LEARNING FROM INCIDENTS

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Learning from incidents

Return on Experience (REX)

manage a structured approach to process feedback

- ❑ reinforce learning
- ❑ increase professionalization of the analysis of the causes
- ❑ ensure the relevance of the action plans

myREX TEMPLATES myREX

Yammer REX HSE Group

*From a **sharing culture** to a **learning organization***

Lessons learnt from past incidents to implement safety improvements

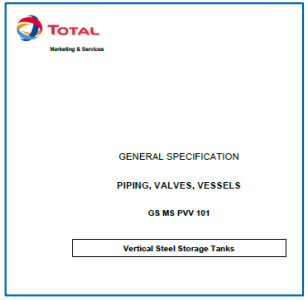
Learning process, a must-have

TotalEnergies

Before

Company Rule

Training



Support Documents

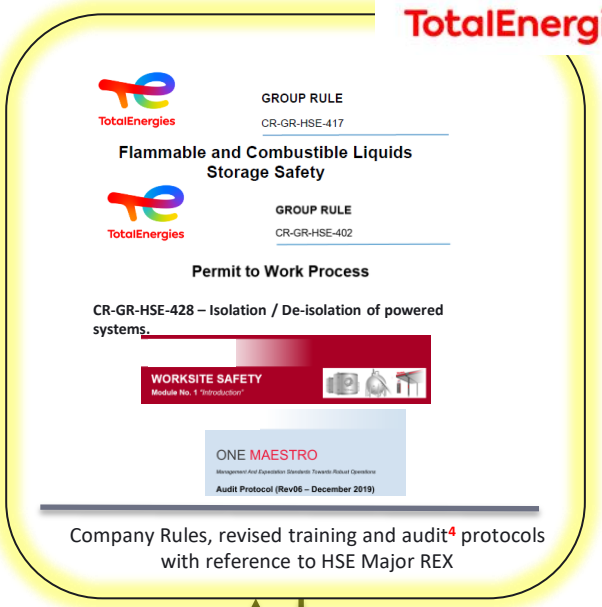
After

Accident

Major HSE REX

Sensibilization Kit

HSE REX VIIDEOS



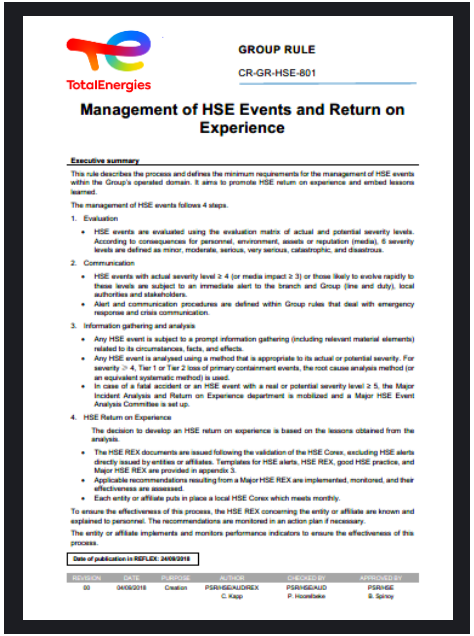
Company Rules, revised training and audit[4] protocols with reference to HSE Major REX

[4] MAESTRO and MAESTRO Log

Tools Available

myREX TEMPLATES
myREX
Yammer REX HSE Group

Common Rule


GROUP RULE
CR-GR-HSE-801

Management of HSE Events and Return on Experience

Executive summary

This rule describes the process and defines the minimum requirements for the management of HSE events within the Group's operated domain. It aims to promote HSE return on experience and embed lessons learned.

The management of HSE events follows 4 steps.

1. Evaluation
   - HSE events are evaluated using the evaluation matrix of actual and potential severity levels. According to consequences for personnel, environment, assets or reputation (media), 6 severity levels are defined as minor, moderate, serious, very serious, catastrophic, and disastrous.
2. Communication
   - HSE events with actual severity level ≥ 4 (or media impact ≥ 3) or those likely to evolve rapidly to these levels are subject to an immediate alert to the branch and Group (line and duty), local authorities and stakeholders.
   - Alert and communication procedures are defined within Group rules that deal with emergency response and crisis communication.
3. Information gathering and analysis
   - Any HSE event is subject to a prompt information gathering (including relevant material elements) related to its circumstances, facts, and effects.
   - Any HSE event is analysed using a method that is appropriate to its actual or potential severity. For severity ≥ 4, Tier 1 or Tier 2 loss of primary containment events, the root cause analysis method (or an equivalent systematic method) is used.
   - In case of a fatal accident or an HSE event with a real or potential severity level ≥ 5, the Major Incident Analysis and Return on Experience department is mobilized and a Major HSE Event Analysis Committee is set up.
4. HSE Return on Experience

