This Photo by Unknown Author is licensed under CC BY-NC-ND

Social License to Operate

Click to start

By the end of this DTM, you will be able to:

- define what social license to operate (SLO) means and how it differs from public acceptance
- list its key factors
- describe why it is important in the context of mining activities

Erasmus+
Enriching lives, opening minds.

How to study this DTM

Your path through the DTM:

1. Begin with Social License to Operate to familiarize yourself with the key concept.
2. Navigate through the topic hubs to explore why public acceptance matters and how it is formed.
3. Open the detailed pages and examples by clicking the interactive elements.
4. Use the Back buttons to move between sections.
5. Consider how different stakeholders may view the same project differently.
6. Complete the module by reviewing the Key Takeaways and reflecting on the examples presented.

Time needed
30-40 minutes

Format
self-study

How to explore
click to explore/return to the main hub

Files
PDF + H5P (NEXPERT website)

Co-funded by the Erasmus+ Programme of the European Union
GEFÖRDERT VOM Bundesministerium für Bildung und Forschung
Grønlands Naturinstitut
Pinngortitaleriffik · Greenland Institute of Natural Resources
AARHUS UNIVERSITY
UNIVERSITY OF EASTERN FINLAND
MRE Institute of Mineral Resources Engineering
RWTH AACHEN UNIVERSITY

This is how a 'how to study' slide guides the learner through the DTM.

Navigation hub

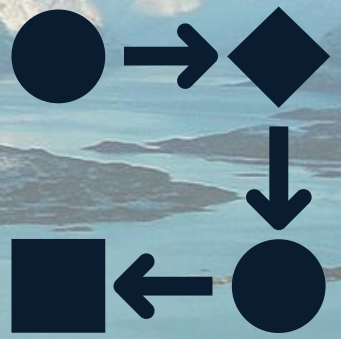
Figure out the meaning and application of public acceptance in mining

What is a social license to operate?	Why it matters?	What factors contribute to SLO?	What are the stages of SLO?	Case study: SLO in Kylylahti mine	Key takeaways

Click on the boxes to explore each item.

UNIVERSITY OF EASTERN FINLAND

Social license to operate (SLO) is



Click to reveal!

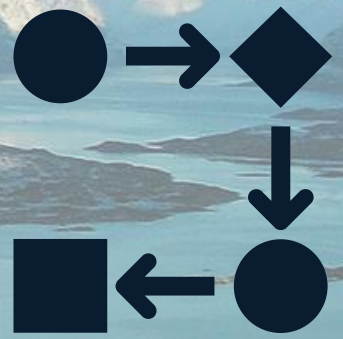
Return to Hub

UNIVERSITY OF EASTERN FINLAND

Social license to operate (SLO) is

A concept of public acceptance:

SLO is mostly used in the mining sector and mining research.



Return to Hub

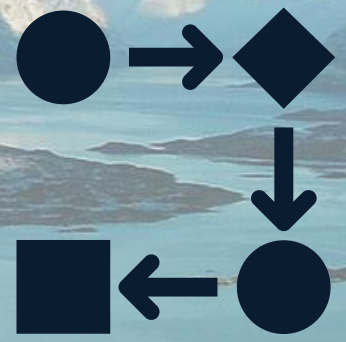
UNIVERSITY OF EASTERN FINLAND

Social license to operate (SLO) is

A concept of public acceptance:

SLO is mostly used in the mining sector and mining research.

Not a formal agreement or license:
SLO is complementary to legal processes and licenses.



Return to Hub

UNIVERSITY OF EASTERN FINLAND

Social license to operate (SLO) is

Click to learn more!

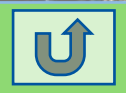
A concept of public acceptance:

SLO is mostly used in the mining sector and mining research.

Not a formal agreement or license:
SLO is complementary to legal processes and licenses.

An ongoing process:
SLO reflects the company-community relationship and can be gained, maintained, or lost at any stage.

Return to Hub



UNIVERSITY OF EASTERN FINLAND

SLO brings the focus on the company-community relationship

The SLO is **a social contract** between the mining operator and the local community.

The operator needs to consider **who is affected by the project** and **engage** with them.

Back

See who makes up for the community

UNIVERSITY OF EASTERN FINLAND

The local community is not one entity but **a network of different stakeholders**, such as:

Decision-making bodies such as local councils, Indigenous councils, local authorities.

Landowners

Local businesses and livelihoods

such as fishers, tourism entrepreneurs, reindeer herders, farmers and foresters.

Civil society actors such as environmental organizations, social movements

Indigenous rights holders

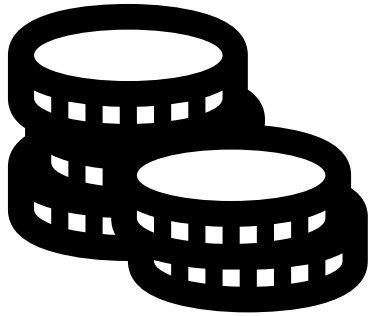
Residents, nature dwellers and leisure home owners

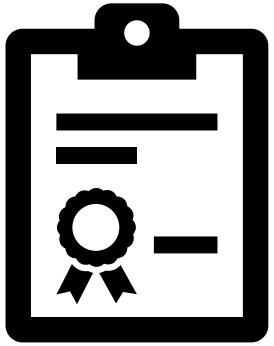
UNIVERSITY OF EASTERN FINLAND

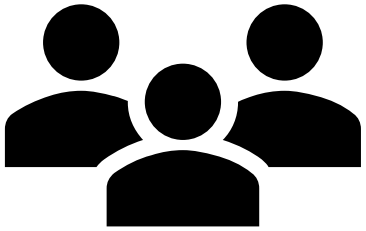
Back

Why SLO matters?

Click an icon to learn more!







Return to Hub

UNIVERSITY OF EASTERN FINLAND

Financial benefits

Gaining a social license to operate can benefit the company financially by

- Avoiding costly delays, protests, and operational disruptions
- Reducing regulatory and compliance risks
- Protecting long-term profitability and investment stability

Back

UNIVERSITY OF EASTERN FINLAND

Reputational benefits

Gaining a social license to operate can benefit the company's reputation by

- Strengthening trust with stakeholders and the wider public
- Supporting investor confidence and partnership opportunities
- Preventing negative publicity that can harm future projects

Back

UNIVERSITY OF EASTERN FINLAND

Community benefits

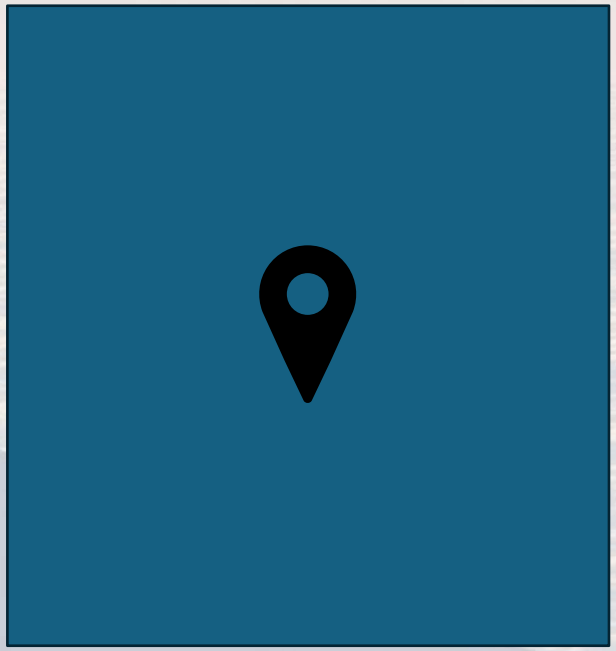
Gaining a social license to operate can benefit the company's community relations by

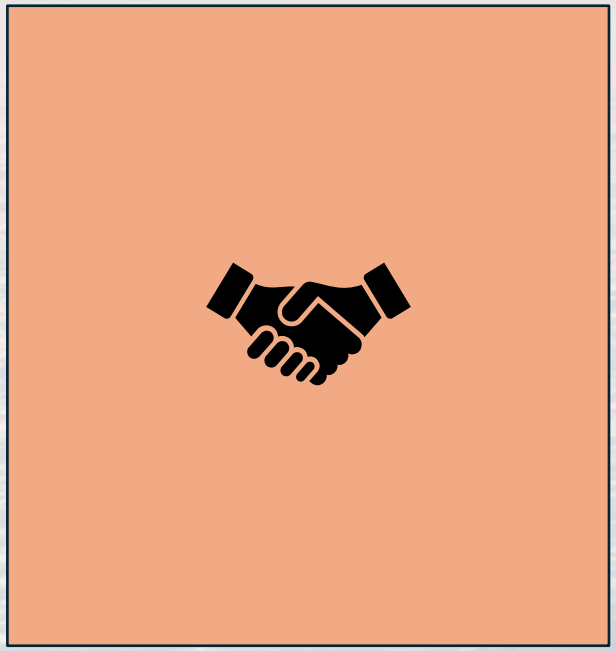
- Building constructive, trust-based relationships with local communities
- Ensuring continued acceptance and cooperation
- Reducing conflict and supporting sustainable, long-term operations

