



FOCUS ARTICLE

Optimizing Safety for the Renewable Energy Sector

Author: Mark Walker

Endeavoring to reduce workplace incidents and accidents in any industry is about creating an environment where people are as well or better off when they return home as when they arrive at work. This is equally true for the growing renewable energy sector. Adjusting the approach slightly to accommodate the particular working conditions on, for example, offshore windfarms, we can see positive safety outcomes in this burgeoning sector.

The renewable energy sector has emerged in an era where science and people are the main drivers behind dominant trends in safety. Neuroscience is telling us more and more about how the human brain works, where our blind spots are and how behaviors are formed and changed. Harnessing this information to reduce workplace hazards and prevent accidents is what safety experts aim to do.

Recognizing the Realities of the Renewables Sector

In some basic ways, when it comes to safety, the renewable energy industry is not unlike manufacturing, oil and gas or the chemical sector. The goal is always the same: to protect people, the

environment and assets by preventing incidents, large and small. The typical working environment and conditions do vary, however, from industry to industry, and both need to be taken into account when **assessing hazards** and implementing safety measures.

To cite one or two examples, teams working on a windfarm may be at the worksite for relatively short periods of time, as contractors tasked with completing a specific project or project segment. Windfarm construction, servicing and maintenance does not generally require round-the-clock labor or a months-long deployment where employees live together as they might on an oil rig. When work is done directly on an offshore wind turbine, the team is comparatively small and supervisory staff may be many miles away.

Crucially, however, the big safety picture applies to any high hazard workplace. Fostering a safety mindset backed by science and inviting workers to identify with and even advocate for safe behaviors leads to better safety outcomes across the board.

Owning On-Site Culture

When a project requires the combined efforts of multiple contractors with a short-term worksite presence, as is often the case with renewable energy, a narrow focus on overhauling company culture is impractical. A better approach is to start by encouraging those involved to ‘own’ the on-site culture. This means, on one hand, sharing the client’s values, emphasizing the golden rules of the site and breaking it all down into simple actions. However, it’s not enough to merely relate what’s expected. Brain science has made clear that individuals need to reflect on and internalize information, make it personally relevant, in order to modify behavior.

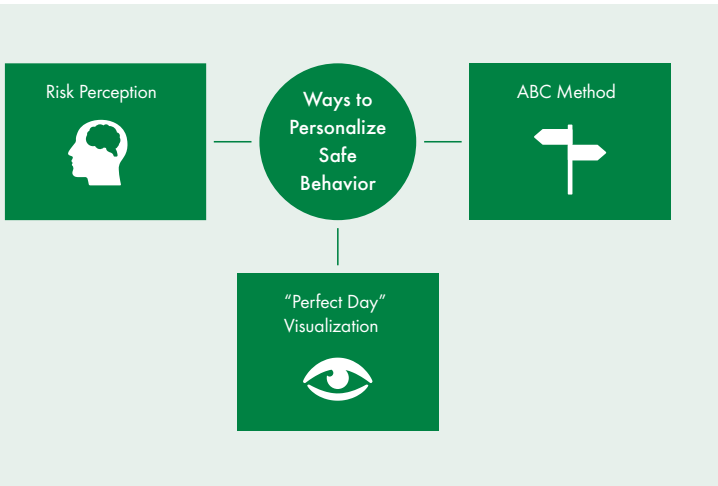


Fig. 1: Three ways to personalize safe behavior in your workforce

Risk Perception

One place to start encouraging reflection is in the area of risk perception. An effective site safety workshop should demonstrate how our assumptions and experience affect the degree of risk we associate with certain activities. For instance, a professional rock climber may acknowledge that a route is hazardous, meaning a fall would result in serious injury or death, say 10 out of 10 times. But based on her experience she estimates the chances of a fall are essentially 0. She is convinced it won’t happen, and so multiplying

hazard (10) by probability (0), she perceives her risk as 0. But imagine if she recognizes the slight possibility of falling, setting it at 1 in 10. The same calculation then, multiplying hazard (10) times probability (1), bumps the risk level up to 10. So much depends on individual assumptions—basically guesses—about what we think will happen. The questions to pose to workers on potentially hazardous sites could be, “Why do you believe nothing bad can happen? Is your answer based on objective measures or only on the fact that so far, nothing has? What are the consequences if things go wrong?”

