status, thereby assuring more business into the future. Shoring up supplier relationships is important the respondent said, as the company seeks opportunities to reduce the number of suppliers, overall. “There is less risk if we have fewer suppliers” she said.



### *Looking at downstream impacts*

Since lifecycle assessments often reveal that the biggest environmental impacts are in the use phase, companies that are further along the maturity curve are setting their sights on reducing their product footprints downstream. “We’re going to create products that are going to help our customers have a more positive, a more significant reduction in their emissions,” the respondent said. “We now have this product goal and customer goal.”

The shift toward lifecycle design incorporates end-of-life concerns as well. Working with suppliers on material recovery and recycling, one participant’s company was able to introduce a product composed of 30 percent recycled components. This year it plans to add another eight or nine products made from 20-30 percent recycled components.

Designing a product with recyclable parts does not necessarily make it easily recyclable, however. “It’s going to be recycled if somebody can make money recycling it,” the respondent said. “If it takes 30 minutes of labor to take a product apart and the commodity value that’s recovered is less than paying for that 30 minutes of labor then it’s not going to happen.”

To address this issue, the company has been working with recyclers on tool-less assembly and disassembly. As the participant pointed out, though, what happens to a product during the end of its useful life has a lot to do with the system of incentives that are built into the business. “If I have a greater incentive to sell you a new product as opposed to repairing an old product then I am going to try to sell you the new product,” he said.

And for some companies or product categories, incorporating lifecycle data into the business evaluation process may reveal that the most ‘responsible’ approach is the counterintuitive one. At one participant’s company, the introduction of a 100 percent recyclable product fell flat when consumers were unwilling to pay the 5 percent premium for the benefit. Additionally, the respondent said, “when you look at the whole process and the waste generated the energy consumed, and the lack of a viable market for the byproducts we just stopped the project.”

# Supply chain risks require focused attention, creative solutions and engagement



As companies start to work on business risks beyond their gates, the challenges are progressively more complex and difficult to solve on their own.

## *Regulatory compliance is a moving target*

The changes in the regulatory environment means that EHS professionals are increasingly being asked to manage risks without clear definition, or straightforward solutions. “All of those are really environmental or health and safety-related regulations that are outside of the traditional EHS as we used to think about it a number of years ago,” he said. “OSHA and EPA? That’s easy. We know the risks. We know what the compliance obligations are. We have the people that are the experts. We have the resources.”

Getting a handle on product regulations is a particularly thorny risk as new regulations continue to emerge at all levels of government around the world. Even knowing what the regulations are can sometimes be a challenge, as one respondent explained:

“You don’t necessarily have to scan the register from environmental or health and safety regulatory agencies because nowadays these regulations don’t come from there,” he said. “They come from the food and drug administration. They come from the Securities and Exchange commission. And that makes the management of this obligation extremely difficult and hard.”

An example of an emerging issue that several respondents said is creeping into the scope of EHS responsibilities is the use of forced labor and human trafficking in the supply chain. This issue has “gotten much hotter in the last year and will continue to increase,” one respondent confirmed. “That is becoming a very, very salient issue.”

In addition to mounting pressure from NGOs, forced labor has also become a regulatory risk for companies, “which is always a really powerful driver,” the respondent said. “There’s a new U.S. Federal Acquisitions regulation that went into effect in March 2015 on human trafficking and the UK modern Day Slavery Act that went into effect in May... sometimes things become regulatory very quickly and in this case it did.”

As with other new regulatory risks, however, the problem—and therefore the solutions-- may lie deep within supply chains, “where the transgressors are labor brokers in countries that are sources of migrant workers and through a great deal of corruption or agency corruption that might not actually be directly visible to our suppliers, let alone to us,” the participant said.

### ***Bolstering supply management approaches***

To better manage these risks, the corporate supply management function is now a valued partner for EHS and sustainability professionals. As a way to strengthen this partnership, one participating company has embedded EHS professionals directly into the supply management organizations of the company’s 60 different businesses. “We continued to see regulations that we are both concerned about from our own operational footprint, but we also want to make sure that our suppliers are acting responsibly,” the respondent explained.