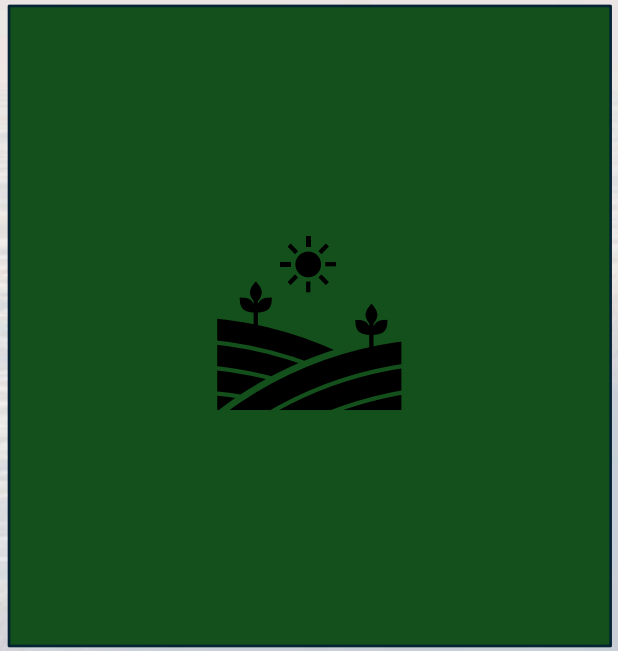
Back

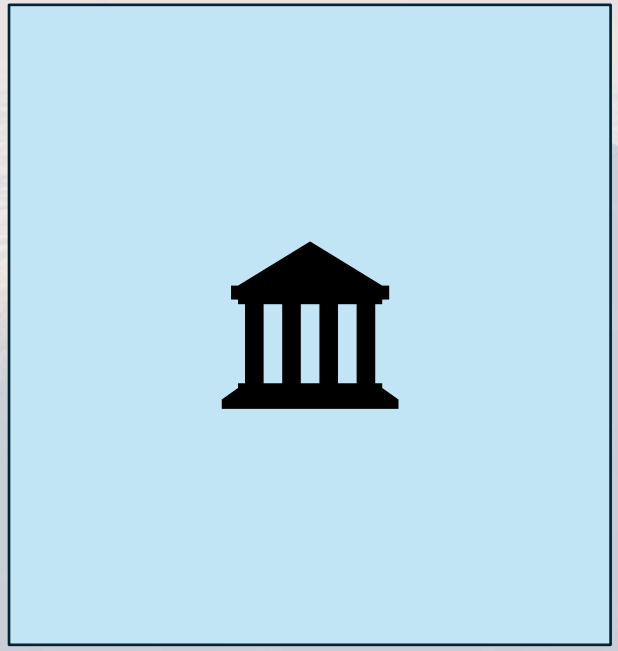
UNIVERSITY OF EASTERN FINLAND

Several factors contribute to the SLO









Click to reveal!

Return to Hub

UNIVERSITY OF EASTERN FINLAND

Several factors contribute to the SLO

Location

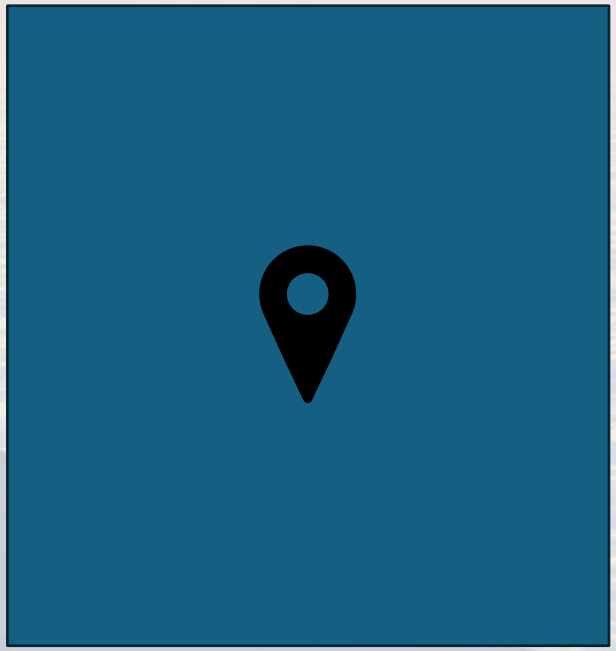
Broader social and political context

Click to reveal!

Return to Hub

UNIVERSITY OF EASTERN FINLAND

Several factors contribute to the SLO



Transparency and quality of community engagement

Perceived fairness of how the company treats the community

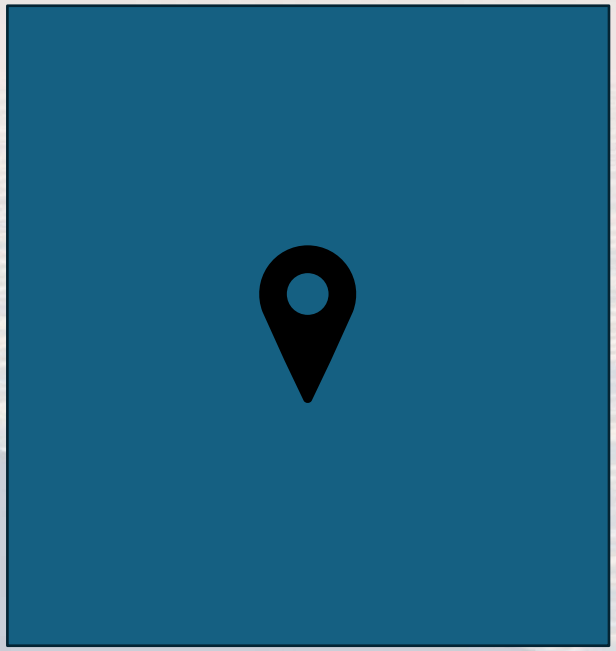
Trust in the company

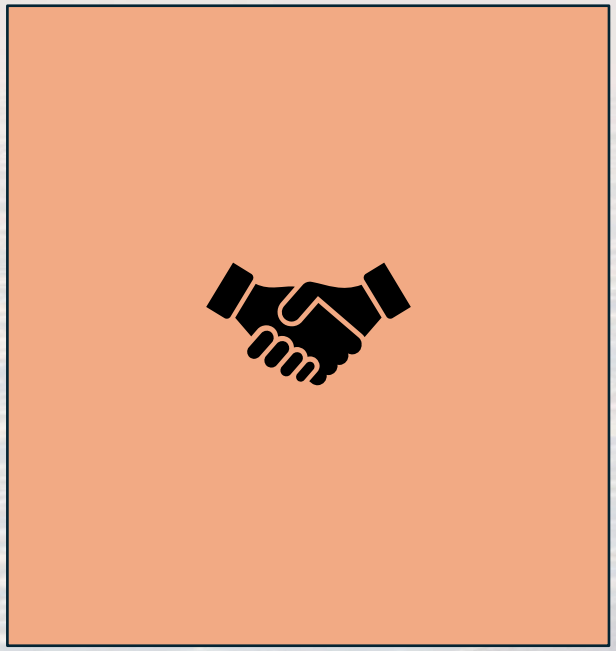
Click to reveal!

Return to Hub

UNIVERSITY OF EASTERN FINLAND

Several factors contribute to the SLO

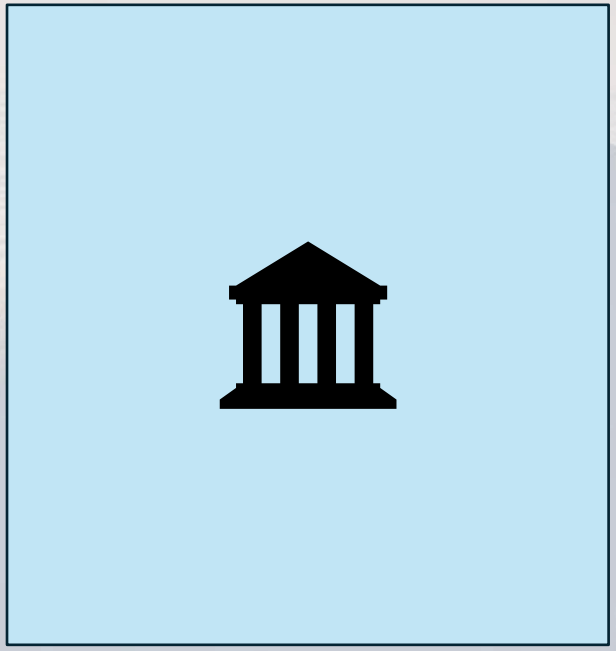




Anticipated or proven impacts (e.g., on the environment)

Anticipated or realized benefits (e.g., economic, social)

