



FOCUS ARTICLE

Optimising Safety for the Renewable Energy Sector

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Endeavouring 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 behaviours are formed and changed. Harnessing this information to reduce workplace hazards and prevent accidents is what safety experts aim to do.

Recognising 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 labour 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 behaviours 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, emphasising 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 internalise information, make it personally relevant, in order to modify behaviour.

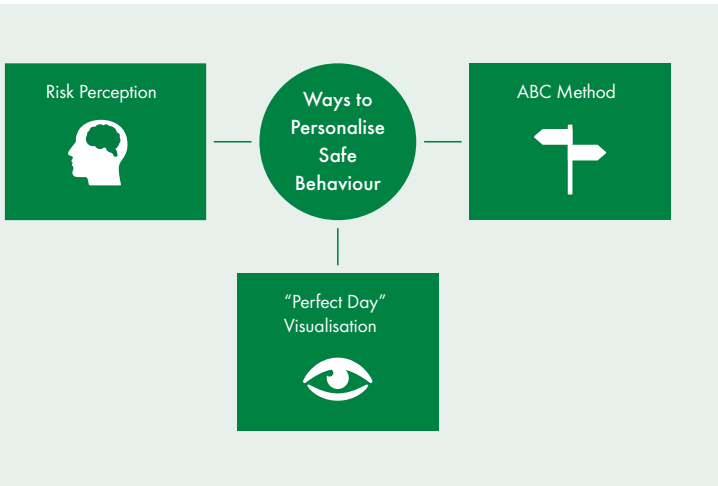


Figure 1 Three ways to personalise safe behaviour in your workforce

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 recognises 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-Behaviour-Consequences) method, which asks individuals to think back to some unsafe behaviour 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 behaviour 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, visualisations are another effective way to personalise safe behaviours. The exercise begins with a generalised 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 behaviour 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 prioritises 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 organisations 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 optimise performance.

MARK WALKER

Vice President

Mark Walker is an experienced consultant specialising in cultural change and leadership coaching. His wide range of hands-on experience working with organisations 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 behaviours 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' behaviours via coaching, Mark assists organisations in facilitating lasting change.

Mark has a BSC HONS in combined social sciences.



DEKRA Organisational & Process Safety

DEKRA Organisational and Process Safety are a behavioural change and process safety consultancy company. Working in collaboration with our clients, our approach is to assess the process safety and influence the safety culture with the aim of 'making a difference'.

In terms of behavioural change, we deliver the skills, methods, and motivation to change leadership attitudes, behaviours and decision-making among employees; supporting our clients in creating a culture of care and measurable sustainable improvement of safety outcomes is our goal.

The breadth and depth of expertise in process safety makes us globally recognised specialists and trusted advisors. We help our clients to understand and evaluate their risks, and work together to develop pragmatic solutions. Our value-adding and practical approach integrates specialist process safety management, engineering and testing. We seek to educate and grow client competence to provide sustainable performance improvement; partnering with our clients we combine technical expertise with a passion for life preservation, harm reduction and asset protection.

We are a service unit of DEKRA SE, a global leader in safety since 1925 with over 45,000 employees in 60 countries and 5 continents. As a part of the world's leading expert organisation DEKRA, we are the global partner for a safe world.

We have offices throughout North America, Europe, and Asia.

For more information, visit www.dekra-uk.co.uk/en/dekra-organisational-and-process-safety/

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