

Which lessons from recent disasters in the mining industry can be helpful for the challenges in the nuclear industry?

NEA-OECD Workshop: The nuclear and social science nexus: challenges and opportunities for speaking across the disciplinary divide, Paris 12-13 December 2019

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Leverage from
the EU
2014–2020



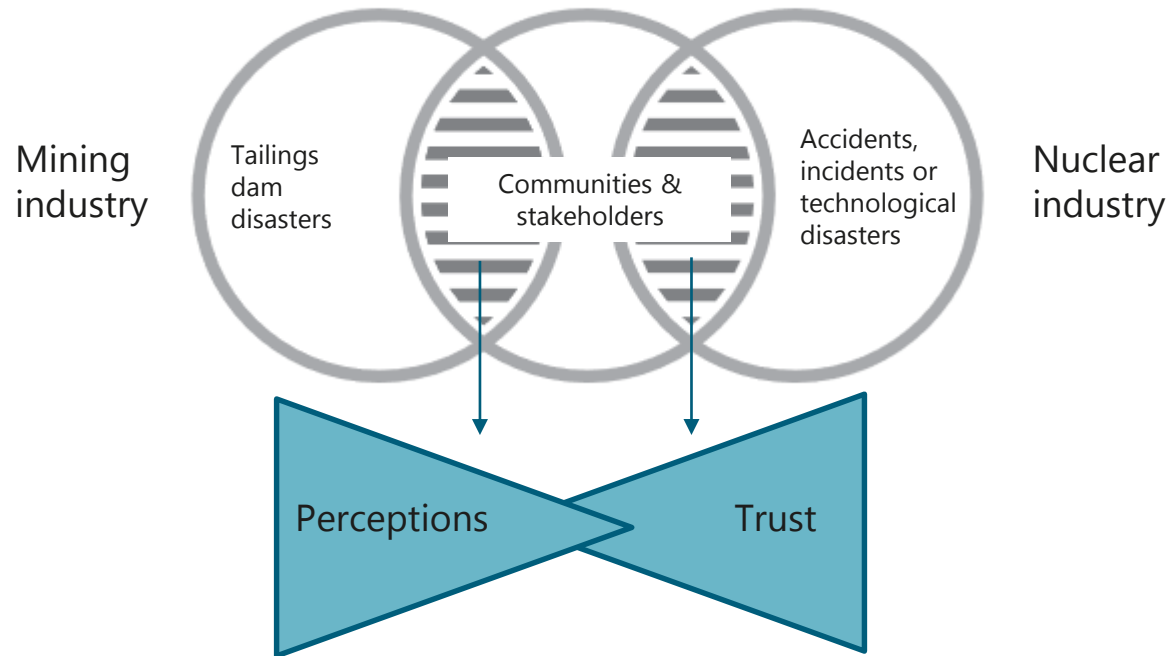
Elinkeino-, liikenne- ja ympäristökeskus
Centre for Economic Development, Transport and the Environment

Potential lessons for the nuclear industry?



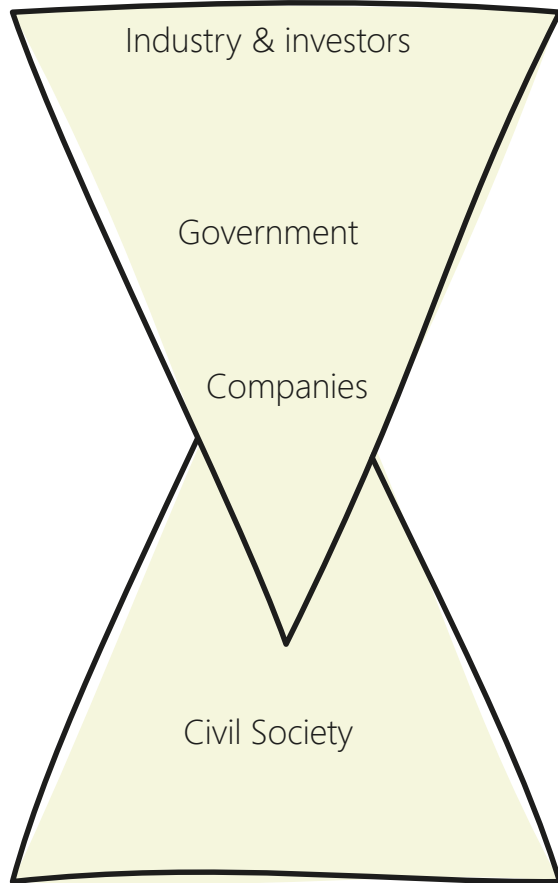
Proportionally it would be equivalent to 12 000 to 25 000 Olympic swimming pools

Communities' acceptance of projects and the role of trust



Earlier studies: Trust plays a key role when locals are to decide whether they want or not mining or nuclear projects to take place nearby them (see, for instance, Boutilier et al, 2012; Harris et al, 2018; Zhang et al., 2015)

Results



Driver 1: Risk & safety perception

Driver 2: Trust & acceptance

Technical improvements & tailings dam management review

Transparency & information sharing

Gather & store data; monitor & fine companies

Political will; law alterations & reinforcement

Persistent risks & human rights violations

Emergency teams & crisis expertise

Seeking for reliable information

Mobilization, multi-level activism



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Mine Disaster Reveals That Brazil Has No Leader

A week of silence from Brasilia, then the president surveyed the site from a helicopter.

Individualised letter to Mining company CEO/Chair

Address
Address
Address

5th April 2019

Re: Urgent request for information concerning tailings dam management

We write as 96 investors in the mining sector, who together represent over \$10.3 trillion in assets under management. This urgent engagement is being led by the Church of England Pensions Board and Swedish Council on Ethics for the AP Funds and backed by the UN-supported Principles for Responsible Investment (PRI).

The tragic loss of life from the Brumadinho and Samarco catastrophic tailings dam failures highlighted the devastating consequences when something goes wrong.

GlobalTailings
Review.org

GLOBAL TAILINGS REVIEW



APRESENTAÇÃO

Descrição do Sistema

Entidades Fiscalizadoras

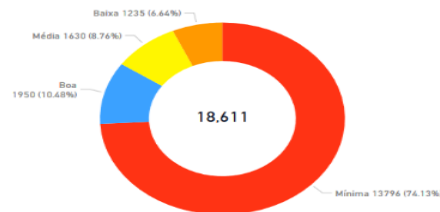
PAINÉIS INTERATIVOS

Gráficos e Relatório de Barragens Cadastradas no Sistema

Gráficos e Relatório de Barragens Cadastradas no Sistema

Compleitude das Informações

● Mínima ● Boa ● Média ● Baixa



Discussion



Conclusions and practical implications

- “Inside the fence x outside the fence” perception
 - ☞ More access to information and more transparency outside the facilities
 - ☞ Adapt the language to each public
 - ☞ Disclose information at multi-levels
- Future projects should consider social vulnerability and political fragility when choosing new exploration sites
 - ☞ Conflicts and reputation costs are higher after starting phase
 - ☞ More likely to escalate abruptly, causing chaotic and harmful consequences
- Industry should listen to “experts” to better understand those vulnerabilities and fragilities
 - ☞ Include voices from community members and validate their perceptions
 - ☞ Cross-pollination with mining industry players



Thank you!

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