Perceived fairness of the distribution of impacts and benefits

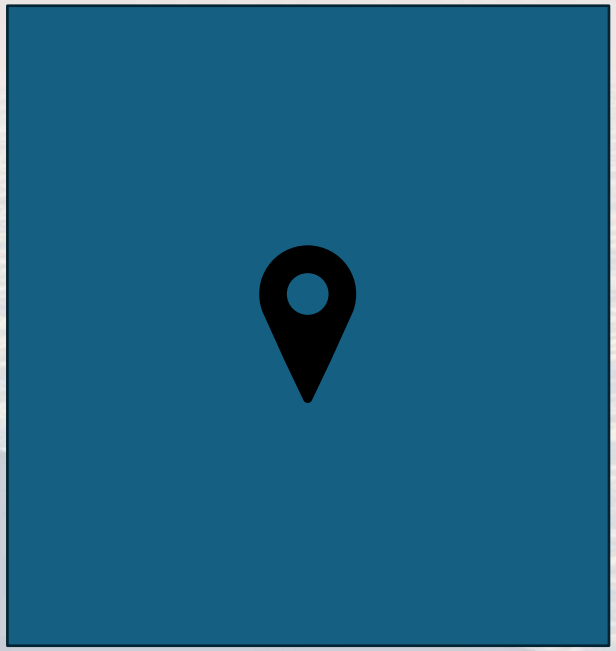


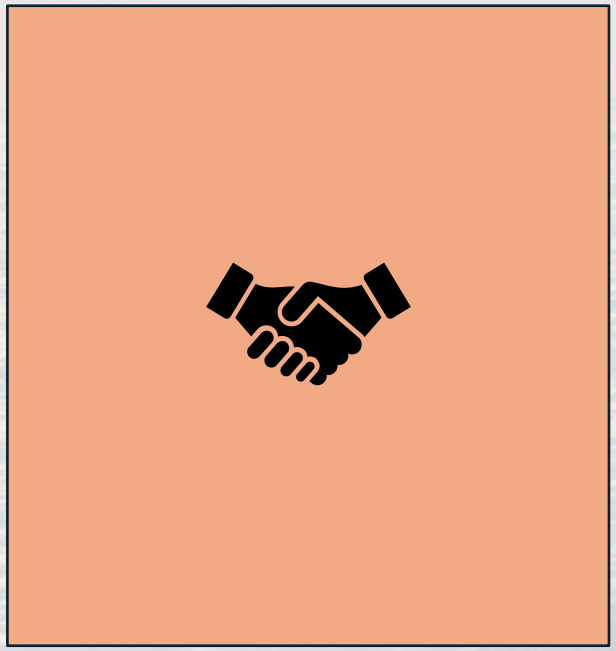
Return to Hub

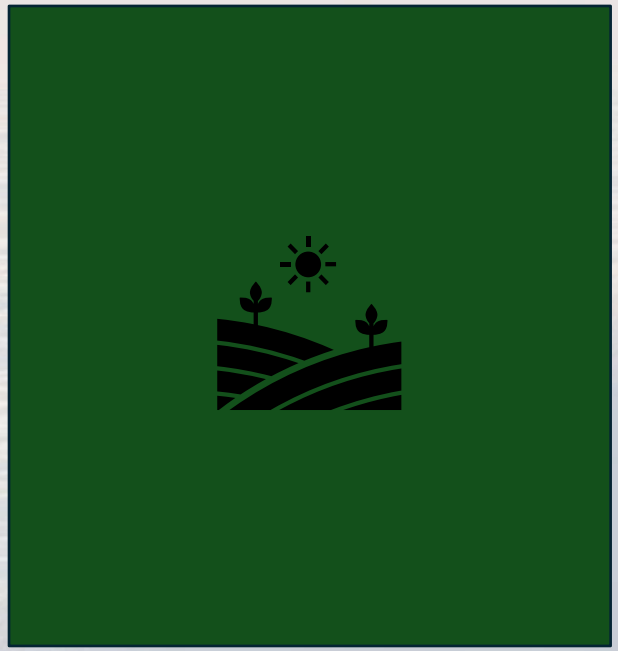
Click to reveal!

UNIVERSITY OF EASTERN FINLAND

Several factors contribute to the SLO







Perceived fairness of how the government and regulations work

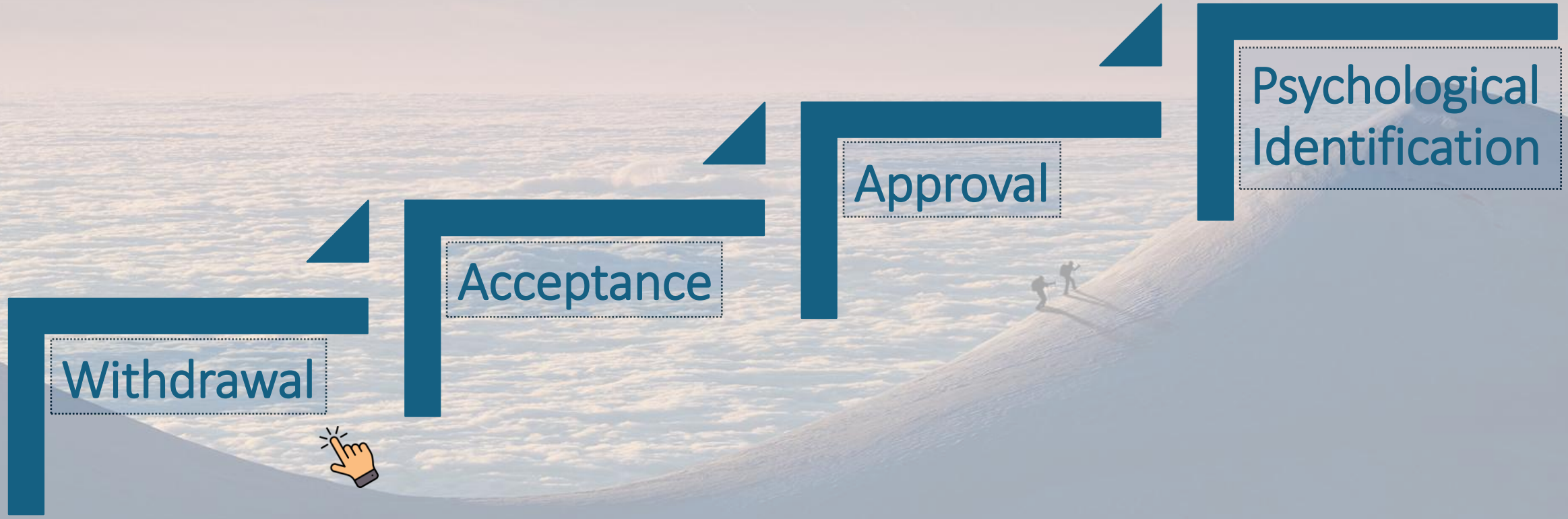
Trust in the government to regulate the industry

Click to reveal!

Return to Hub

UNIVERSITY OF EASTERN FINLAND

Stages of SLO



Return to Hub

UNIVERSITY OF EASTERN FINLAND

Acceptance

Community stakeholders tolerate the company and its project. They do not necessarily like the project or benefit from it.

Key ingredient: **Legitimacy**

Back

UNIVERSITY OF EASTERN FINLAND

Legitimacy

When the community perceives that the company benefits it economically, contributes to the well-being of the region and treats the locals fairly and with respect.

Issues to consider:

- Does the project benefit the community economically, beyond mandatory taxes and such? Are the costs and benefits distributed fairly?
- Does the project benefit the community socially and contribute to wellbeing? Are people treated with respect?

Back

Approval

Community stakeholders explicitly approve the company and its project. They also encourage the project's continuation.

Key ingredient: **Credibility**

Back

UNIVERSITY OF EASTERN FINLAND

Credibility

When the company holds to its promises and builds a reputation as an honest actor.

Issues to consider:

- Is the information provided true and clearly presented?
- What is being promised to the community? Are all commitments to the community being delivered?

Back

Psychological Identification

Community stakeholders perceive the company and its project as integral to the community and its identity.

Key ingredient: **Trust**

Back

UNIVERSITY OF EASTERN FINLAND

Trust

When the company and the community engage in a reciprocal relationship that serves their mutual interests.

Issues to consider:

- Does the company manage and mitigate impacts from its operations?
- Does the company engage with the company often enough? Is the engagement of good quality?
- Are there real opportunities for participation and influence for the community? Are all necessary stakeholders included?

Back

Withdrawal

Community stakeholders withhold their acceptance before the project's implementation or withdraw it at a later stage.

This poses a risk that the project is being restricted or contested.

Withdrawal can happen at any time during the project.

