Safety: Global Challenges, Solutions and Best Practices

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Introduction to E.ON

E.ON AG is the world's largest investor-owned energy services provider with 90,000 employees and nearly the same amount of contractors in 30 countries around the world. E.ON's goal is to be the leading power and natural gas company, which it strives to achieve through the acquisition of existing assets and the organic growth of new investments. E.ON's priority, however, is to ensure the well-being of its employees, business partners and the public through world-class safety performance.

Managing and advancing safety in any organization is challenging, but this is especially true for an international energy company in which potential high risks and hazards are natural parts of the business. The challenge is compounded by differences in E.ON's multi-faceted businesses and operations, as well as the diverse regulatory and legal requirements, financial environments, local cultures, attitudes and behaviors around the world. Yet, the challenges present unique learning opportunities and sharing of best practices that are afforded to few organizations.

This paper addresses some of the differences in safety practices and behaviors that exist in E.ON's diverse territories. The levels of safety performance in E.ON organizations range from world-class to unacceptable. The latter has resulted from ingrained local practices, which are antiquated compared to U.S. and Western European standards. Using best practices from E.ON's top-performing organizations, the company is working diligently to transform areas with substantial safety issues. E.ON is making financial investments and providing safety experts, education and training to improve hazardous conditions, infrastructures and employees' safety work ethic. In addition, the company must overcome age-old traditions, beliefs, poverty and regulatory guidelines. E.ON has learned from experience, however, that the most effective way to improve safety is to devote time to change worker behavior. In this paper, four E.ON safety leaders draw from their international experiences to share an eye-opening perspective on global safety issues as well as world-class achievements within E.ON organizations.

E.ON Operations Explored

E.ON AG is based in Germany and operates businesses along the entire energy value chain, including gas production, electricity generation, energy transmission and distribution, and retail services for customers. In addition, the company is actively involved in energy research and exploration, engineering activities and construction around the world. These operations are organized geographically or functionally in market and business units and are aligned with the structure of respective target markets. E.ON pursues a value-oriented management approach aimed at enhancing competitiveness and delivering profitable growth and safety. Among the countries in which E.ON has operations are Austria, Bulgaria, Czech Republic, Denmark, France, Finland, Germany, Hungary, Italy, Netherlands, Norway, Poland, Romania, Russia, Slovakia, Spain, Sweden, the United Kingdom and the United States as well as on the continents of Africa and Asia.

E.ON generates electricity using a variety of energy sources. They range from nuclear reactors to hydropower to fossil plants around the world that burn diverse fuels, including coal, oil, peat, biomass, waste and natural gas. In addition to hydropower, E.ON explores and utilizes other renewable energy sources, including wind and geothermal energy, to generate electricity. The company also focuses on other environmental initiatives, such as the generation of biogas to natural gas quality, the use of fuel cells in households and the reduction of CO₂ emissions from its power plants. E.ON is committed to improving the environment and invests billions of dollars each year in research and retrofitting facilities. In addition to generating electricity, E.ON moves power through thousands of miles of transmission and distribution lines across its vast global service territory.

E.ON's natural gas business in Europe runs the length of the supply chain as well. For example, E.ON Ruhrgas E & P extracts gas from the North Sea and Russia, while E.ON Ruhrgas runs the divisions for international gas purchasing and sales for industrial customers. The European gas transportation network stretches over 7,000 miles. Customers buy gas from the distribution companies of E.ON market units, many of which also supply power. Similarly, in the United States, E.ON U.S. manages 4,300 miles of gas transmission and distribution lines as well as underground storage fields.

E.ON's service territories also are diverse, ranging from rugged mountain ranges to icy Siberia to rural countrysides and crowded urban areas. As an energy business, E.ON also has a wide range of challenges that vary across the value stream. They include the obvious electrical and natural

gas hazards as well as working at heights, construction activity, high temperatures and pressures, ergonomic issues associated with office work, vicious dogs, aggressive customers, road dangers, water and chemical hazards, and others. There are many differences in E.ON's global business, but the common factors are the dedicated employees and contractors who provide services to millions of customers. Their skills, knowledge and hard work are the foundation of the company's future success as the world's safest and leading power and gas company. To that end, E.ON is committed to ensure the safety of its workforce, regardless of the challenges.

