

Using Impact Assessment and HR Due Diligence to redefine 'safe tailings' for a just transition



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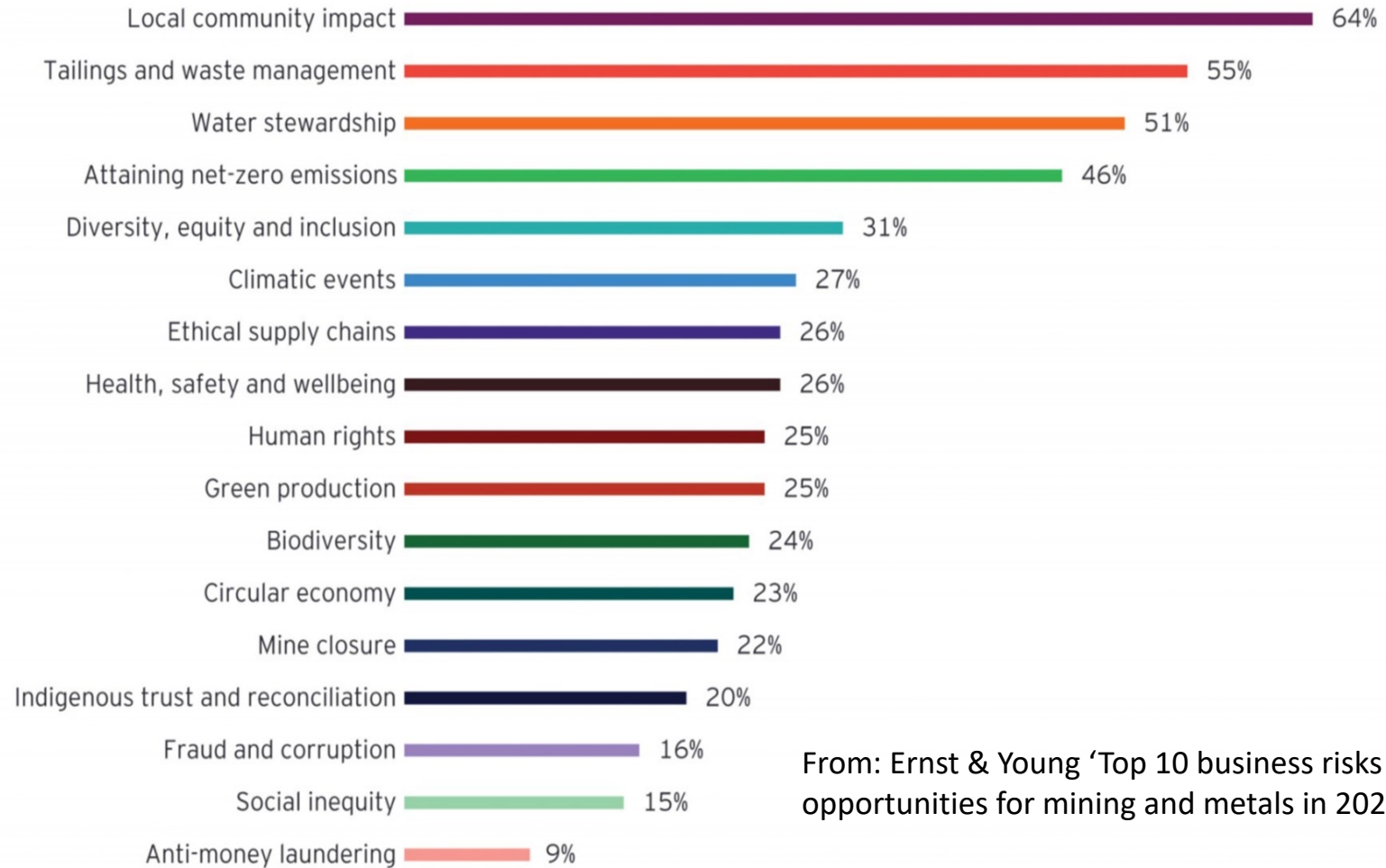
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*Insert presenter
headshot here.*

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TEXT BOX.*

What ESG factors are investors asking about?



From: Ernst & Young 'Top 10 business risks and opportunities for mining and metals in 2024'

https://www.ey.com/en_gl/mining-metals/risks-opportunities

A RISK ASSOCIATED WITH THE NEED FOR COPPER IN THE JUST TRANSITION

Typical copper mine (2015)
produced 200,000 tonnes
of tailings/day from
270,000 tonnes mined (1)



**Increases Each 1/3
Century :**

Waste volume - 10-fold

Area of waste – 5-fold

Heights of tailings dams
2-fold



Risk = Likelihood x Probability
FOR DAMS

Probability 'somewhat'
proportional to height

Consequences – 'somewhat'
proportional to volume

**20X increase in potential
risk of failure**

(2)

1. Grid Arendel: <https://www.grida.no/resources/11439>
2. A.M. Robertson presentation Tailings and Mine Waste Conference 2011

Global Industry Standard for Tailings Management- GISTM

The 'ideal'- social assessment integrated into tailings management decision making

Human Rights Due Diligence & SIA/EIA of **at-risk areas**

Integrated Knowledge Base informs decisions & processes

Assess human exposure and vulnerability to potential failures

Reduce probability & **consequences** - apply mitigation hierarchies

Multi-disciplinary risk assessments and MAA

Decisions that prioritize 'keeping people safe'

Requirement 2.4 - key integration link

*In order to identify the groups most at risk, refer to the updated tailings facility breach analysis to assess and document potential **human exposure and vulnerability** to tailings facility credible failure scenarios.*

- Who is exposed to harm and in what ways in case of a failure?
- How does vulnerability to impact change who is most at risk?

https://rise.articulate.com/share/OkwjiT-8S4fMlZqlQZpJ_Blwh0ZgW4qd#/lessons/dMQw5V0enUXsnDQxRUE9tY2Kbmgd025q

This is a work in progress!