Back

UNIVERSITY OF EASTERN FINLAND

Case study: Mining with an SLO in Kylylahti, Finland

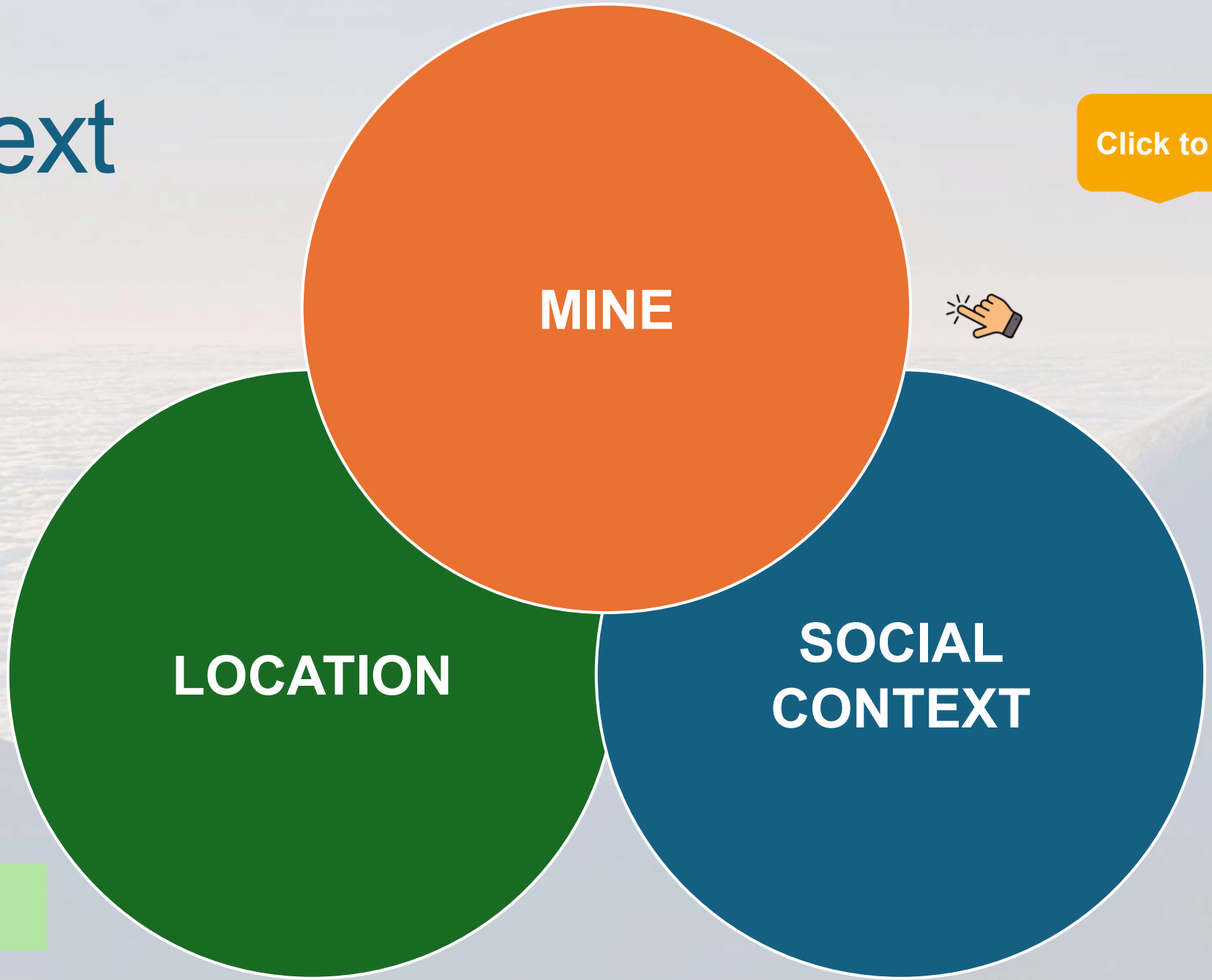
The context | Timeline | Gaining legitimacy | Proving credibility | Building trust

Return to Hub

UNIVERSITY OF EASTERN FINLAND

Context

Click to reveal!

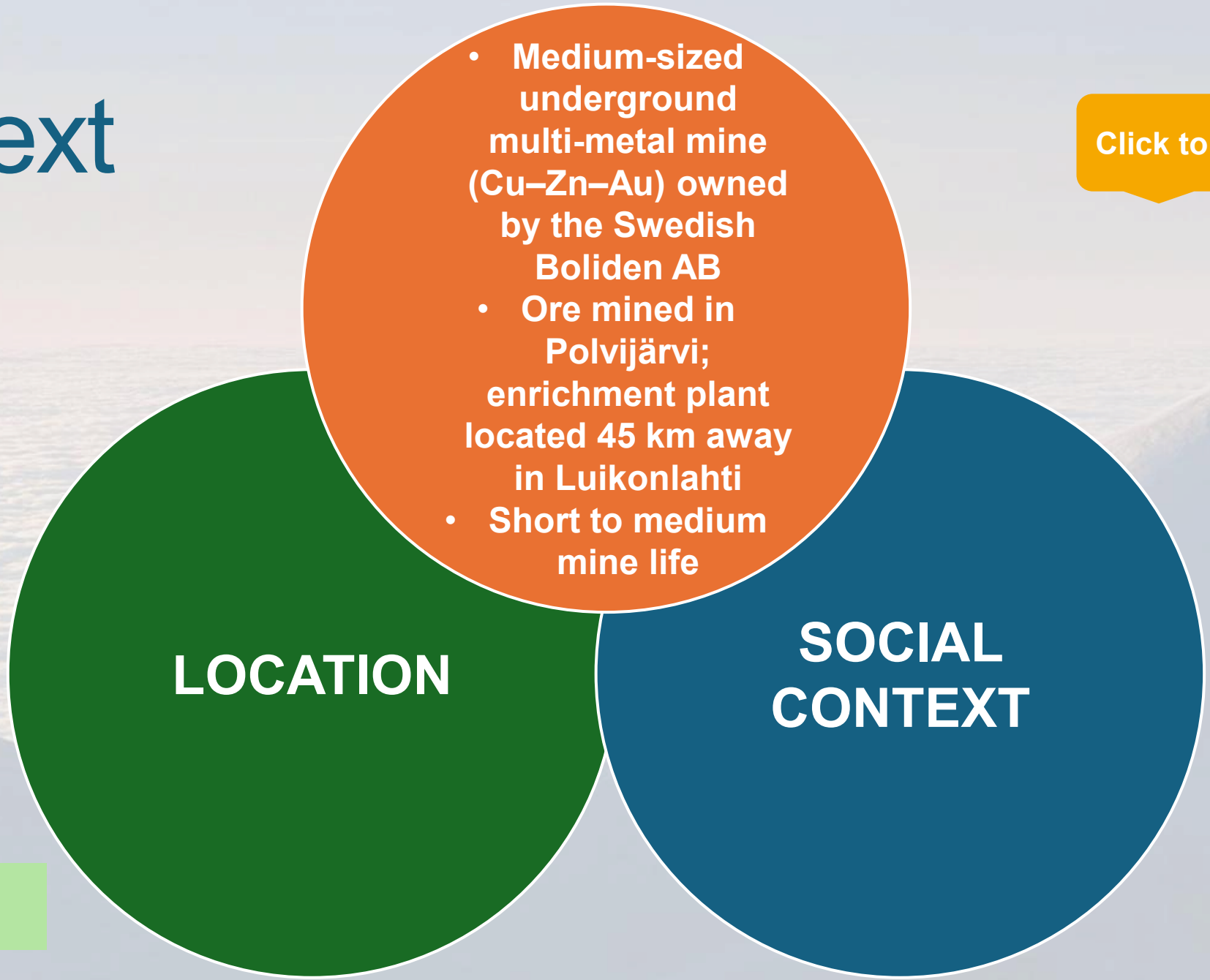


Back

UNIVERSITY OF EASTERN FINLAND

Context

Click to reveal!