Why the Safety Initiative?

Safety is essentially a moral choice for E.ON. Employees are people, not assets. They will be physically, mentally and emotionally impacted by injury, as will their families, co-workers and acquaintances. E.ON CEO Wulf Bernotat has challenged the organization to improve health and safety performance across all countries, business activities and markets, and to be comparable with the world's best performers. As a benchmark, the company uses the petro-chemical industry's top performers, which are experts at safely managing hazardous operations.

E.ON is not the only company striving to manage safety on a global basis. Many successful international businesses are pursuing the same initiative as well. There are many reasons to grow an effective safety culture in an organization. There is the moral reason – because "it is the right thing to do." There is the economic reason – safe companies are typically financially successful companies as a result of substantial decreases in direct costs. There are collateral benefits – the company is viewed positively by its customers, the media, regulators and even employees, who experience a boost in morale and productivity. Then, there are legal and regulatory requirements. However, in the UK and the U.S., where company executives could face possible prison sentences for breaches of legislation, regulatory and legislative reasons are seldom cited as a key driver to change behavior or safety priorities.

Executives at some companies have traditionally overlooked the human side of safety. That mentality still exists in many developing countries, where fatalities on the job are considered part of doing business. E.ON refuses to accept this position because its future success depends upon keeping its people safe, physically fit and on the job. There are many challenges to achieving world-class safety performance, but the company owes it to employees and contractors to demand the highest standards. As will be discussed later, real safety leaders sincerely care about their employees and drive safety for that reason. Employees managed by these leaders know their motivation is sincere and work harder to be safe. In addition, large corporations are increasingly held accountable for the strength of their corporate responsibility credentials in global operations.

A company that continuously strives for positive safety performance will eventually reap the financial, productivity and collateral benefits. This is particularly true in the U.S. where Workers' Compensation, liability and medical insurance expenses, legal fees, labor-related losses and regulatory fines cost companies billions of dollars each year. E.ON U.S. has saved literally millions of dollars in recent years as the incident rates of its employees and contractors have plummeted. (Exhibit 1.) The company also is viewed positively by its communities, regulators and other key constituents as a result of its reputation for being safe.

E.ON U.S. Direct Cost Reductions

Workers' Compensation, Medical Costs, Legal Fees, Investigative Expenses, Etc.

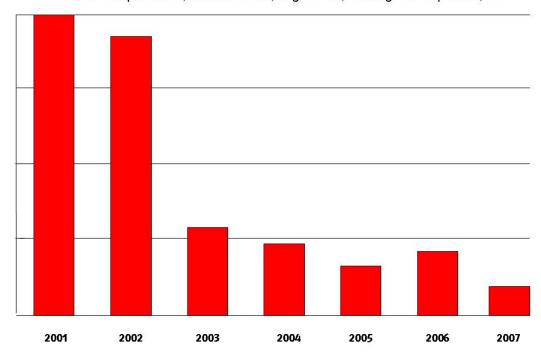


Exhibit 1. The above bars illustrate the decline in direct costs that correspond to the decrease in employee recordable injury rates at E.ON U.S.

The Challenges

The challenges in implementing a global safety management process in the energy business are infinite and unpredictable, complicating the use of a single approach. On the surface, it appears the diversity of operations would create the greatest challenge, especially since each area has employees with so many different skill sets – electricians, line and gas technicians, plant operators, all types of crafts people, fuel handlers, engineers, chemists, information technology and administrative personnel, and others. Each job has its own potential hazards. However, the toughest challenge is identifying and adapting to cultural differences in countries, companies and people.

Developing international safety standards requires collecting fundamental information from individual groups. E.ON has established a process to gather this information when it integrates new units into the business. The due diligence process delves into basics such as local lifestyles, customs and mindsets, including attitudes and beliefs that influence behavior and safety. Experienced safety experts from different business units and cultural backgrounds visit the new subsidiary to learn about these points as well as to assess the safety situation and related challenges. Each area reveals unique findings.

Upon preparing for construction of a new plant in India a number of years ago, management personnel found it the norm for employees and their families to camp together on the potentially hazardous construction site. E.ON took immediate action to remedy this situation by establishing a safe area outside the site to care for youngsters while their parents worked.