   The decision to develop an HSE return on experience is based on the lessons obtained from the analysis.
   - The HSE REX documents are issued following the validation of the HSE Corex, excluding HSE alerts directly issued by entities or affiliates. Templates for HSE alerts, HSE REX, good HSE practice, and Major HSE REX are provided in appendix 3.
   - Applicable recommendations resulting from a Major HSE REX are implemented, monitored, and their effectiveness are assessed.
   - Each entity or affiliate puts in place a local HSE Corex which meets monthly.

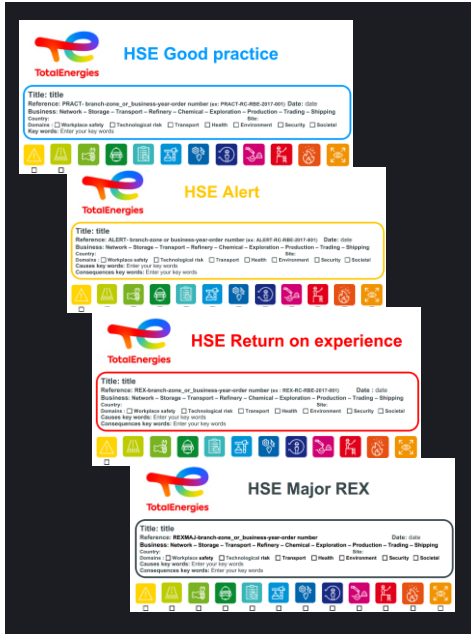
To ensure the effectiveness of this process, the HSE REX concerning the entity or affiliate are known and explained to personnel. The recommendations are monitored in an action plan if necessary.

The entity or affiliate implements and monitors performance indicators to ensure the effectiveness of this process.

Date of publication in REFLEX: 24/09/2018

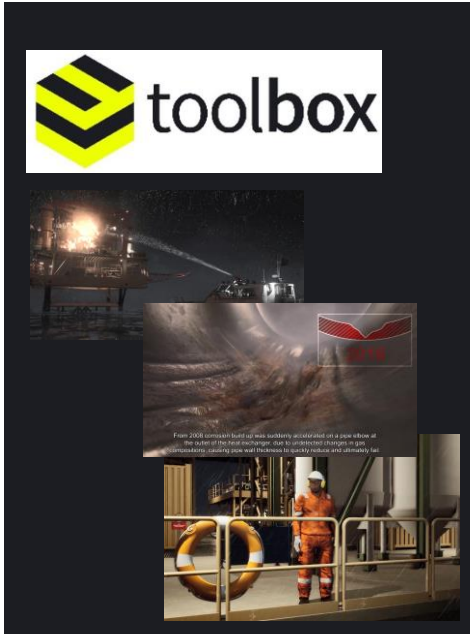
REVISION	DATE	PURPOSE	AUTHOR	CHECKED BY	APPROVED BY
00	04/09/2018	Creation	PSR/HSE/AUD/REX C. Kapp	PSR/HSE/AUD P. Hoorebeke	PSR/HSE S. Spinoy