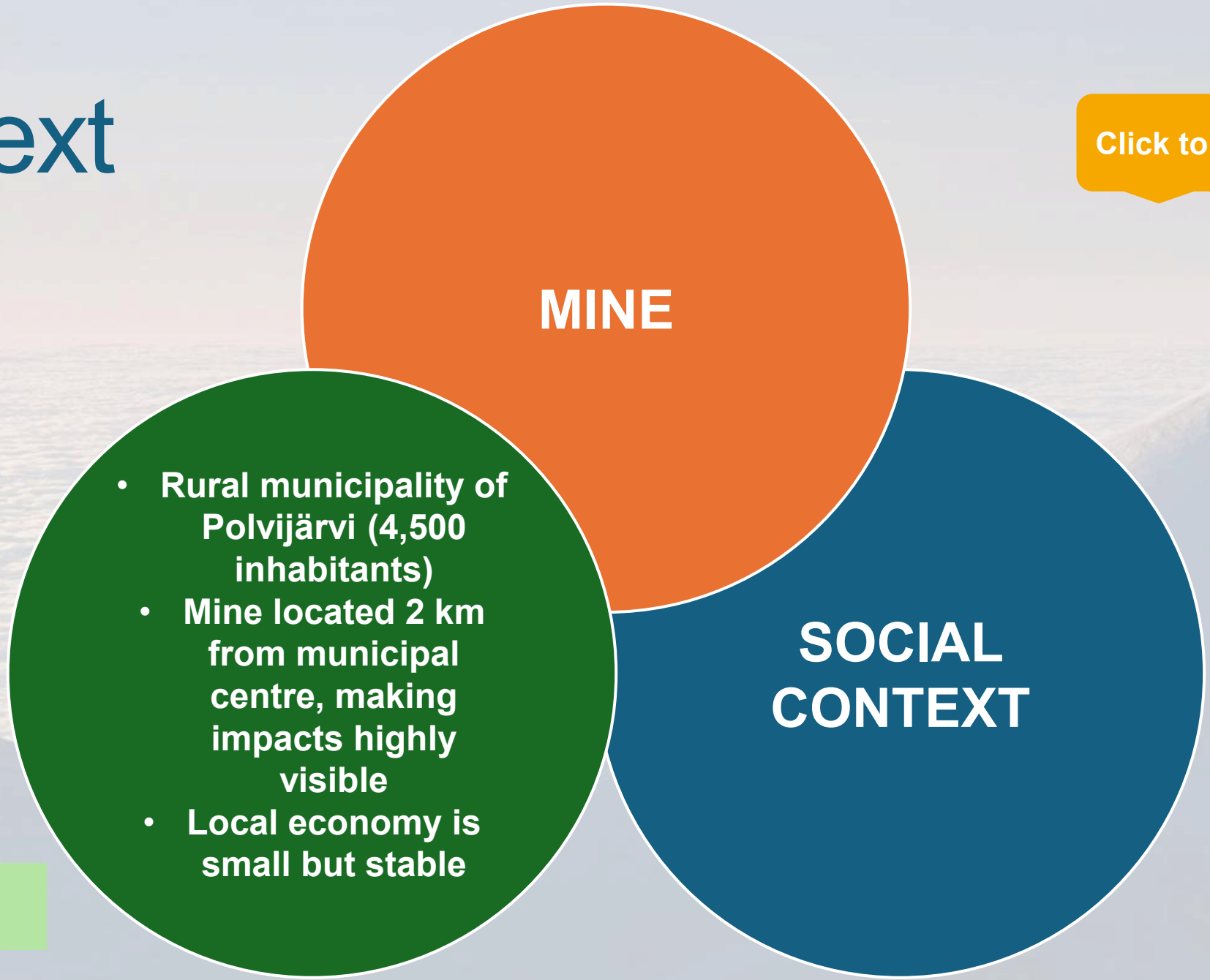


Back

UNIVERSITY OF EASTERN FINLAND

Context

Click to reveal!

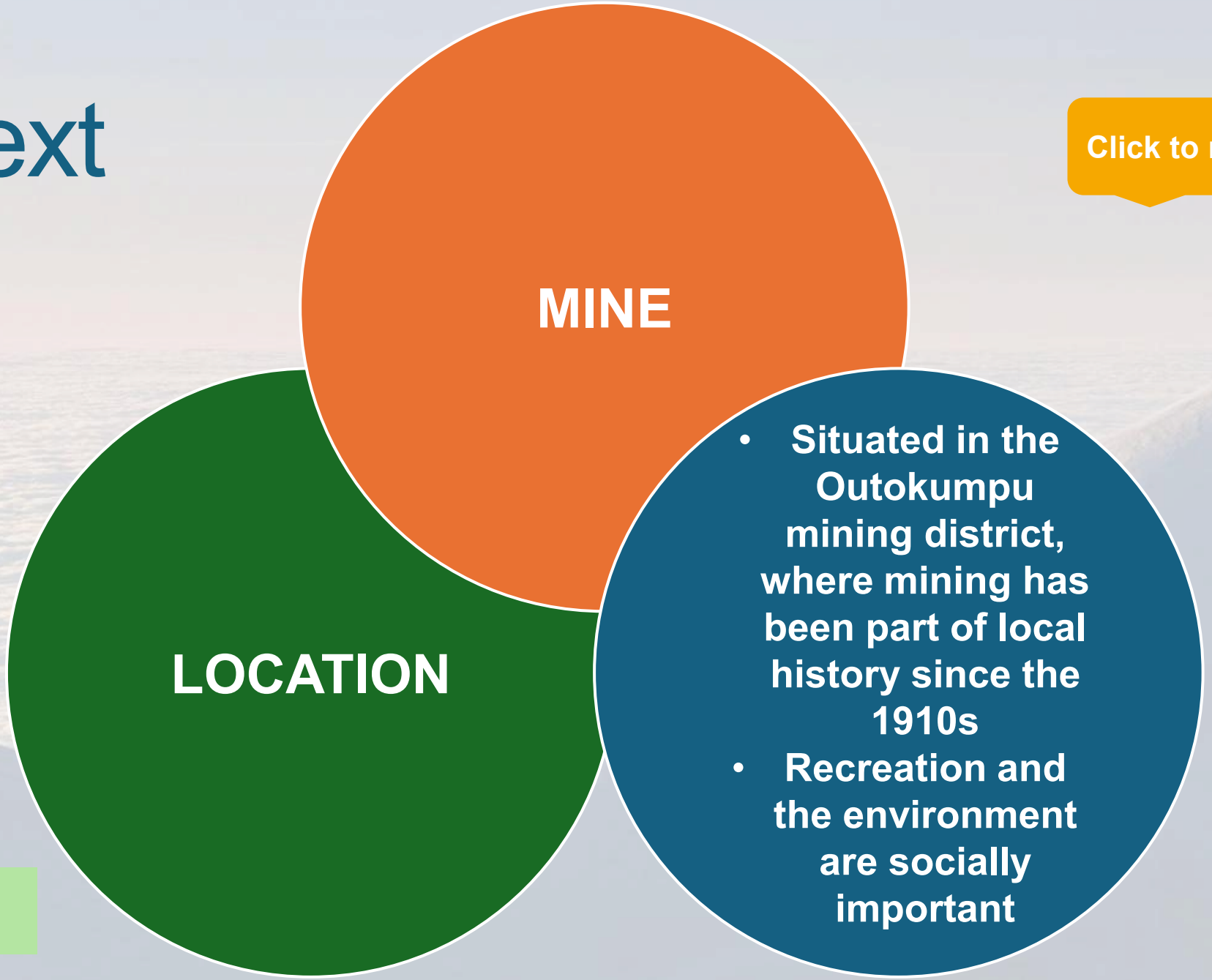


Back

UNIVERSITY OF EASTERN FINLAND

Context

Click to reveal!



Back

UNIVERSITY OF EASTERN FINLAND

Timeline

Back

1910s - 2005 | 2005 - 2007 | 2007- 2010 | 2010 - 2012 | 2012 - 2016 | 2016 - 2020

1910s-2005: Discovery

Outokumpu mining district operates in the region for decades.

Kylylahti ore is discovered in 1984 by Outokumpu Ltd.

Back

UNIVERSITY OF EASTERN FINLAND

2005–2007: Planning

Environmental Impact Assessment (EIA) is conducted in 2006.

Local survey identifies key worries: Traffic safety, noise, dust ans water quality in Lake Polvijärvi

Pro-Polvijärvi movement is founded to protect the lake.

Back

UNIVERSITY OF EASTERN FINLAND

2007–2010: Delay

Planned start of the mine in 2007 is postponed due to the global financial crisis.

Ownership of the mine is changed to Altona Mining Ltd.

Back

UNIVERSITY OF EASTERN FINLAND

2010–2012: Construction and start of production

Underground mine infrastructure construction is started in 2010.

Production begins in July 2012.

Decision made to use Luikonlahti enrichment plant (45 km away) instead of building one in Kylylahti is made to answer local concerns.

Back

UNIVERSITY OF EASTERN FINLAND

2012–2016: Operation and impact management

- Boliden AB buys the mine in 2014.
- Traffic impacts become the main everyday concern, leading to petitions from residents. Traffic routing is changed, as well as road maintenance and safety measures improved, in response to concerns.
- Lake Polvijärvi water use plan is altered to change the water intake from the old talc mine instead of the lake.
- Collaborative rehabilitation plan is made for the lake.

Back

UNIVERSITY OF EASTERN FINLAND

2016–2020: Stabilization and closure

Mine becomes a “socially unnoticed” operation with no major conflicts.

The mine is closed at the end of 2020.