In Romania, poverty and religious beliefs and practices associated with the role of the Orthodox Church strongly influence individual behavior, including that pertaining to safety. Romanian values and history lead workers to have an integrated work-religion-life balance, creating a tendency for them to be more fatalistic. E.ON has observed that, if an accident happens, the general belief is it is something that is supposed to happen. Because of the country's financial condition, workers historically have had just a few pieces of personal protective equipment, which they wear only during extremely hazardous work conditions. In addition, some workers may even sell a good pair of protective shoes on the black market to help provide for basic family needs, rather than wearing them for protection. While this practice is not acceptable to E.ON, it is not easy to control. Also, a lack of investment by prior management in Romania has resulted in some failing infrastructures and hazardous work conditions. These are some of the difficult, long-term challenges that E.ON is attempting to manage through investments of time and money and the growth of a safety culture.

Still, despite these factors, the safety performance in Romania and other places, like Slovakia, are excellent for behavioral reasons. Sophisticated psychological tests are undertaken and certain competence levels achieved before an individual is authorized to work on the system. Simple hand-written procedures are strictly followed by employees because that is the behavior which is expected. Incidents are thoroughly and openly investigated and addressed by senior management.

A different PPE issue exists in the Bulgarian subsidiary where employees wear work clothes that look like protective clothing, but consist of material that is inappropriate for electrical or gas work. However, when working a job with a higher potential for injury, such as electrical switching, Bulgarians, as well as Romanians, put on extra personal protective equipment specific to the job. This is an interesting approach. The individual use of PPE for specific work makes people more aware of the specific risk. In Western European countries, employees wear quality PPE because the positive financial climate enables companies to purchase it, and there is a historic precedent and expectation that safety equipment will be provided and used properly.

One might stereotype Russia as lacking concern for worker safety, yet the contrary there is generally true. Safety is greatly influenced by legal requirements and incidents are investigated openly; so there is a culture of compliance. It is the expected behavior. Procedures are documented and accepted. In addition, a risk compensation system gives employees who work in hazardous environments an extra benefit, such as food, milk or money. Unfortunately, Russia's relatively low standard of living sometimes encourages a personal acceptance of risks, so individuals seek this type of work. Alcohol consumption at many work sites also has been a problem. E.ON's Russian subsidiary has reacted strongly to these inappropriate behaviors and is committed to managing them.

Overall, Russia's safety performance is excellent, and employees clearly understand safety issues. Generally, E.ON's strong safety message is well-accepted among workers. They wear PPE, and a safety management system is in place to lead performance. There are many infrastructure issues in Russia, where investment and modernization have been limited in some areas; however, the

company is investing in improvements to reduce risk to employees. To date, the greatest safety challenges have been cultural issues and the language barrier.

Just the opposite is true in the Czech Republic, where companies and people historically tend to believe that a certain number of fatalities are acceptable. Trade unions initially reacted unfavorably to E.ON's directive that "We do not accept fatalities," with the statement, "In the Czech Republic, we calculate fatalities as part of risky work." E.ON is working aggressively to change this fatalistic mindset along with employee behavior that ultimately could lead to death.

Other Influencing Factors

In addition to cultural influences, E.ON has found that other external factors impact the way workers behave and how companies run their businesses. Actually, health has a major effect on employee safety. Workers who are in good condition physically, mentally and emotionally tend to work safer because they are more focused and alert. Many E.ON business units actively promote healthy lifestyles and offer wellness programs, incentives and opportunities that foster more productive workers. Unfortunately, in many developing countries basic health care services are not easily accessible and governments have not made them a financial priority. So, health is difficult to promote among the workforce. E.ON sees this as yet another safety challenge.

Technical applications are a strong influence among the Swedish. For example, the airbag and vehicle safety belts were invented there. Technical inventions help to make the world safer, but can lead to a misplaced over-dependence on safety equipment. Consequently, E.ON has observed lower safety performance in nearby Nordic countries. Germans tend to have that viewpoint as well. They believe safety assets, such as seatbelts, make them invincible. So, many Germans drive at very high speeds (up to 140 miles an hour) without regard for external conditions. This behavior absolutely is not condoned by E.ON.

