

SAFETY

Putting safety in your hands

The Energy Institute has developed two new, free-to-use resources, providing the energy industry with a 'one stop shop' for H&S good practice and guidance. *Stuart King, Technical Manager, Human Factors & Power Utilities, Energy Institute, reports.*

Data from the International Association of Oil & Gas Producers (IOGP) suggests that 87% of fatal incidents occur during a small number of high-risk activities.¹ If we can help improve safety and work practices for these high-risk activities, we can reduce fatal incidents significantly.

However, industry struggles to learn from incidents. In part this is due to 'lessons learned' not being readily shared between companies, including with their own contractors. Companies also struggle to get information to those who need it – frontline workers and their supervisors – when they need it, and in a format that is right for them.

So, how do we get information to frontline workers and supervisors that is *what they need, when they need it and that is right for them?* And how can we get

companies to pool lessons learned into a single 'one stop shop'?

To help answer these questions, the Energy Institute (EI) has developed two new, free-to-use resources.

Toolbox

The EI has worked with seven major energy companies to find a way for industry to share lessons learned (including incident alerts and videos) among themselves, with their contractors and with the wider industry. Whatever we developed had to be simple to use, have no blockers that would prevent people using it (no log-in, paywall or password) and must allow frontline workers and their supervisors to find information about incidents relevant to the job they are doing that day.

Together with industry, we have created 'Toolbox'. Toolbox is a 'progressive web app' – a fully online app that can be accessed like a website, download as an app, and also provides offline access.

Toolbox is completely free to use. It is accessible on PC, tablet or smartphone (Android and iOS), and is intended for frontline workers, supervisors and HSE professionals to access learning from industry. It currently contains 100 lessons learnt based on real incidents, shared by the EI's industry partners, with more being added regularly.

Toolbox has been designed to be extremely easy and quick to use. Content is organised by work activities (eg construction, marine, maintenance, pipeline) and risk activities (eg confined space, driving, energy isolation, broadly aligned with IOGP's 'Life Saving Rules'). Toolbox also features a powerful search engine. This

means that users can quickly find content that is relevant to the job they are doing at the time. Its purpose is to save lives, so content is focused on high risk tasks that can result in fatality.

Each piece of content briefly discusses an incident – what happened, why it happened, what was learned. It also includes 'reflective learning' questions (informed by research funded by the EI's Hearts and Minds programme) to ask your team (or yourself) how can something like this happen here and what can we do to avoid it?

The content length and detail has been carefully balanced to be short, sharp and engaging – something that can easily be discussed in a Toolbox talk, HSE meeting or daily briefing, or reviewed before starting a task.

Earlier this year, Toolbox was piloted over a period of two months in 46 countries, in seven major energy companies, and 30 business units/industry sites. Over 1,800 people used the app. We wanted to know – Do they like it? Do they want it? Do they think it will make industry safer? And what do we need to improve?

Feedback was overwhelmingly positive:

- Half (50%) of usage was as part of meetings (job briefings, HSE meetings). Toolbox was also used for risk assessments and permits to work, with users overwhelmingly in agreement that Toolbox will be useful for such activities.
- Some 90% of users thought that Toolbox will help improve how they work, will help them get safety information when they need it, and will help prevent incidents.
- Users overwhelmingly agreed that the content on Toolbox is useful, engaging, relevant for



them and their team, contains practical lessons, and is clear and easy to understand.

- Users are extremely likely to recommend Toolbox to a colleague – 50% of users found out about Toolbox from a colleague during the pilot programme.

In terms of improvement, users wanted much more content (we are adding content nearly every day), and for content to be available in local languages.

So, what is next for Toolbox? We officially launched the app in September 2019 at Offshore Europe. Toolbox is there to be used – so please like and share content with your colleagues and change the way you work, one day at a time.

However, Toolbox will only be sustainable in the long term with continued industry support and with a steady stream of content being added. We need industry to share lessons learned with us on Toolbox.