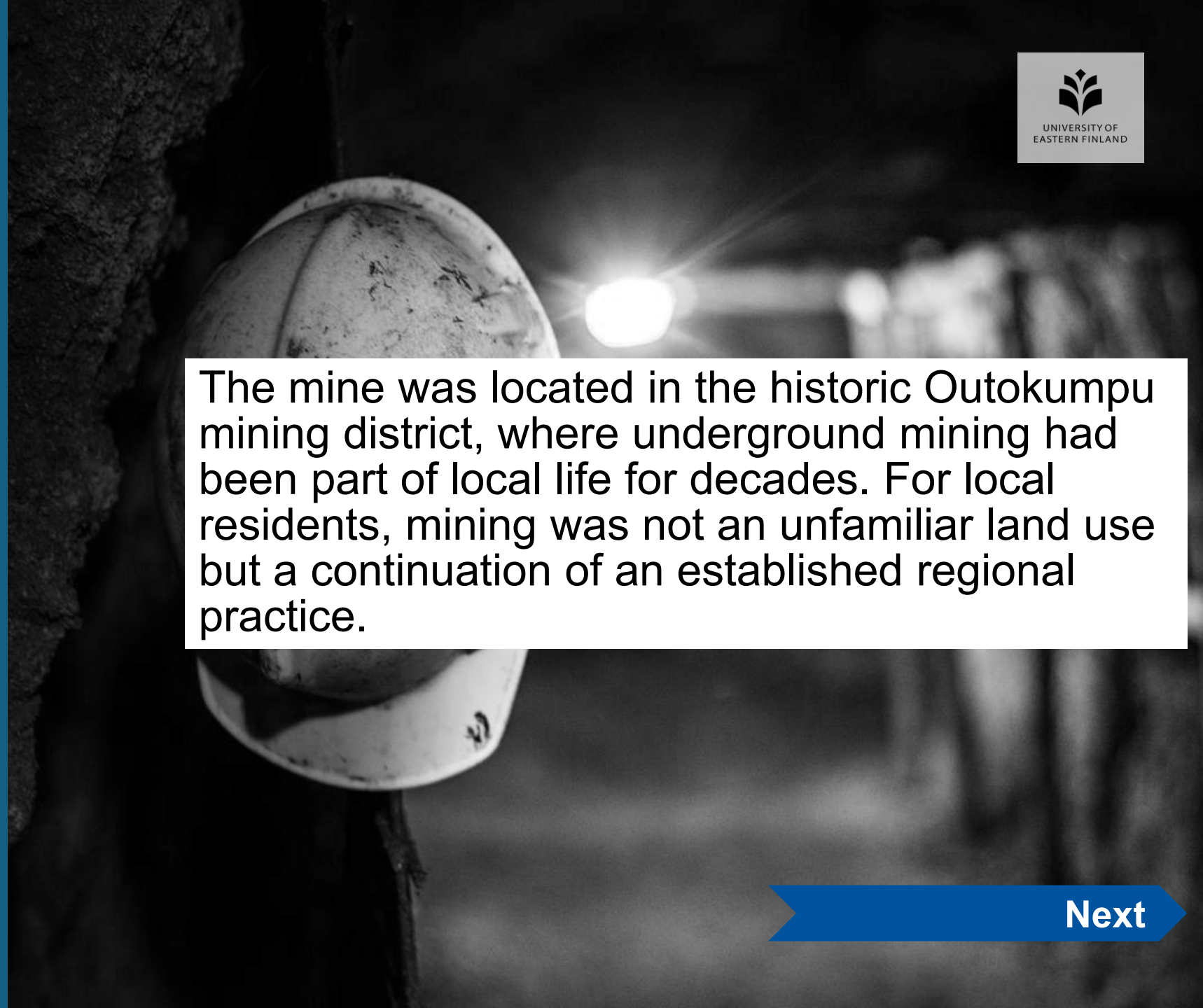
The post-mining work and landscaping of the mining area are completed in 2022.

Mineral exploration continues in the region.

Back

UNIVERSITY OF EASTERN FINLAND

Legitimacy: Mining made sense locally

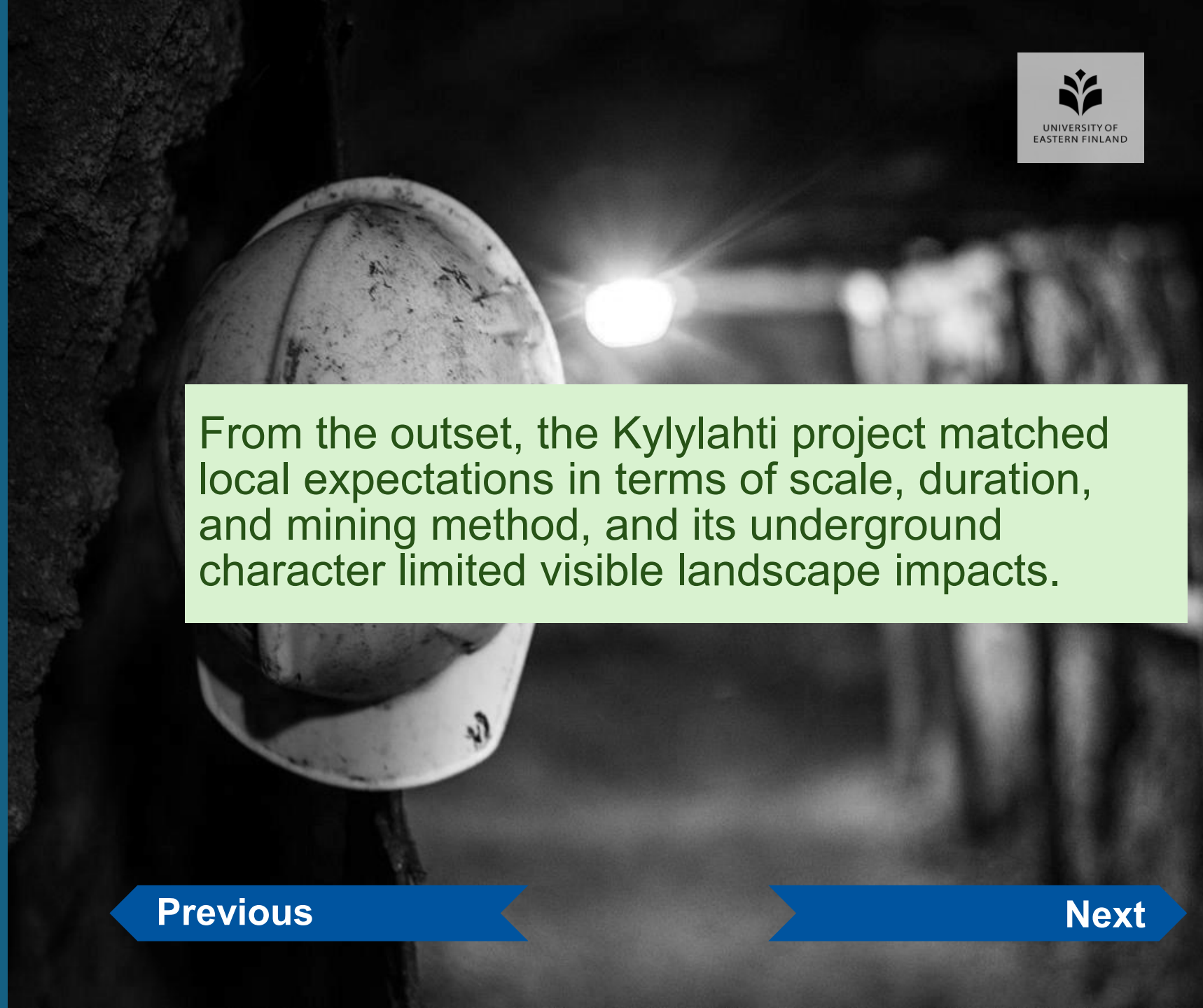


The mine was located in the historic Outokumpu mining district, where underground mining had been part of local life for decades. For local residents, mining was not an unfamiliar land use but a continuation of an established regional practice.