These dedicated personnel not only work with suppliers on initiatives such as product compliance, conflict minerals, REACH and RoHS, but they also conduct trainings with suppliers to build capacity at the source. Having the resources to focus on the challenge also allows the company to conduct audits at a deeper level of the supply chain, “so we get information on our products [and] can assure that we have products with built-in compliance,” she said.

### ***Raising the bar for supplier conformance***

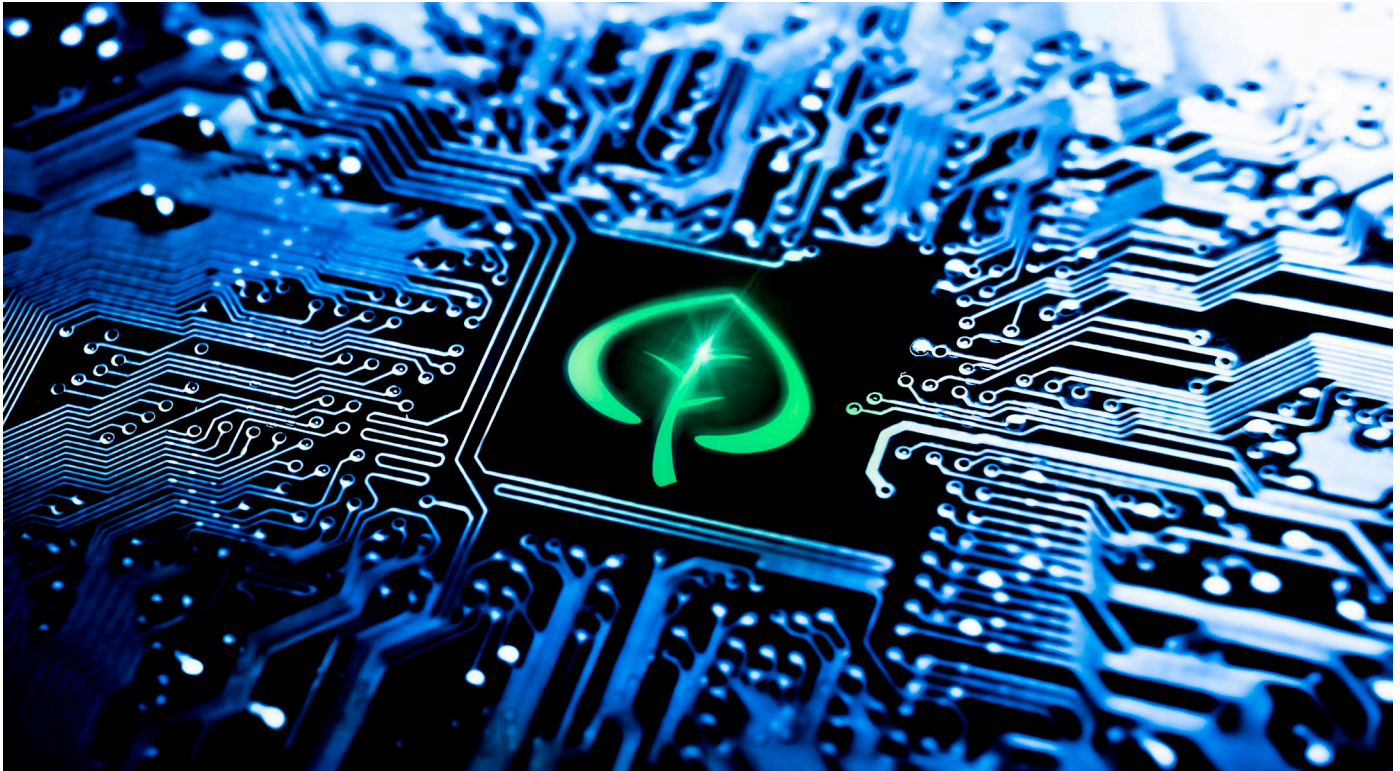
Given the risks associated with noncompliance among suppliers, participating companies are also looking more closely at their supplier requirements and strengthening those agreements accordingly.