Germany offers another unique example of how external factors impact safe work. There, all safety incidents are covered by mandatory insurance, which costs companies \$500 annually per employee. With this fee, the company no longer has the responsibility to pay in the event of an employee injury. This has led to lackadaisical behavior among some businesses that feel protected from financial risks associated with injuries. The consequence is a lower commitment to safety. If there is no perceived risk; there is no awareness! This is not the belief of E.ON, which is fully committed to preventing injuries to its employees!

Companies in some countries adopt various philosophical approaches to safety management because of directives by their legislative systems. The European system is moving toward a goal-setting environment, where risks are identified and controlled regardless of how they are considered within the law. In the U.S., the Occupational Safety and Health Administration outlines detailed and prescriptive ways of identifying hazards and controlling them. The Russian legislative system has approximately 1,700 safety regulations, making Russian companies oriented to compliance and procedures.

The different applications of engineering standards even have an impact on safety. During the course of its safety work, E.ON has observed that safety performance tends to be better in environments where field personnel have less of a role in interpreting engineering standards. This was initially a surprise to the company and required closer examination of the causes. Germany has field personnel who work according to extremely specific engineering standards; however,

occupational safety performance lags behind that in the U.S. or in Russia. In the U.S., engineering experts provide field personnel with more general construction standards that the experts have derived from very specific standards. This allows for greater focus on working safely. Germans understand the technical aspect of safety, but are less likely to spend time and attention modifying "at risk" behaviors.

It also is important to note the impact of diverse control methods, strategies and legal frameworks. The European Union and U.S. regulators take different approaches to meet the same end – to ensure the health and safety of people at work. Within the European Union, there are differences in interpretation and practices between different national systems ranging from proscriptive regulation to goal-setting regimes. In the U.S., minimum work standards are developed by regulators specific to the industry standards of the company.

In addition to these challenges, differences in resource constraints, leadership expectations and other influencing factors present barriers to safety. Consequently, the goal of establishing a single set of safety work processes is difficult, but not impossible. E.ON does not give directives on how to manage safety, but shares a common vision, values and standards, which can be the same everywhere. The company establishes common standards through various means, including safety performance measures and targets connected to compensation and benefits.

As international safety professionals and managers, it is often easier to focus on why standards vary. There is a natural tendency to automatically create reasons and justifications to accept lower performance standards. It is usually more effective to concentrate on performance "expectations" first, then look for physical or procedural deficiencies and identify improvements.

For example, different countries have unique methods for building scaffolds, all of which have safety controls. The main expectation for any scaffold is to give safe access to a work point. The requirement that the scaffold supports loads without collapsing is fundamental. Less important is the material or method used to erect the scaffold. Experience shows that bamboo is an excellent material for constructing scaffolds provided it is done properly, using the correct methods. Although Germany has the most highly regulated legal framework on scaffolding, the company observes as many problems as in other countries.

Obviously, the approaches to safety vary widely around the world. Some countries rely on "hard" technical solutions and others on "soft" behavioral solutions. Consistently, the best practices rely on selecting appropriate solutions that address technical, behavioral, procedural and protection risks, rather than relying on any single control mechanism.

Developing a Safety Culture

E.ON focuses on growing safety cultures based on behavioral change, not just establishing a safety management program. There is a difference between a culture and a program. In a culture, employees drive the safety process with sound judgment, authority and positive outcomes. Safety is an intrinsic behavior. In a program, employees follow the rules, but depend on leaders for direction. Building a safety culture requires years of nurturing, patience, a relentless desire to change, a critical course of action, and strong, visible, energetic leadership to activate it.

In some ways, switching an organization to focus on safety is like a chemical reaction. Mix two chemicals together – oxygen and volatile hydrogen for example – and nothing will happen without the input of energy to activate the reaction. The energy causes the two chemicals to form water, which offers many benefits. (Exhibit 2.)

Activation Energy: The Critical Turning Point in Safety Culture Change

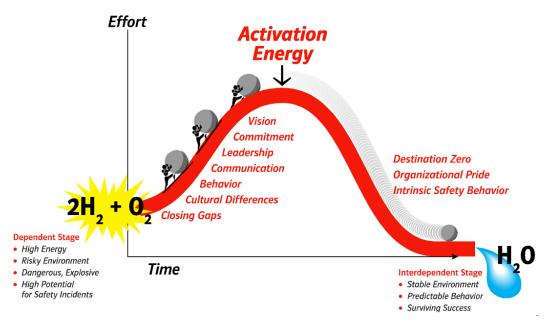


Exhibit 2. The development of a safety culture requires the energy of leaders, who will move employees from a dependent to and an interdependent stage.