Back

Next

Legitimacy: Mining made sense locally



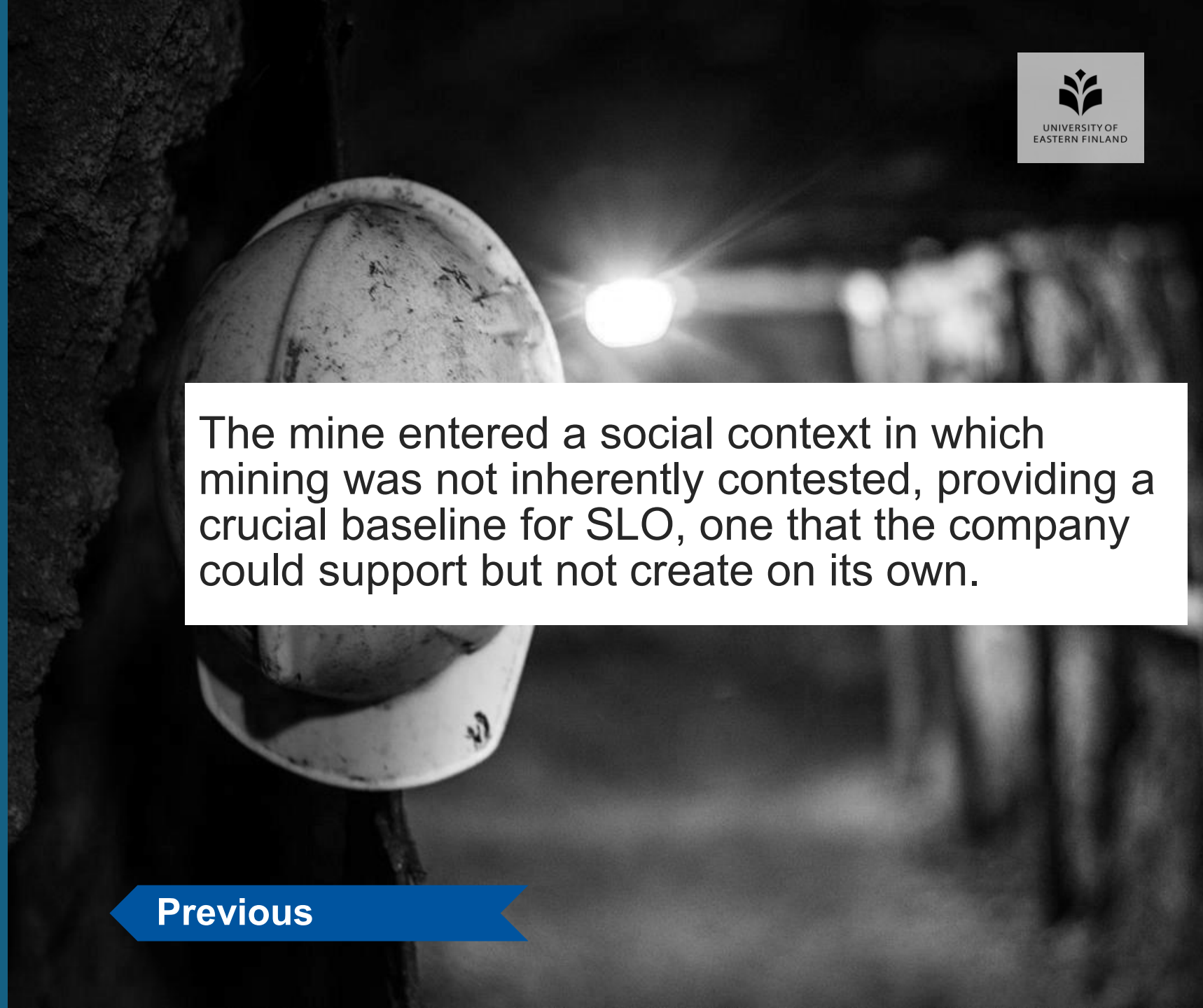
From the outset, the Kylylahti project matched local expectations in terms of scale, duration, and mining method, and its underground character limited visible landscape impacts.

Back

Previous

Next

Legitimacy: Mining made sense locally

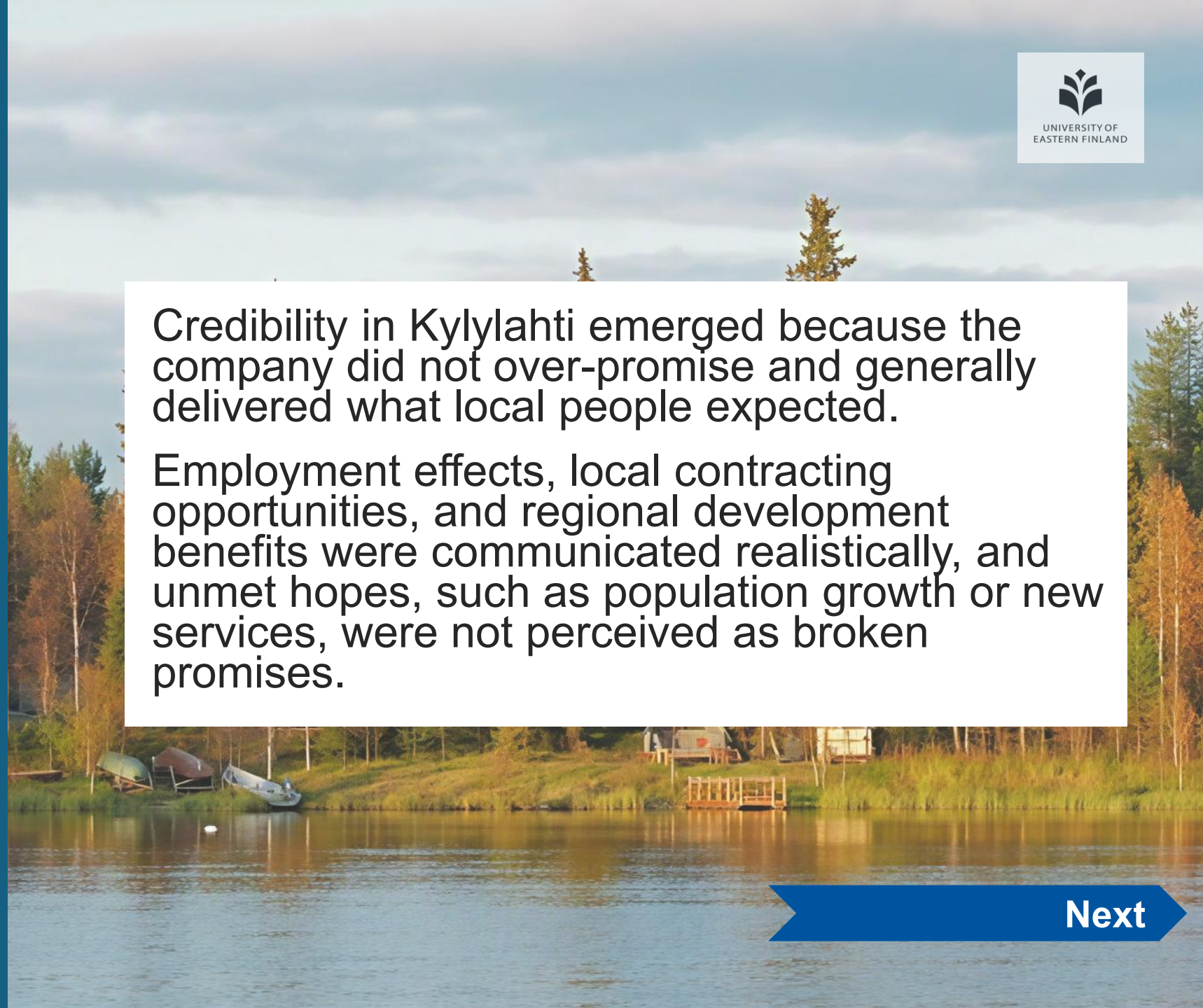


The mine entered a social context in which mining was not inherently contested, providing a crucial baseline for SLO, one that the company could support but not create on its own.

Back

Previous

Credibility: Matching words to reality



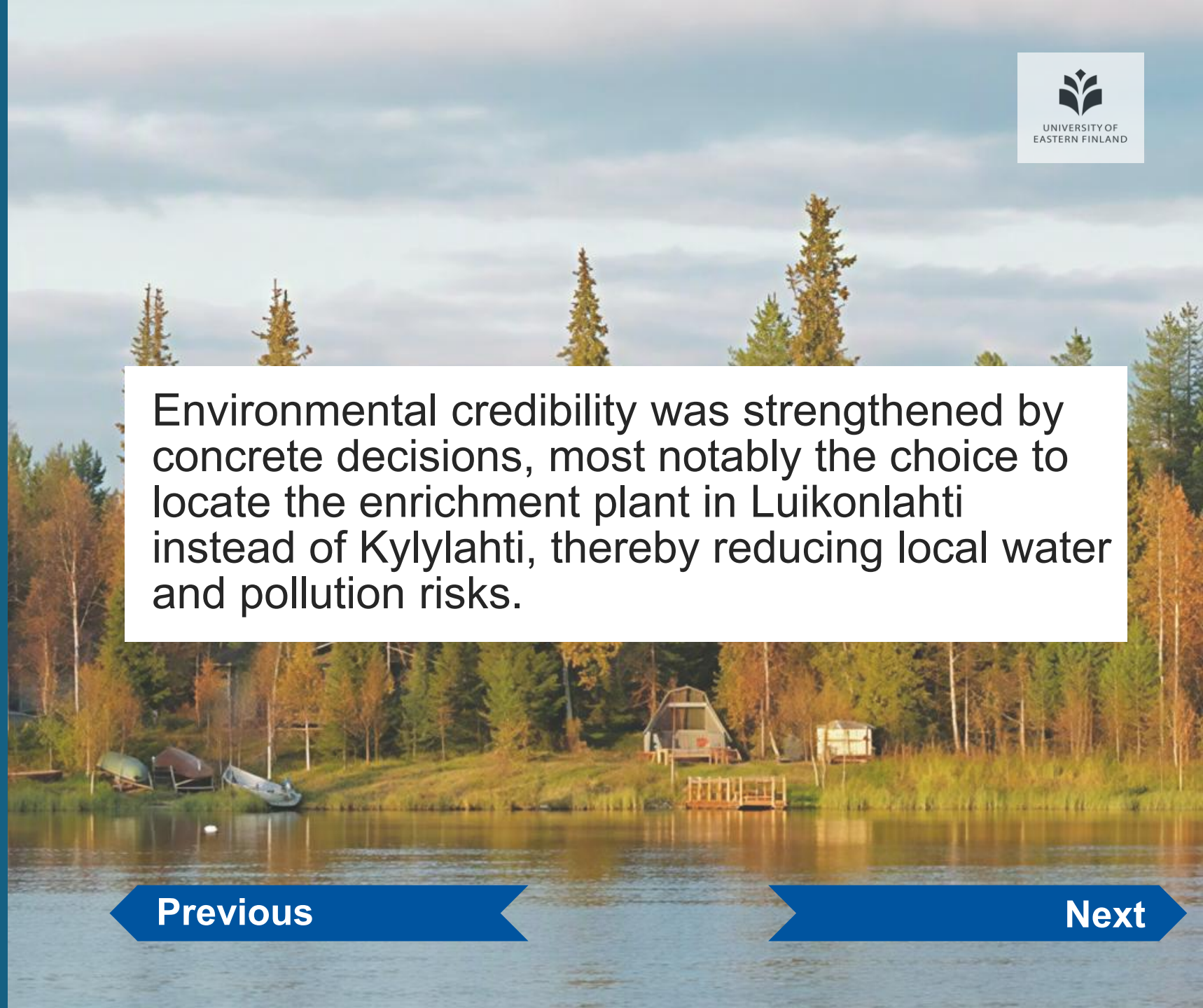
Credibility in Kylylahti emerged because the company did not over-promise and generally delivered what local people expected.