While questionnaires are routinely used by companies to vet potential suppliers, one diversified manufacturer recently introduced more explicit requirements for ESG performance among its top-level suppliers. One component of the new guideline is that ESG performance be embedded into the compensation structure for senior executives at the supplier’s company. “The key here is that your senior executives have committed to the program and they’ve actually put skin in the game because some of their pay is tied to this program,” the respondent said.

The new program also introduces actual consequences for non-conformance. “This is the first time we’ve told people we will walk away from you for an EH&S issue. Before, it was, ‘Don’t break the law and be a good steward, and that was kind of just the lip service....Now it’s actually got some teeth in it.’”



# Sustainability is introducing innovations in processes and products



The extension of this holistic, lifecycle thinking is starting to drive innovations at all levels, including the introduction of products that deliver sustainability as a benefit in and of itself.

## *Innovating to eliminating risk*

One of the key innovation opportunities for many companies is to reduce risk through improvements to internal manufacturing processes. In the case of one participant, whose company's byproducts take decades (or longer) to break down, there is a new focus on innovating to reduce or eliminate that waste altogether. "We are definitely looking actively in that space and trying to understand if there's other ways of dealing with or even limiting production in some of the waste streams," the respondent said.

Improving the environmental footprint of a product through innovation can also reduce risk for customers, too. "I am always quick to remind people internally, 'We don't have a supply chain, we are in a supply chain,'" another respondent said. "Everything we care about in terms of how we look at our supply chain, our customers care about. How do we help them have less managed risks, how can [we help them] have less exposure to disruptions of supply or variation in material costs."

## *Innovating to deliver sustainability as a value-add*

Among participants, this concept of sustainability as a value-add shows up in the next generation of goals, which call for delivering sustainability benefits to downstream customers. "What we need to do is to make sure that we are developing products and services that will help our customers and society solve their sustainability challenges," one respondent explained.

For some companies, this might mean identifying the ultimate benefit to the customer and introducing a solution that offers the same outcomes without the detrimental environmental impact. The evolution of this notion was best summed up by one respondent as follows:

“Seven or eight years ago...it was about greening our operations with things like renewable power, energy efficiency, etc., greening our supply chain, greening our products. That was important and certainly continues. Lately, especially when we redefined our strategy and articulated our 2020 plan, we realized that ultimately, we needed to make sure that how we deliver the value to the marketplace and to our customers was built into how we define sustainability. So this idea of delivering sustainability is something we bring to the market not just something we do for ourselves.”

This type of holistic thinking is not only being embedded into the product development process, but is also guiding decisions about future business growth into areas which today may not yet exist. “It’s much more substantive around the type of footprint that you have,” the respondent explained. “If you use a lot of water, how do you figure out a way to help create more water rather than just make sure that your water use is neutral?”

### *Long-term innovations start today*

To achieve sustainable products tomorrow, companies are introducing innovations into the development process today. For one participant whose product development cycle includes regulatory oversight, “you need to think about that [manufacturing process change] 15 years before [the product is ready],” he said. “If we’re really going to influence those [products] that are going to come out 12, 16, 20 years down the road from a sustainability perspective, we need to be talking to and influencing the processes now. So that means really engaging sustainability as the driver—not just doing sustainability.”

Taking a longer view of innovation is also shaping how companies evaluate the return on investment, according to another participant. “We have on our calendar to start looking at the longer term like the 2030,” he said, “because you can look at innovation so then you can be potentially more aggressive with the targets.”

This future-forward thinking can also suggest innovations that would not otherwise be possible, according to another respondent. For its goal-setting process, the company thought about what the world will be like in the year 2097. “What would my grandchildren be saying to me? Will they be saying, ‘Wow, you really drove around this contraption with gasoline power in a combustion engine? Did you really do that, Grandpa?’” he said. “Even my own kids right now [react that way when] I talk to them about Sony Walkman. They kind of go, ‘What’s that?’”