Some organizations have the potential to deliver great safety performance, but they may lack appropriate management styles and commitment. With the right input of energy, the reaction begins and improvements in practice and performance follow rapidly. That energy, from E.ON's experience, is usually provided through safety champions, or leaders who generate enthusiasm, demonstrate safety commitment and foster the respect of peers and co-workers. Safety champions can be anyone at any level of the organization. With the input of energy, the development of the safety culture begins. Employees move from a dependent stage, where they follow rules and need direction to stay safe, to an interdependent stage where they rely on their own decisions about safety.

A positive reaction follows energy input. The organization and employees benefit from safety as it becomes a natural part of the business. However, at this point, a new potential hazard can develop. Employees and management can begin to take safety for granted. In many respects, surviving success can be more difficult than growing the culture. The challenges are to refocus and re-energize the workforce to keep safety alive in the minds of employees.

The steps to growing a safety culture are fairly methodical, but require unwavering commitment by senior management. The motivation must be sincere and based on a true concern for workers. Otherwise management will be tempted to compromise safety for other business reasons, and employees will know the effort is not sincere. Management personnel also must "walk the talk" by demonstrating safe action and supporting employee safety at all costs. This top-led, bottom-driven approach will be the basis for the safety culture from its inception.

Senior management must establish a critical course of action with defined safety processes, goals, measurements, consistent tracking mechanisms and minimum performance requirements to keep employees motivated and on track. It is critical to equally enforce safety practices and procedures among all groups, and close the gaps in all areas of the organization. Not only does this mold the culture, but it is the right thing to do.

Communication, education and training are important support factors as they create the cultural background in which the company operates. Communication must be constant, using a variety of media and techniques. It is comparable to selling products and having to generate demand. Most important, employees must hear safety messages from all management levels – from senior officers to line supervisors. Actions must reinforce the messages.

Involving workers in the safety process will make them responsible and accountable for safety. This can be achieved through tools such as behavior-based safety management, safety observations, near-miss reporting without fear of discipline, work safety audits, job briefings, health and wellness programs and training sessions. To create a safety culture, it is also critical to effectively manage contractor safety performance, which can have a significant impact on other workers and the success of the business.

Developing A Safety Culture From Diverse Groups

E.ON U.S. offers great insight into how to develop safety culture among very diverse groups. In 1998, E.ON U.S., formerly LG&E Energy, underwent a merger with KU Energy, a nearby electric utility with similar operations, financial stability, professional workforce and dedication to safety. The differences were in the safety cultures, attitudes and mindsets of the companies' subsidiaries. Louisville Gas and Electric Company provides gas and electric service to the sprawling Louisville metropolitan area and surrounding counties. Kentucky Utilities Company (KU) provides electricity to customers in service territories scattered from the Mississippi River at Kentucky's western border to the mountains of eastern Kentucky and western Virginia. KU's customers are in the large city of Lexington, as well as in smaller communities and rural areas. Sub-cultures based on geography and organizational structure actually existed within KU's ranks. Shortly after the merger, the company also moved to a variable workforce in which contractors began performing much of the work previously done by employees.

Safety was a high priority at both companies. However, there was concern that the trauma from the merger, the reduction in the number of employees and the meshing of cultures would have a detrimental effect on workers. Senior management established a critical course of action to ensure the safety and well-being of its workforce. The plan and message were simple and included the following initiatives.

• Safety First; No Compromise. Absolutely, under no circumstances, were employees to perform work that was unsafe. Schedules, budgets, customer service, peer pressure and other

reasons were not acceptable excuses for working unsafely – and they still are not today. To back up this directive, management empowered employees, giving them the authority to say "no" to unsafe work or to stop it. Employees were held responsible and accountable if they worked unsafely. Although they were reluctant at first to fully embrace the concept, workers gradually learned they had full support from management.

- Follow all procedures and wear PPE.
- Protect your co-workers, business partners, the public and yourself.
- Contractors must meet or exceed the same standards as employees.
- The goal is always zero incidents.