The ABC Method

Another helpful exercise is the ABC (Antecedent-Behavior-Consequences) method, which asks individuals to think back to some unsafe behavior they’ve demonstrated in the past, one which had a positive outcome. Maybe they’ve cut corners in order to complete a job faster and were able to do so without any negative consequences. The next step is to identify the antecedent that drove their behavior in that instance. Were they told they could knock off early as soon as the job was done? Did they see colleagues receiving recognition from supervisors for finishing ahead of schedule? Or was it simply that they felt constantly pressed for time? Now they should consider the consequences if things hadn’t worked out. What negative outcome could have resulted? And crucially, what would need to change in terms of the antecedent for them to follow safety guidelines consistently? Certainly, leadership that encourages haste, either explicitly or implicitly, is working counter to safe operations, and should be addressed. If the pressure to work fast is an internal impulse, however, then the individual needs to consider where it comes from and how to quell it.

The ‘Perfect Day’

Taking a page from sports psychology, visualizations are another effective way to personalize safe behaviors. The exercise begins with a generalized scenario: workers are asked to picture a perfect day on the worksite. They might imagine that the weather is ideal, that there is no queue for permits, that their equipment is in perfect working order and so on. Next, they are requested to focus on their own behavior and how it supports these perfect conditions. The exercise moves from the general to the personal in order to encourage each person to see themselves as part of the solution, an important contributor to safety on site.

A Culture of Care

The ultimate goal and animating force behind these efforts is a **culture of care**, the cultivation of an atmosphere that prioritizes the well-being of people, that breathes life into systems and processes and that is committed to keeping equipment in top form. When the input is attention and concern (that is, care) in all these areas, the

outcomes go beyond safety to include efficiency, quality, reliability and predictability. DEKRA is dedicated to helping organizations develop a culture of care, and DEKRA experts have designed a **portfolio of services** based on their experience, science and collective knowledge. As the renewable energy sector grows and expands, we are keen to share our expertise, offering practical solutions to protect life, reduce harm and optimize performance.

MARK WALKER

Vice President

Mark Walker is an experienced consultant specializing in cultural change and leadership coaching. His wide range of hands-on experience working with organizations both on and offshore worldwide has made him a sought-after trainer and change leader.

Mark is committed to help each of his clients improve decision-making and achieve reliable performance. He has worked with various companies globally across diverse conditions to transform the behaviors of leaders and workers so that projects are delivered on time and safely. He has helped create cultures based on caring for systems and processes, plants and people, thereby increasing not only safety but also productivity and engagement—even in the midst of trying economic times.

Mark has trained leaders to leverage skills based on humanity, integrity, and competency in order to create a workplace environment that has trust and respect at its heart. Through his work, he provides scientific tools to track culture from its current status to its desired state. In this way, and by 'holding up the mirror' to leaders' behaviors via coaching, Mark assists organizations in facilitating lasting change.

Mark has a BSC HONS in combined social sciences



DEKRA Consulting

DEKRA Consulting combines evidence-based science, cutting-edge technology, and internationally renowned expertise to create innovative safety solutions for today and tomorrow. We aim to lead safety transformation at the workplace and business practices, within operations and processes as well as in the dynamic and rapidly changing digital era.

Since organizations require diverse approaches to protect their operational business environment, data, people and processes, we designed our services as multi-faceted as your needs to support you in any safety issue.

For more information, visit www.dekra.com/consulting

Would you like more information?

Contact Us