Employment effects, local contracting opportunities, and regional development benefits were communicated realistically, and unmet hopes, such as population growth or new services, were not perceived as broken promises.

Back

Next

Credibility: Matching words to reality



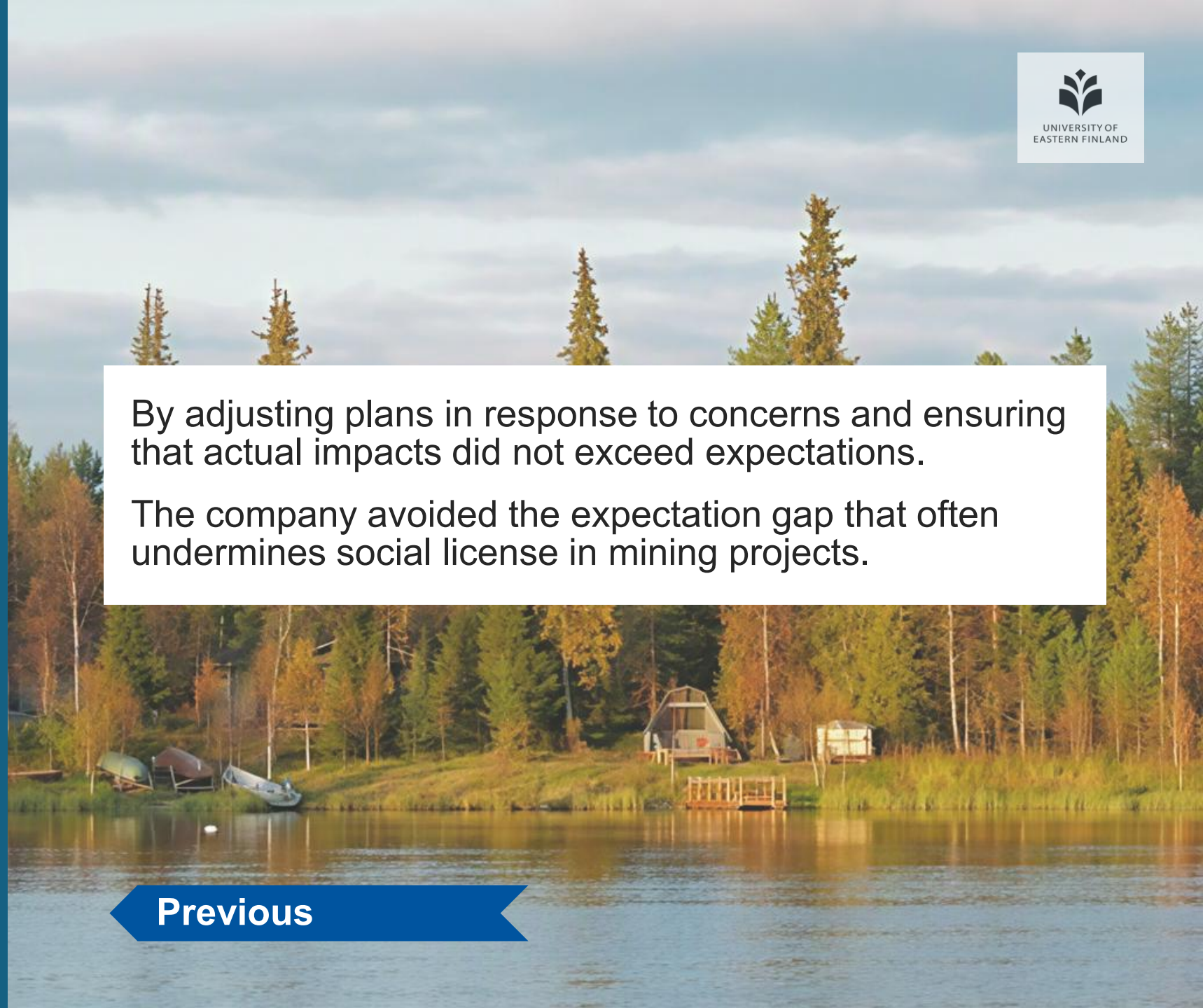
Environmental credibility was strengthened by concrete decisions, most notably the choice to locate the enrichment plant in Luikonlahti instead of Kylylahti, thereby reducing local water and pollution risks.

Back

Previous

Next

Credibility: Matching words to reality



By adjusting plans in response to concerns and ensuring that actual impacts did not exceed expectations.

The company avoided the expectation gap that often undermines social license in mining projects.

Previous

Back

Trust: Everyday relationships and responsiveness

Trust developed gradually through repeated, practical problem-solving rather than formal participation alone.

Back

Next

This Photo by Unknown Author is licensed under CC BY-SA

Trust: Everyday relationships and responsiveness

The most important trust-building episode concerned Lake Polvijärvi. When local residents and the Pro-Polvijärvi movement raised concerns about water use and contamination, the company entered into cooperation rather than confrontation.

Together with local actors and authorities, it changed water sourcing plans, supported a lake rehabilitation process, and engaged in long-term monitoring.

Similar responsiveness was shown in traffic safety issues, where community complaints led to changes in traffic routing and improved road maintenance.

Back

Previous

Next

Trust: Everyday relationships and responsiveness

Over time, these experiences fostered a shared understanding that the company took local concerns seriously, leading to the mine being seen as “part of the community” rather than a distant corporate actor.

Previous

Back

Key takeaways

Social license to operate (SLO) is **a non-formal, social contract** between the mining company and the local community.

SLO is not a stable state but **an ongoing process** in which SLO can be gained, maintained or withdrawn.

Project lacking SLO can lead to delays, conflict, and cancellation.

Factors such as project **location**, its anticipated or proven **impacts**, and the quality of company's **engagement** measures contribute to the level of SLO.

Co-funded by the Erasmus+ Programme of the European Union

GEFÖRDERT VOM Bundesministerium für Bildung und Forschung

Grønlands Naturinstitut
Pinngortitaleriffik · Greenland Institute of Natural Resources

AARHUS UNIVERSITY

UNIVERSITY OF EASTERN FINLAND

MRE Institute of Mineral Resources Engineering

RWTH AACHEN UNIVERSITY

Erasmus+
Enriching lives, opening minds.

Sources & further reading

Data sources

- Jartti, T., Litmanen, T., Lacey, J. & Moffat, K. 2020. National level paths to the mining industry's Social Licence to Operate (SLO) in Northern Europe: The case of Finland. https://doi.org/10.1016/j.exis.2020.01.006
- Mononen, T. & Sairinen, R. 2022. Mining with social license: Case study of Kylylahti mine in Northern Karelia, Finland. https://doi.org/10.1016/j.exis.2020.05.023
- Lesser, P. et al. 2020. European mining and the social license to operate. https://doi.org/10.1016/j.exis.2020.07.021

Learn more / videos

- Article: Canadian-Swedish comparison of SLO by Beland Lindhal et al. (2022)
- Video: Practical insights of SLO from South Africa mining (Youtube)

Return to Hub

Co-funded by the Erasmus+ Programme of the European Union
GEFÖRDERT VOM Bundesministerium für Bildung und Forschung
Grønlands Naturinstitut
Pinngortitaleriffik · Greenland Institute of Natural Resources
AARHUS UNIVERSITY
UNIVERSITY OF EASTERN FINLAND
MRE Institute of Mineral Resources Engineering
RWTH AACHEN UNIVERSITY

This is what a references slide can look like — sources and links to go deeper.