In 2000, the opportunity arose to take advantage of international safety best practices to strengthen the process that had already begun. At that time, Powergen, predecessor of E.ON UK, another subsidiary of E.ON, acquired LG&E Energy. Powergen began a value-driven process to streamline and develop efficiencies throughout the entire organization. The company was well-known for outstanding safety performance, so supporting innovative and energetic programs to reinforce health and safety as a key organizational value was a moral decision. It was supported by Kentucky regulatory officials. Cross-functional safety teams engaged in a series of workshops to challenge the business to improve performance and determine the type of safety culture leadership to develop.

Safety expectations were communicated to all employees and contractors, who were all involved in the safety initiatives. Thus began a top-down approach to safety that demanded (and continues to demand) results and created an environment where safety is seen as a key leadership skill. It took some time before the level of commitment demonstrated by senior leaders was accepted as genuine by all employees. After several years, contractor leaders were fully integrated into the fold. The first joint employee/contractor safety summit was held in 2003. The result has been significantly improved performances by both E.ON U.S. employees and contractors, which are among the nation's top utility performers in safety.

Contractor Safety

As stated in the E.ON Corporate Responsibility Policy, E.ON places the same importance on contractor safety as it does on employee safety. Contractor incidents have a significant impact on individuals, operations and finances as do those involving employees. Consequently, all parties benefit as a result of strict contractor safety management.

There are cultural gaps in the way organizations in different countries manage contractors. In developing countries, businesses often give contractors more dangerous jobs because they consider them expendable. The market for contractors is highly regulated in Eastern Europe. There E.ON often does not have the choice to decide who will do the job, and the company is not able to select contractors by their safety performance. Instead, E.ON has a prequalification process, which objectively demonstrates the impact of potentially hazardous situations. E.ON hopes to convince policymakers and regulators that the system should be changed.

E.ON considers contractors as business partners who can positively influence the company's success through safe work practices, and they are treated accordingly. Contractors perform about 50 percent of E.ON's work and are used in varying degrees throughout the corporation. The company employs various means to ensure contractors work safely, depending on influencing factors in the local environment.

At E.ON U.S., for example, contractors must undergo a procurement review and comprehensive precertification or "passporting" process before the company retains them. Safety performances are continually monitored and evaluated through the terms of their contracts. E.ON U.S. clearly states to contractors, "If you don't work safely, you don't work for us!"

E.ON U.S.'s safety management of "resident" contractors, or those that work for the company on a long-term, regular basis, has been very successful. These business partners are integrated into the safety culture through ongoing communication, education, participation in safety meetings with employees, and by being expected to meet or exceed the same standards as employees. E.ON U.S. business partners now have a recordable injury rate among the lowest in the nation for utility contractors.

"Transient" contractors are those who perform work on a shorter-term, temporary basis. These contractors conduct much of E.ON U.S.'s construction work. While the standards are the same, the turnover in contractors' employees sometimes hinders their full integration into the safety culture. However, the performance of those contractors is still managed aggressively. New, more stringent standards, particularly relating to drug and alcohol testing, were recently implemented to ensure the safe performance of transient contractors' employees.

The Role of Leaders in the Global Challenge

When influencing behavior, the role of organizational leaders cannot be underestimated. Senior leaders have a particularly defining impact on the overall business culture. People naturally pay attention to the messages they consider important. If a CEO emphasizes profitability and seldom mentions safety, then employees will focus profitability. As stated earlier, E.ON CEO Wulf Bernotat, the E.ON Executive Board and the entire E.ON senior management team send a clear message to employees that safety is the company's priority.

As E.ON has moved through its cultural journey, it has identified safety champions. As noted earlier, these are people who have safety in their hearts and genuinely want to make the workplace safer. An important part of improving the E.ON safety culture has been allowing these champions to inject their energy into the organization's overall safety goals. By encouraging this outreach, E.ON harnesses their enthusiasm to increase employees' overall involvement in safety. Employees naturally follow leaders they respect; and, of course, leaders influence behavior.