We are also looking for industry partners to help us fund the next phase of development. Our plans are to translate Toolbox content into 10+ languages so it can be used globally and to work collaboratively with industry to create engaging new content, including videos and more. Help us to give frontline workers and supervisors reason to use Toolbox, return, learn, and work safely.

Hearts and Minds: Reflective learning videos

Toolbox may not have happened without the research funded by the EI's Hearts and Minds programme into learning from incidents. That research found that, for people to truly learn, they need to 'reflect' on the information they are given. It is not enough for someone to read about an incident – they need to question how something like this can happen here on their work site, and what they need to change in their job to prevent it.

To this end, the EI and Shell have created nine new 'reflective learning' videos. Each 10 minute video is split into three parts, intended for teams to watch in a 1–2 hour facilitated session (run 1–2 times per year). The purpose is for the team to really reflect on incidents, ways of working, and how they can change the way they work to prevent future incidents.

After each part, questions are provided for the team to reflect on what they have seen, and discuss what it means for them, their work and what they can change. Facilitator guides are provided for each video, as well as a guide for running a 'reflective learning programme'.

The videos are:

1. **I own my barrier** – what safety barriers do you, as a worker, 'own'? What is your role in preventing incidents, what 'holes' in the 'Swiss cheese model' do you fill?
2. **Chronic unease** – what are the 'weak signals' that not all is well in a process? If the pressure is a little off, or the temperature a little too high, do we 'explain-away' these weak signals and assume 'all is well'?
3. **I keep my barrier strong** – now we have ascertained how we 'own' our barriers, how do we keep them strong by plugging the 'hole' in the 'Swiss cheese'? Do we 'normalise risk' to the point where we no longer see the danger?
4. **Stay out of the line of fire** – how do we know when we are in the 'line of fire'? Do we recognise the hazards of falling objects, moving vehicles, pressure, electrical hazards?
5. **Together we can lift safety** – do we plan lifts correctly? Planning starts in the office, and ends at the site. Everyone has a role to play.
6. **Stop drops** – objects falling from height are an ever-present hazard with potential to kill; but it can be avoided, and we all have a role to play.
7. **Removing the hazards** – the hierarchy of control is a well-known concept in our industry, but in many cases it is not very well applied. Thinking you have full control of a hazard is an illusion. It is better to remove the hazard!
8. **Sleep matters** – for both individuals and as a work group, it is important to understand how to reduce fatigue risk for the team. How can we manage fatigue, and how can we intervene when a colleague is too tired to work safely?
9. **Only together** – Only together is all about collaboration between

Toolbox – Users said:

'A genuine "One Stop" safety shop that can be accessed by anyone who needs resource material.'

'Wow, what an amazing tool.'

'The usefulness of Toolbox is not limited to the work environment, but extends to managing unsafe acts and conditions at home.'

'I have already recommended the application to a colleague and used it in training sessions.'

clients and contractors. Only by working together at all levels can we deliver world class HSE performance and much more (good safety = good business!). Working together as contract management teams, as clients and contractors, as contractors and sub-contractors, respecting each other's responsibilities and taking care of our own, are key.

Reflective learning is not about watching a video. It is about having great discussions with concrete actions that can be implemented to improve how we work. The videos provide a great excuse for having these discussions. Furthermore, as the EI has made these videos *freely available* there is no excuse for not using them – especially as many are available in several languages. ●

1. <https://www.iogp.org/blog/oil-and-gas-safety/fewer-fatalities-in-2017/>

Free access

Toolbox is freely available at <https://toolbox.energyinst.org> If you would like to share content on Toolbox, and/or help fund further developments, contact Stuart King e: sking@energyinst.org Hearts and Minds: Reflective learning videos are freely available from <https://heartsandminds.energyinst.org/toolkit/reflective-lfi>

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Photos: Energy Institute