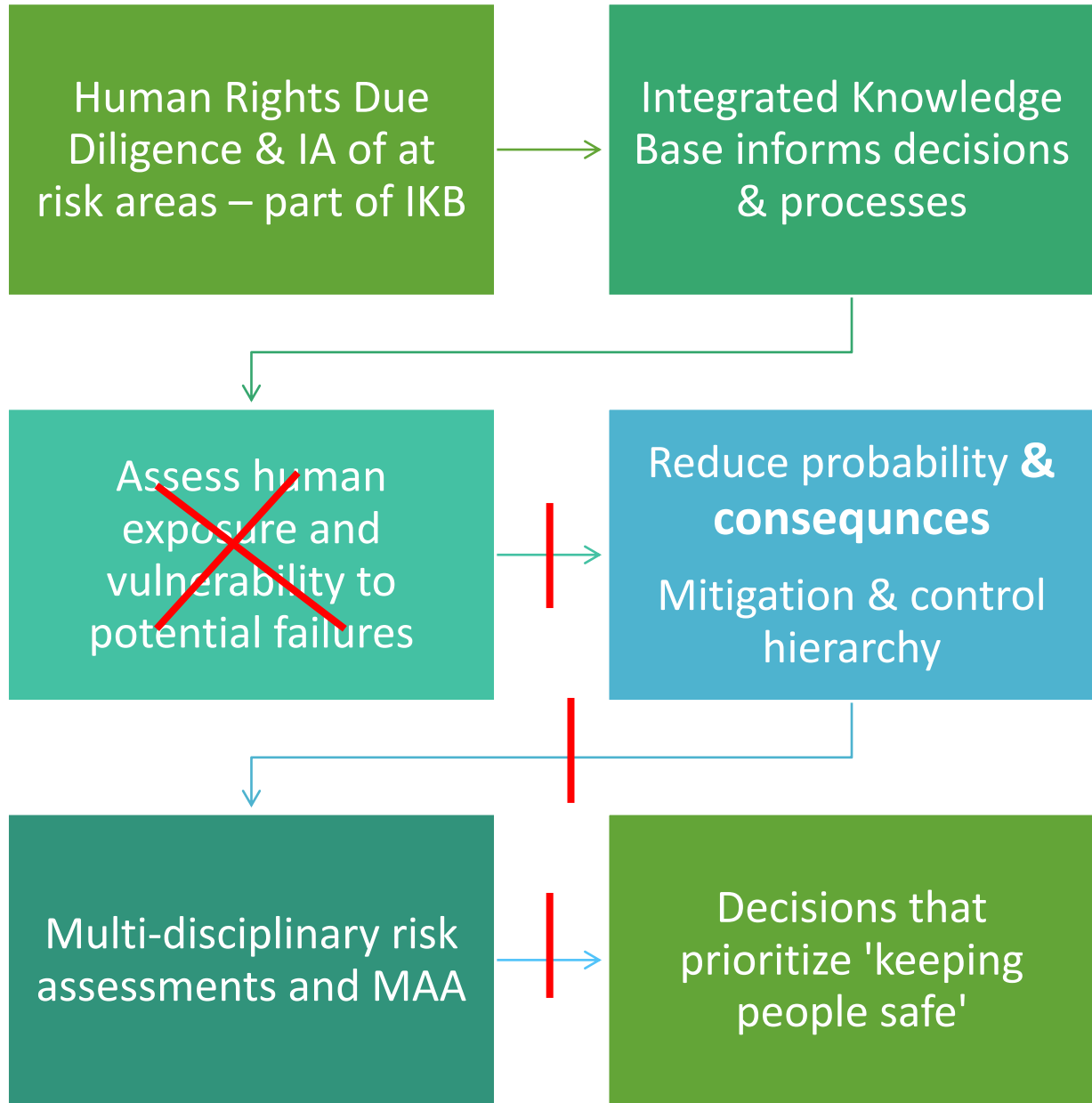
ONGOING RESEARCH



ONGOING IMPLEMENTATION BY
COMPANIES



ONGOING EFFORTS TO FUND AN
INDEPENDENT OVERSIGHT
ORGANIZATION



Initial indications

Why the gaps?

Focus has been primarily on reducing probability
Carrying out focused IA – some cases HRDD but is it changing decision-making?

The **Integrated Knowledge Base** is not that – has yet to be translated into *integrated thinking*

Not assessing human exposure and vulnerability - key to identifying *harm* and bringing that into analysis

Integration across engineering and social functions is not a comfortable 'fix'

Redefining 'safe' tailings?

Going beyond engineering fixes

Prioritizing the elimination of *harm* from tailings- addressing the consequence side of the risk equation -

We have the tools but not the knowledge - or to date the *experience* at applying it

Towards Zero Harm: A Compendium of papers prepared for the Global Tailings Review -

<https://globaltailingsreview.org/compendium/>

Social Performance and Safe Tailings Management: A Critical Connection. Susan Joyce, Deanna Kemp

Lessons for Mining from International Disaster Research Deanna Kemp

Let's continue the conversation!

Post questions and comments in the IAIA24 app.



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