Unified Documents



MyREX Database

Digital



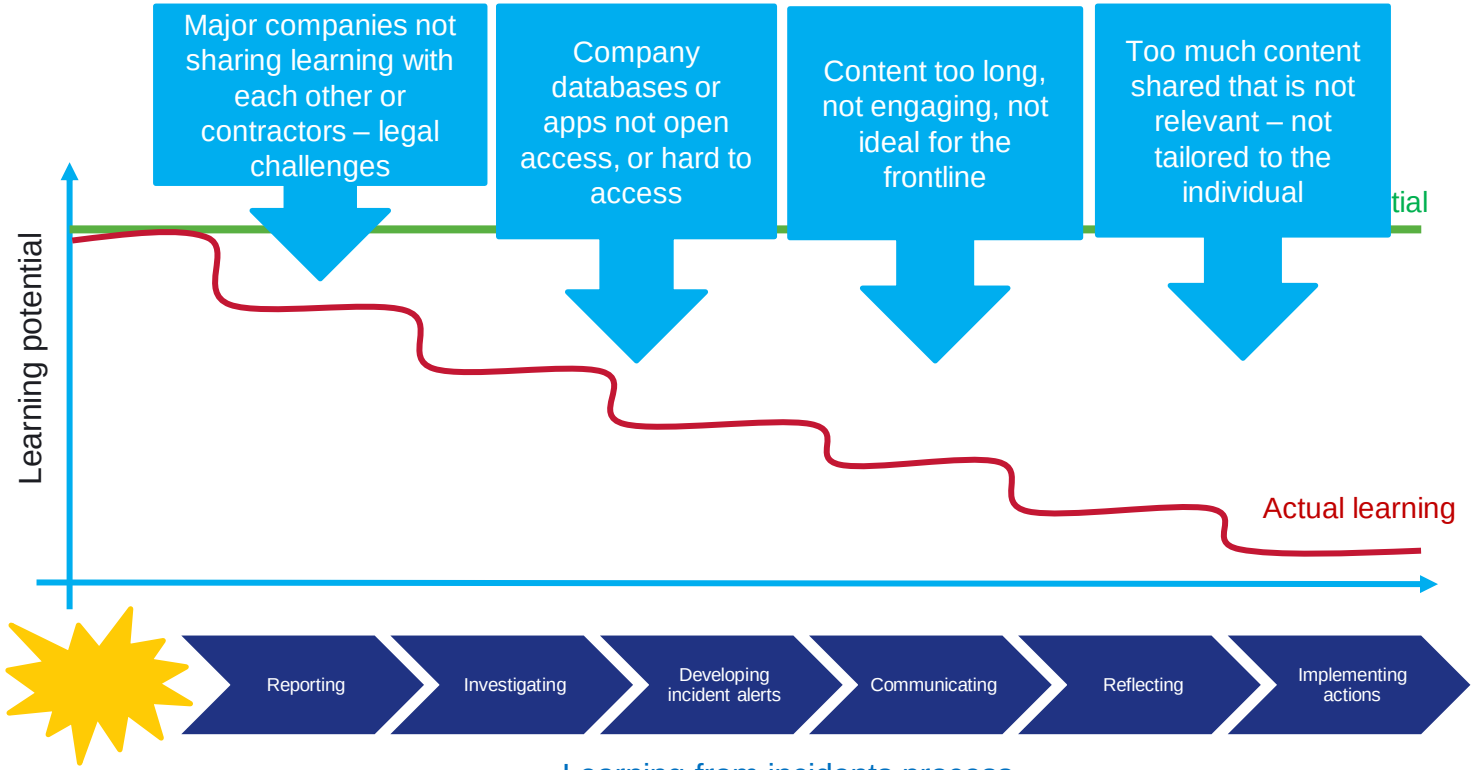
Learning from incidents

- In 2018, 7 major energy companies decided to work together to improve how they share and learn from incidents.
  - TotalEnergies, along with BP, Chevron, ConocoPhillips, ExxonMobil, Phillips66 and Shell agreed to work with the Energy Institute.

- Organisations have historically struggled to learn from incidents.
  - Lessons not being shared amongst companies or with contractors
  - Several attempts to solve this and build an app for sharing incidents attempted by individual organisations, with mixed success.

Some challenges

Learning potential was being lost:



Learning from incidents process

The vision

Prevent incidents by sharing learning with the energy industry's front line

JUST FOR ME
- Relevant to user
- Personal connection
- Easily searchable

JUST ENOUGH
- Right content
- Reinforce barriers

JUST IN TIME
- Accessible when planning & carrying out work
- Regularly updated

Toolholders & Supervisors

Lessons learned from past incidents

Job Hazard Analysis

Safety Meetings

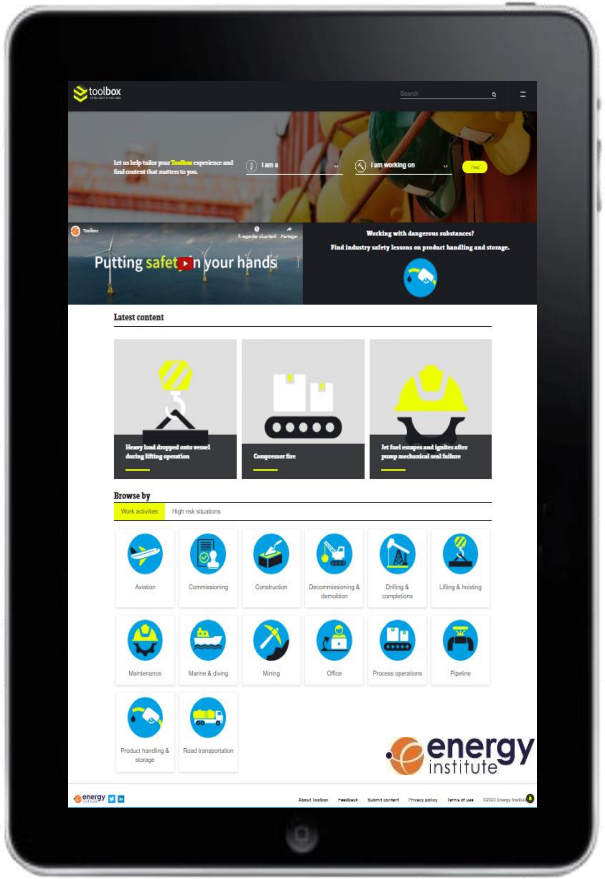
Permit-to-Work

Toolbox talks

Safely executed higher risk work

A safety tool**box** for better learning from incidents

What is Toolbox ?



Toolbox is a **FREE web app** accessed by ~ 7,000 users globally each month and growing.

It provides short, useful **safety insights and solutions,** helping people on site to **get home safe.**

Used by **HSE managers, supervisors, contractors, and others.**

> "Toolbox became a **key player for our operational improvement**."
>
> HSE Manager

toolbox.energyinst.org

toolbox

Key users and **supporters**

bp
ExxonMobil
Lloyd's Register Foundation
G+ Global Offshore Wind Health & Safety Organisation
PHILLIPS 66
REPSOL
TotalEnergies

Global reach – life-saving content in 10 languages:

Timeline

2019

Build

Pilot

2020

Translate

Grow content

2021

Building the foundations for sustainable future

Used globally

toolbox

500+ pieces of content published

102,000 Users since September 2019 Go-live

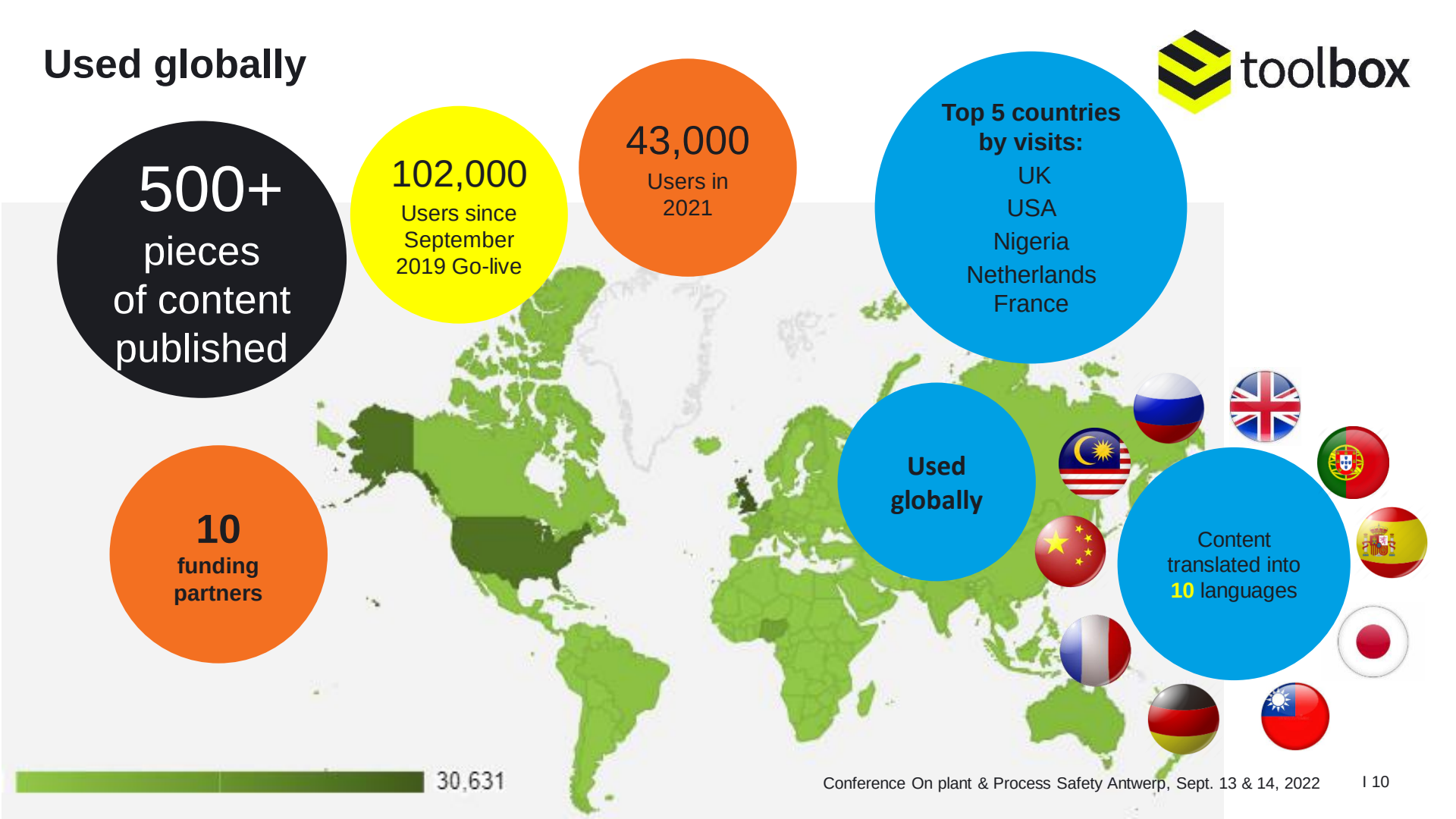
43,000 Users in 2021

Top 5 countries by visits:
UK
USA
Nigeria
Netherlands
France

10 funding partners

Used globally

Content translated into **10** languages



How is Toolbox intended to be used?

1. Supervisor visits Toolbox website on PC or phone

2. Supervisor quickly finds incident relevant to today's job

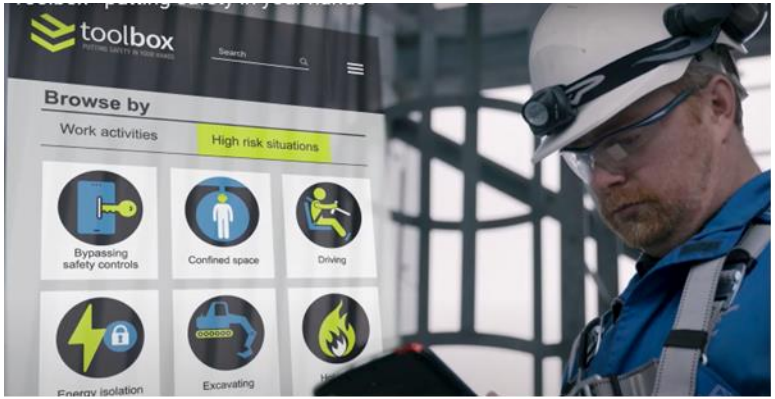
3. Supervisor delivers the content during toolbox talks/job planning meeting

4. Learnings are used to:

- Raise awareness of hazards
- Put in place additional barriers
- Change the plan

Just for me….

- User can **quickly** find content relevant to their work (work activity or hazard)
- **Content is anonymous**, and unnecessary **context** removed.
- **Reflective learning:** all content has had open questions added to help users engage with the content and think “What does this mean for me and my work?”



Just enough…

What happened?

- Short description of the event
- Typically 4-6 succinct bullet points, ~100 words.
- Be clear on the outcomes/potential outcomes
- Context and detail – not too much!

Why did it happen?

- Immediate and underlying causes
- Often a mixture of technical and human factors issues
- 4-6 succinct bullet points, ~100 words

What did they learn?

The recommendations/lessons to help prevent similar incidents happening

- DOES NOT need to contain a complete ‘how to’ or good practice guidance on how to undertake this task safely.
- 4-6 bullet points, ~100 words.