Taking that mental leap forward freed leaders up to ideate around the innovations they could make to help the business thrive in the future. “You won’t be bound by the assets that you have in the ground right now,” he said. “A lot of the decisions that we make on a day-to-day basis are based on the physical assets that we have on the ground, the [plants] that we are operating today.”

This look at the long-term future also introduces the need for innovations in how businesses are structured to maintain relevancy in the economy of the future. Looking forward, one respondent predicted that “we need to redo our business models from a take-make-break-dispose kind of economy to a circular economy. That’s going to be what we are going to have to do in the future.”

Understanding the future in these terms introduces the possibility that some businesses simply will not survive the test of time, he said. “We are constantly scrutinizing our businesses to make sure that we are the best owner for those businesses going forward...because business in the next decade is going to be very different than business in the last decade.”

# The climate conversation has reached the tipping point



Most of the contributors to NAEM's 2014 trends research reported they had well-defined greenhouse gas reduction targets and had even conducted a climate risk assessment. Yet, few leadership companies had publicly acknowledged these risks, nor committed themselves to broader action. That is no longer the case today.

## *Signs of change are hard to ignore*

Over the course of the last two years, a series of events including the California drought and the Paris climate talks have tipped the climate conversation into the mainstream. In June 2015 public attention hit a new level when Pope Francis issued an encyclical, calling for an 'ecological conversion' among the faithful. According to those we interviewed, this action had impact far beyond the religious community. "[Business] is part of society so what becomes acceptable and how business operates shifts, and I think we are in the midst of a pretty big shift," one respondent said.

That shift, another respondent argued, will require the business community to move from closed-door strategies to public action. "Looking back, people will look at 2015 as the year where there really was an inflection point and we stopped talking about the problem and actually acknowledged that we need to go out and do it," one respondent said. "Companies that don't understand that are really living on borrowed time because the fundamental shift is there and it's accelerating."

## *Setting goals with climate change in mind*

The concern about climate change, in fact, is already reflected in the latest generation of goals. At one participating company, there are four new goals related to climate change, including one that commits the company to maintain greenhouse gas emissions at 50 percent of its 2002 levels, while growing the company. It is also plans to unveil a new suite of products aimed at helping its customers reduce their own emissions by 215,000,000 tons. In another instance, the participating company set its greenhouse gas reduction targets based on "what scientists are telling us we need to do," which anticipates an 80 percent emission reduction by the year 2050.



### *Understanding and articulating business risk*

The shift in tone may also require companies to be more candid about disclosing their exposure to climate risk because “if you want to engage and be successful in business, that’s how you’ve got to play on that new landscape,” one respondent said.

At one participating company, questions about climate risk are incorporated directly into its annual supplier survey. “If you’re going to be impacted by sea-level rise, we want to see some kind of [continuity plan]. We’re not looking for a massive study but we want to know you’ve looked at this and you’re thinking about it...We want to know that you’re not going to be caught flat-footed,” the respondent said.

Gaining a better understanding of these risks now can provide companies with the time they need to find alternative solutions going forward. In the case of one company, this might involve rethinking their relationship with vulnerable suppliers. “If a supplier is in an inherently unsustainable situation, that jeopardizes the ability for them to supply use with the stuff we need from them so we are going to be moving away from those kinds of products,” the respondent said. “We don’t really talk too much about it, but we are very concerned about the sustainability of our suppliers.”

Accordingly, the attention to climate risk is also to drive greater transparency demands from customers: “It’s just going to be unacceptable to be unaware, certainly, but kind of aggressively ambivalent about carbon and your own footprint,” one respondent predicted.

This is already the case at one participant’s company, which mandates public reporting, requiring each of its Tier 1 suppliers (up to about 95 percent of its supplier spend) to disclose its carbon emissions to CDP. “We are still debating whether that’s enough,” the respondent said. “We just want a goal for ‘You know what? We just want to put a stake in the ground. We will not tolerate more than X of this or any of that.’”