However, behavioral change is a long-term challenge that requires care, skill and nurturing. The real trigger for change and ensuring great safety performance is the style and quality of leadership exhibited in an organization. E.ON finds that a transformational leadership style best influences behavior, productivity and excellent safety performance, particularly in a global business. A transformational leader takes a visionary approach to safety and inspires people to achieve related goals. A transactional leader creates structures in which employees understand what is required, the rewards they may receive and possibly what disciplinary action may occur. In contrast to a transactional leader, a transformational leader develops an exciting plan for the future with key messages to support it. This requires long-term continuous communication and demonstrations of the message. The unique component of a safety vision is the vast majority of people support it because they want to go home from work unhurt.

Next, the leader must establish trust among employees. This can be a challenge if this person does not have established roots in the country and an excellent understanding of the local culture. The challenge can be similar for a person trying to lead a new organization or business unit. Transformational leaders remain visible and committed at all levels, all locations and all times — during routine work as well as in emergencies or tumultuous times. They re-energize and refocus employees in the event of an incident and celebrate successes to reinforce the vision. They ensure that safety remains central to the vision in every part of the organization.

E.ON also prefers this leadership style because it uses a people-oriented approach. The leader does not focus directly on metrics, processes and procedures that may be culturally based. Incidents generally occur because of human error or omission. Focusing on people, rather than the numbers generated by people, is much more effective in improving safety. A people-approach to safety in an international organization also removes many traditional obstacles to progress. Managing safety from a technical point of view can create conflicts, especially across diverse groups where standards vary widely. Engineering standards or training requirements that are acceptable in one country or business may not be acceptable in another. The transformational style enables leaders to focus on the "what" rather than the "how." This leaves the detailed implementation to employees who have the appropriate skills, knowledge and experience.

Looking back at E.ON U.S.'s history, it is clear that its leaders adopted a transformational leadership style. Dr. Steven Yule, a lecturer at the University of Aberdeen, Scotland, conducted research into leadership styles and safety performance in E.ON predecessor companies in the UK and U.S. from 2000 to 2003. His research showed a correlation between transformational leadership, effective health and safety performance, and business leadership and performance.

The E.ON U.S. Energy Delivery leaders, who initiated the "No Compromise" message and vision of zero incidents, are among those who are true change managers at the company. Today, the Energy Delivery group, which includes gas and electric distribution and retail services, is E.ON U.S.'s top-performing line of business in safety. This is a very significant accomplishment given the excellent levels of safety performance across all businesses at E.ON U.S. In 2007, Energy Delivery employees achieved zero lost-time incidents. They also had only 10 recordable incidents, which calculated to the extraordinarily low injury rate of .81. Contractors also finished the year with an excellent safety performance record.

Best Practices: What We Have Learned

As described throughout this paper, E.ON has learned and implemented a number of key lessons as a result of its cross-cultural safety experiences. Those lessons are very fundamental, but universal, and apply despite local diversities, work practices or workforce attitudes. These best practices are the basic steps to achieving excellent safe performance.

• Establish and promote a vision, and clearly state it in a way to rally support among workers through communication, leadership and unwavering commitment. E.ON's vision is zero incidents

- Focus on behavior more than the technical aspects of safety. Financial investments in infrastructure, PPE and other safety items, while essential, will not be as effective if employee behavior does not support their proper use.
- Adopt a transformational leadership style to inspire and motivate employees toward safety goals.
- Clearly state and enforce goals, performance measures and other metrics, but let the culture drive ways to achieve them.
- Strive for behavioral changes through responsibility and accountability for safety to enforce work practices.
- Demonstrate through actions that safety is the principle or value by which the organization operates. It comes before all other operating factors.
- Value employees and contractors as human beings, not assets. Learn from their unique perspectives to improve safety.
- Find and engage safety champions those respected by other employees who will drive safety.
- Integrate contactors as valuable business partners who can influence success, not hinder it.

As an international company, E.ON has found it invaluable to have a global network of safety and health professionals who can share information across borders. In addition, the company hosts international health and safety summits for its officers, senior managers, health and safety professionals and champions every two years. The employees converge from across the globe to share their knowledge, skills, experience and best practices at those conferences. E.ON also uses the opportunity to critically evaluate its progress and identify what actions are needed to improve performance further.