Ask yourself or your crew:

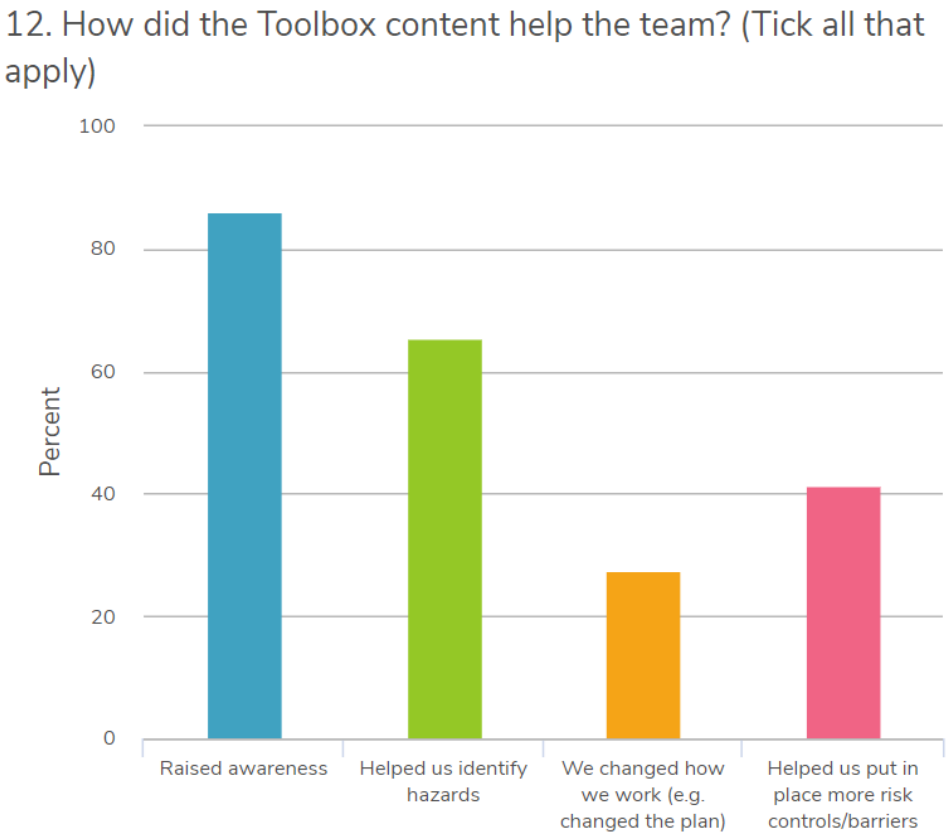
4-5 ‘reflective’ questions (open questions) to help users engage with the content, e.g.

- How can something like this happen here?
- What would we do in this situation?
- How can we improve the way we do this task?

Just in time…

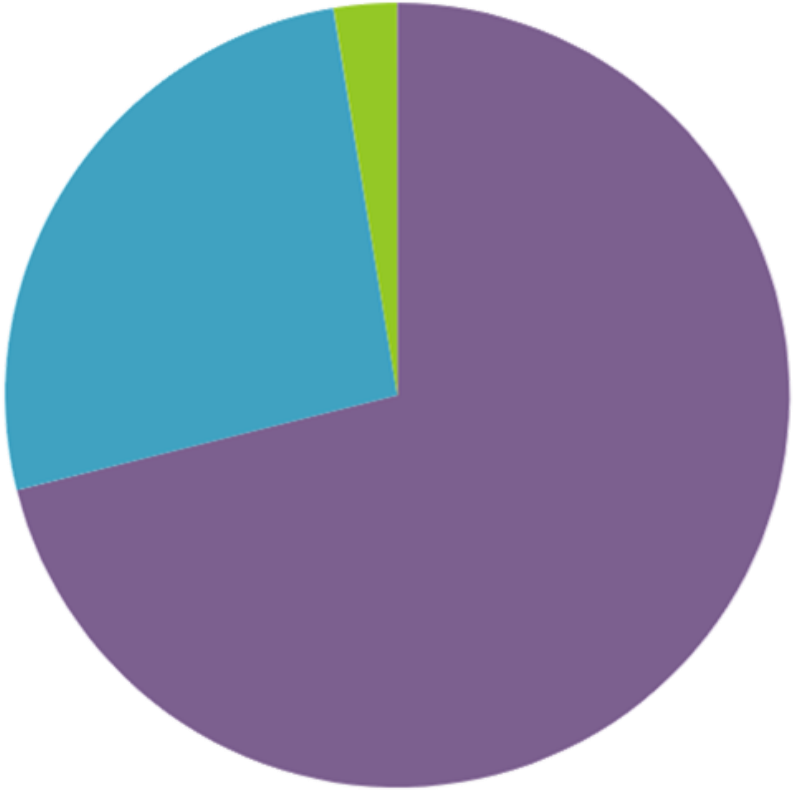
- This is an ongoing challenge for companies. Potential solutions include:
  - Embedding Toolbox learning into **permit to work systems**.
    - EI is working with Wolters Kluwer to make Toolbox available within its **Enablon** permit to work and risk management software.
  - Operationalising Toolbox usage within other **existing company processes** (Toolbox talks, safety moments, work planning)
  - **Gamification** – Repsol Canada case study Toolbox presents | A Toolbox to help frontline workers learn from incidents - YouTube