### *Speaking publicly about climate as a business risk*

The change in the tone of the conversation also creates an opportunity for businesses to take a more public role in addressing climate-related risks. “You have mainstream companies saying, ‘We just need to get on with it, this is a real risk,’” one participant observed. “The longer we keep our heads in the sand the more uncompetitive we’re going to be in the future markets of the world. When household names say it’s okay to use the ‘C’ word, it changes the political dynamic and that’s why I think it’s so important for businesses to speak up and speak out.”

In December 2014, Paul Polman, the Chief Executive Officer of Unilever made headlines when he publicly declared what he said companies had privately acknowledged. “Most CEOs, I’m convinced of now, know that their companies cannot prosper in a world with runaway climate change,” he told the Global Landscapes Forum. “This is increasingly evident. They understand the need to work together with political leaders to address these challenges.”

Indeed, over the last two years, a number of business groups have sprung up to demonstrate support for climate action and to galvanize change. These include the “We Mean Business” coalition and the Corporate Renewable Energy Buyers’ Principles, which was established by the World Resources Institute to scale up the availability of renewable energy. “Businesses are actually investing in renewables and we do care about it,” one participant said. “They [the utilities] understand that we’re going to do it whether they help us or not. So it would be good if they help us.”



# Companies are going beyond their gates to address systems challenges



As companies take a more holistic view of their impacts, their efforts increasingly reveal broad, system-level issues. While many companies have experience collaborating to address shared challenges at the industry-level, leadership companies are now turning their sights towards changing the rules of the game altogether.

## *Individual companies are taking initiative to address systems challenges*

One of the first steps toward changing the system for some companies is taking responsibility for it. “We can’t just be in our [companies] developing great technology,” one respondent said. “We have got to be influential in terms of the behaviors that we need to use and we need to develop the business models that are going to be replacing the obsolete business models.”

One such example of a company taking action is the work one participant is doing to incorporate unrecycled waste into its products. “We are trying to create markets for these things so that if there is a business case, where people are pulling plastic trash out of the ocean and make something into it, we think it will happen quicker than if there is no business case for that,” the respondent said.

Another participating company is taking it upon itself to ensure the sustainability of the paper they use, which means tracing the raw materials to the source. “We’re not just going to rely on [certifications], we’re going to take greater personal ownership as an organization and provide reports on how that’s happening. It’s been hailed as somewhat of a unique shift...I would say there’s a greater ownership, a greater stake in the issue, a larger voice in the discussion.”

### *Collaborating to advance renewable energy*

One of the most oft-mentioned examples of system change in action was the push for renewable energy. The entrée point for one participating company was its new goal to source energy from renewables. “We’re not the only one that’s doing that but it’s certainly something that we see as a cutting edge program, using renewable energy and business is driving renewable energy when governments maybe cannot,” the respondent said.

And not all of this engagement is taking place in the United States. While describing his company’s efforts to advance green power, which comprises almost 40 percent of its global electricity usage, one respondent said “the challenge is actually India and China where it’s been a lot harder. In that case we are working more at the system level to look into ‘Who else is trying to source renewable power?’...and ‘How can we get together and how can we potentially collaborate with local utilities, how can we collaborate with local power producers?’”

Collaboration on this issue is endemic of a larger shift, the participant said, from accepting the parameters of the existing system to collaborating to create opportunities beyond the gates. “I think what I’ve seen in the marketplace is more companies are coming together I think that -- and understanding that as a group we’re able to move things faster more efficiently and make a bigger impact if we come together,” she said. “You’re still accomplishing your own objective but you’re going to move things along faster potentially because you have a greater network of people working against it.

### *Collaborating to advance the circular economy*

The other area where collaboration for system change seems to be accelerating is around the concept of the circular economy. What may have seemed futuristic five years ago is taking shape in a variety of ways among participating companies, as one respondent described: “We have been really pushing for the last several months or actually probably over a year now, really trying to figure out this kind of circular economy concept and where we fit inside of it.”