The 2005 "Sharing Best Practices Around the World" summit in the U.S. and the 2007 "From Systems to Culture" summit in the UK drew hundreds of attendees from around the world. Annual safety meetings within the business units, due diligence visits to subsidiaries and inpat/ex-pat assignments have been very helpful in advancing the safety culture as well. Following the 2007 safety summit, E.ON established an aggressive groupwide action plan to reinforce its safety message and advance the sharing of internal best practices. The plan includes the following initiatives.

- Establishing a "Project Safe Top Executive Group," which was launched by the E.ON board in October 2007.
- Creating a Safety Governance Council in each business unit, the first of which was launched last year by E.ON U.S. to share information and best practices within its organization. The council is considered an industry best practice in itself.
- Instituting groupwide performance statistics, including a lost-time incident frequency rate and total recordable injury rate.
- Launching the groupwide use of the E.ON UK incident reporting tool ARNIE.
- Implementing lessons learned about process-safety management from the Baker Panel Report, regarding the Texas City BP refinery explosion.
- Implementing transparent safety monitoring and reporting.
- Developing a video about the critical importance of safety for all employees from E.ON's CEO and human resources director.

- Establishing a link between safety performance and culture during the 2009 OneE.ON Day (a global E.ON education and celebration event).
- Establishing safety as a key element of the company's management leadership profile.
- Developing, implementing and auditing groupwide health and safety management systems.
- Advancing contractor safety management to the next level.

Corporate Responsibility

Employee and contractor safety are just two components of E.ON's overall safety strategy. As a global leader and concerned corporate citizen, we are not only obligated, but want to ensure the safety of our customers and the general public. In addition, E.ON believes its corporate responsibility is to share safety information and best practices with other businesses and organizations worldwide in an effort to promote a safer global environment.

For E.ON, education about electrical and natural gas hazards begins with young children through school systems, the internet, educational activities and public appearances. It continues into adulthood through advertising, written communication, dramatic demonstrations and specialized training. E.ON UK offers free testing of electric blankets for hazards and provides carbon-monoxide detectors to ensure home safety. In the U.S., safety specialists conduct targeted training for customers, businesses and trade groups, emergency response officials, military personnel and industrial safety specialists.

In addition to aggressive public safety initiatives, we make a concerted effort to educate local, national and international industry peers about our safety best practices and successes. Company representatives travel the globe to educate industry peers about safety topics from fundamental practices to dog bite prevention. The company also regularly shares its experiences at European and U.S. conferences and conducts benchmarking visits.

In 2006, the United States Energy Association invited E.ON U.S. to address utility workers in Albania, where industry-related fatalities occur regularly. E.ON U.S. also is a key source of information for leading industry organizations, such as the Edison Electric Institute, American Gas Association, Southern Gas Association and many other energy companies that frequently call upon the organization to share safety best practices.

Our Values

As a global organization, E.ON has significant business and economic impacts in the countries in which it operates. Consequently, it is imperative to run the business in a socially responsible way. E.ON guides the performance of its personnel and business operations by these values, which also support the company's key operating principle – safety.

<u>Integrity</u>

We act honestly, ethically and legally in every thing we do. We honor our commitments and take personal responsibility for our actions. *E.ON employees are responsible and accountable for safety*.

Openness

We are open to new ideas and change. We are open and candid with one another and promote knowledge-sharing freely across all barriers and boundaries. *Employees share information and raise safety issues without fear of reprisal*.

Trust and Mutual Respect

We treat everyone with fairness and dignity. We trust our colleagues and are trustworthy in all that we do. *Employees trust and respect the opinions and judgment of co-workers, including management, regarding safety.*

Courage

We have the courage to act on our convictions. We sacrifice individual self-interest when necessary to preserve these values. We do and say what we think is right and engage constructively in all discussions. *Employees have the courage to stop or refuse to perform unsafe work regardless of operating pressures; they have full support of senior management to do so.*

Social Responsibility

We are responsible to our colleagues, customers, suppliers, the environment and the communities where we live and work. We seek to improve lives everywhere we operate, aiming for a healthy, safe and sustainable environment. We consider the needs of the present generation and also anticipate the needs of future generations. *Employees are responsible for and committed to the safety of business partners, customers and the general public as well as themselves*.

These are bold statements and bold standards to which E.ON holds itself, particularly since the challenges the company faces are diverse and unique. These values support the way E.ON operates its business around the globe, and ensures, regardless of location, activity or business, that safety comes first.

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