How does Toolbox help the team?



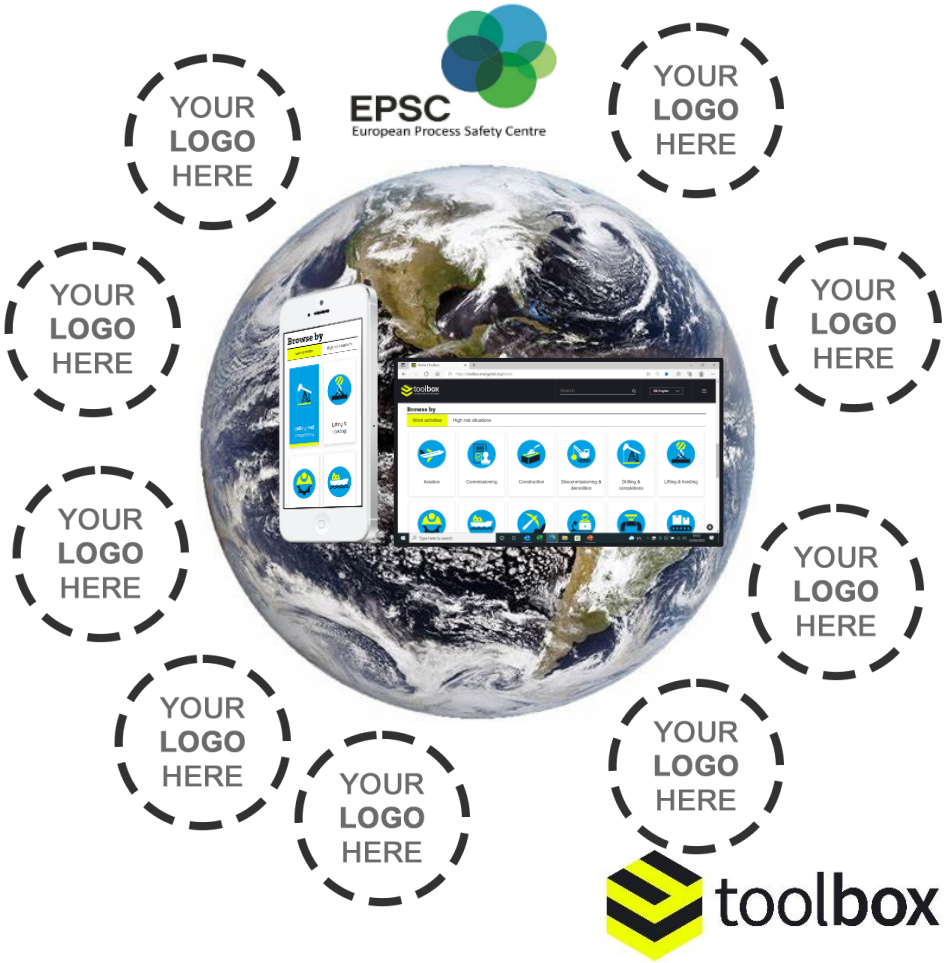
- Over 80% who have delivered a Tool**box** talk said it raised awareness in the team.
- 65% said it helped them identify hazards
- Over 40% said they put in place more risk controls/barriers as a result
- 25% said they changed the plan.

How does Toolbox compare to other sources of lessons learned?



Next Steps

- In 2022, EI is reaching out to like-minded organisations to form **partnerships**.
- We want Toolbox to become the primary way that companies share lessons learned with industry.
- Partnership agreed with EPSC to share safety alerts via Toolbox.
- Discussions ongoing with other organisations including Energy Safety Canada, IChemE, IOGP, Step Change in Safety, IMCA and IADC.



Thank you.

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