One participating company, for example, is a founding member of the Circular Economy 100, a group of businesses committed to advancing the concept. To bring this idea to life inside its own walls the company has designed its products for serviceability and has assigned its R&D group to work on bioplastics.

These programs are not altruistic, however. Indeed, another respondent described his company’s programs in the context of driving new value: “Whether it’s extending the life of products (which we are doing), whether it’s making new products from old (which we are doing), whether it’s to look at upcycling and collaboration with other companies... that broader concept of circularity is a big example for us of how to reinvent ourselves.”



One business win from incorporating this concept was a packaging innovation using wheat straw, “an agriculture waste product that has no nutritional value, has no commercial value,” he explained. “We found that we can turn wheat straw into something that almost looks identical to cardboard and has a lot of the same qualities except it takes 90 percent less water and 40 percent energy to make and it saves us money.”

Another group that is working to advance the circular economy is the Closed Loop Fund, a collaborative group of companies such as 3M, Coca-Cola and Unilever that aims “to harness the power of our network to influence the market to increase capital investment and demand for recycled content,” the group’s website reads. According to a respondent whose company is working with the group to create a recycling program for flexible film plastic bags, “we would love to buy post-consumer food grade plastics for our [product] but...you’re dealing with a marketplace that doesn’t even exist, so that’s sort of one example where, you know, we’re going to -- if this doesn’t exist we want to make it happen.”

### *Collaborating on green chemistry*

One of the outcomes of the Target-Walmart Personal Care Summit was a proposal that the major chemical companies collaborate to develop an entirely new set of chemicals to replace ingredients such as parabens. “It’s a big deal,” according to one respondent who attended the summit. “They are talking about basically group research and development, and nobody has done that...I am not sure anybody has ever attempted it and nobody has ever really made it work if they have.”

While collaboration of this kind is likely to introduce a host of new questions, including ownership of the intellectual property, it might be the best way for suppliers to satisfy their customers’ expectations. “It’s a big enough challenge that the sellers of these products, the Walmarts and Targets of the world are trying to say to the [chemical] sector, ‘You guys all do it. Figure it out,’” he said.





# Leadership companies are changing how they think about their role in society



The traditional role of business as purely a driver of economic value is eroding as companies recognize their impact on society and their potential to influence changes that support broader sustainability goals.

## *Purpose is a new way describing the role of business in society*

A combination of stakeholder pressure, changing cultural norms and systems failures has prompted companies to rethink about their very role in society. This emerging idea was best summed up by one participant who explained:

“There is a longstanding philosophy that really is dysfunctional at this stage and that is that the role of business is to just go make money. If business is going to make the world better, well that’s called ‘philanthropy’ or ‘corporate social responsibility’ in some quarters. That’s just a way of thinking that needs to be retired. Is that the only way that business is going to operate in terms of trying to make the world better? No. What we need to do is to make sure that we are developing products and services that will help our customers and society solve their sustainability challenges...the combination of technology advances and public policy changes and then behavioral changes that will help move us toward a sustainable future on this planet we share.”

The result is a new conversation about ‘purpose’, which respondents used as a term to describe the impact their businesses have on the lives of their customers from a full value chain perspective.

“[Our company] and our products and our business are based on the people who are linked to the land, whether they are farmers growing food, fiber, tool or whether they are in the construction business where they are helping the world to grow and create infrastructure whether it is bridges, water, filling pumps, so we are linked to those people that are linked to the land and so being responsible in how we are stewards of natural resources, whether it’s in our business or through our products with our customers. It’s just how we do business and that goes well beyond compliance that is being sustainable,” one respondent said.



### *Social issues are entering into business conversations*

Income inequality is an example of an issue that has gone from a question for civil society to one that has direct business impact. “This is a big issue around inequality, poverty, the haves and the have nots and can you reconcile free market capitalism with social justice and equitable society,” one participant explained. “In most parts of the world, the collective good is something that people are focused on or trying to increasingly. Certainly in Europe and large parts of Asia and Latin America. It’s a real risk. It’s a risk of political viability of countries.”

Other related areas that companies are starting to think about include gender pay equity, access to clean water and healthcare education. While most of these efforts are still in their infancy, the path it carves for business is a significant one, respondents said: “I think business in this big social mix of creating inclusive growth is a big issue—one that we’re just stepping up to.”

### *Businesses are starting to act on their values*

Along with this new sense of purpose, respondents said there is a need for business to have a stronger voice in policy issues that impact sustainability goals.

“Businesses spent the last 20 or 30 years distancing itself from political positions and religious positions,” one sustainability leader said. “It doesn’t take sides and it need some very heated emotional discussions and debates in society. I think what is happening now is business is increasingly being asked to take the leadership position again with a...asked what is moral and social position is on a number of issues that really impact its consumers, its employees.”

One noteworthy example is the way the business community responded to the wave of legislation targeting marriage equality rights. To lodge its disapproval with the Indiana state legislature’s stance, for example, one participating company, cancelled its sponsorship of a sales conference in Indianapolis.

Climate change is similarly another area where values have recently become part of the business conversation. “It’s a larger moral discussion,” one respondent said. “No individual company is going to act per se on an encyclical, but to the degree that it changes culture, that has an effect on our business.”

During his tenure as CEO of NRG Energy David Crane demonstrated this new mindset by not only publicly acknowledging the risks of climate change but serving as an outspoken advocate for policies to address it.

Likewise, those we spoke with suggested that companies may soon start engaging more overtly in the political process to create a landscape that supports sustainability. “There’s quite a bit of conversation going out there now about how to move from good technical practice into the integration with good politics that you can’t really create an environment in which you can do your best work to political environment isn’t tolerant of change,” one respondent explained.

This engagement with policy-makers is already taking place, the participant pointed out, in the form of collaboration with government on the state and local levels: “We’re seeing not only the associations of smaller businesses but we’re seeing some of the larger companies within metropolitan areas actually coming together and having entirely different kinds of conversations with state and local government about what it is that they need in terms of a cooperative relationship. So that the basic infrastructure that’s necessary for economies to work and also for societies to succeed is thought of as a collective effort as oppose to a whole bunch of discrete acts.”

Another respondent said the push toward greater community engagement was still a new initiative for his company, but one that was poised to grow. “Communities should expect to see more engagement from [our company] not only on the issue of water but other issues in ways that help the community...I think it’s part of a larger trend, [our company] is part of it, of companies engaging more in the communities where governments cannot. It’s quite frankly a means for those companies to be sustainable,” he said.

### *Communicating purpose enhances brand value*

At the most practical level, publicly communicating support for sustainability makes sense for companies who are working on breakthrough innovations that need broader support to emerge. “We can develop great technology but if public policy doesn’t support it or people don’t use it, all of the efforts are worthless,” one respondent said.

Defining and publicly communicating a purpose strengthens brand equity, which could translate directly to bottom line impact. “Over and over again we’re seeing research that demonstrates that people who are not calling themselves environmentalists or activists, but they’re looking for brands with purpose, brands that align with their values and they believe strongly that companies should be producing things that align with their value: community and well-being, not only for themselves for the planet,” another respondent explained.

And the appeal of brands with purpose goes beyond the North American market to ‘aspirationals’ in China and India, too, according to respondents. “There’s a shift in China where people are realizing ‘My food is poisoned. I need to start thinking more about this stuff, where it’s coming from, how it’s produced.’ Food is more immediate but people start moving from food to other things, like manufacturing or energy producers or retailers,” one respondent said.

Part of articulating a set of values, however, means acting upon them even when they defy the straightforward business case. This recently happened to one participating company with a strong legacy of brand trust when it reformulated a popular household product after learning that one of the ingredients was potentially harmful to consumers. The leadership knew the reformulation would likely affect market share, but decided to go forward anyway because ‘integrity’ is core to the company’s values. “He [the CEO] made such a big point about this,” the respondent recalled. “We’re going to do the right thing and if our business suffers, it suffers.”

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