

CIRAN Forum Peer-learning Workshop: Mining and Environmental Protection

DATE: 16 JUNE 2025

TIME: 08.30 - 16.00h EEST

LOCATION: University of Lapland, Rovaniemi (FI) - Room B126

09.10h - 09.20h: Opening

The Lapland Region: An introduction

by Kristiina Jokelainen

Founder - SmartNorth Ltd
(Rovaniemi, FI)

Operational Coord. -
PERMANET Project

CIRAN External Expert



09.20h - 09.40h: Keynote

*Good governance for sustainable mining:
Key societal challenges*

by Dumitru Fornea

SecGen - Romanian National
Trade Union Confederation
MERIDIAN

Member - EESC

CIRAN External Expert



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10h - 12h: Workshop Session 1

Environmental Impact Assessment and the CRM Act: Biodiversity Impacts

- Permitted in areas of sensitive nature
- Land use aspects and solutions
- Mitigation measures
- List of extracted materials
- Industrial Emissions
- Best practice technologies



13h - 15h: Workshop Session 2

Stakeholder engagement – role of local and external actors

- Compensation measures
- Support to local communities
- External vs local stakeholders
- Governance and industry/community agreements
- Industrial and societal responsibility

Chaired by Ronald Arvidsson

CIRAN WP7 leader

Senior Geophysicist - Geological Survey of Sweden (SGU)

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12:50h - 13h: CIRAN Case Study Overview

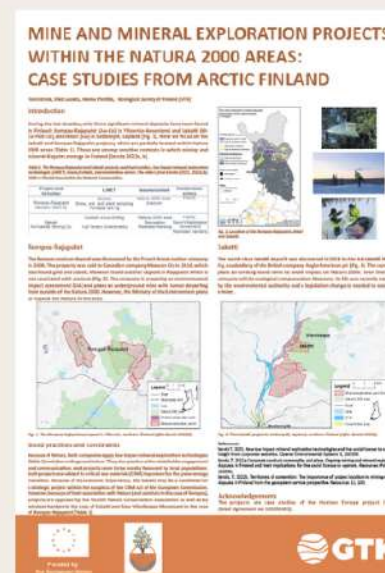
Sakatti: A strategic mine project within a Natura 2000 area



by Toni Eerola

Senior Specialist, Geologist

Geologian tutkimuskeskus /
Geological Survey of Finland (GTK)



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Sakatti –

A strategic mine project within a Natura 2000 area and its challenges

AUTHORS:

Toni Eerola/Nike Luodes/Hannu Panttila (GTK)

DATE:

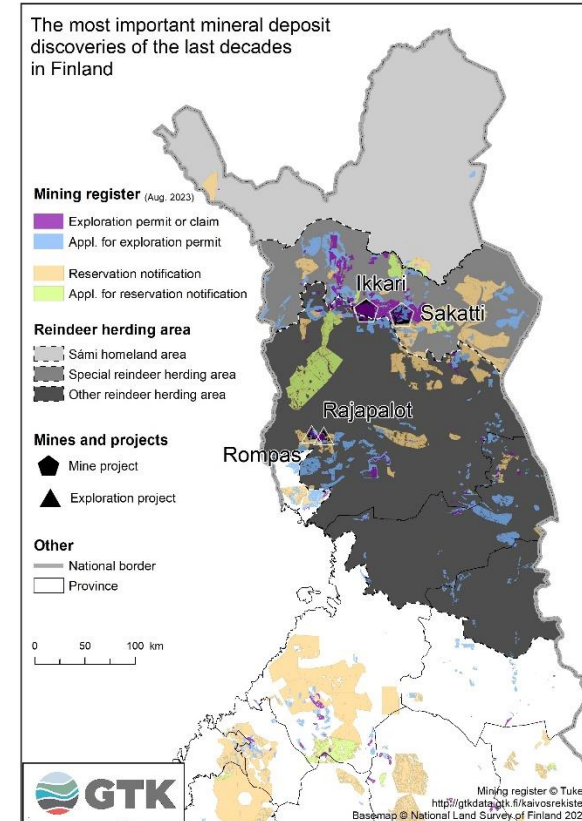
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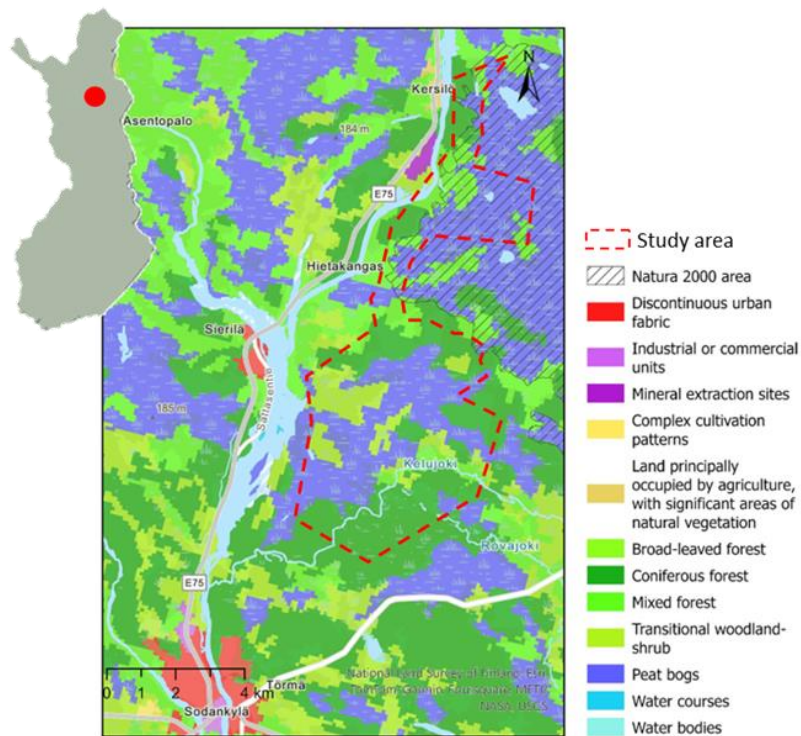
Case studies from Finland: context

- Intense mineral exploration by foreign companies since 2000s;
- Only three important discoveries in last decades;
- All in Lapland, northern Finland;
- Peräpohja Schist Belt and Central Lapland Greenstone Belt;
- Reindeer herding area;
- Rompas-Rajapalot and Sakatti are dispute cases (CIRAN);
- Mining legislation changed 1.6.2023:
 - Increase of landowner's and municipality rights.



Sakatti, Sodankylä (Lapland)

- Significant Ni, Cu, Co, Au, PGE deposit (CRM, green transition);
- Exploration started in 2004;
- Found in 2011 (Sakatti Mining/Anglo American);
- Natura 2000 (mire protection);
- Reindeer herding, recreation;
- Local acceptance high but decreasing;
- Municipality favorable;
- Local and external opposition (reindeer herders, NGOs);



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Category	Characteristics	Terminology	Examples in Finland	Numerical values
High	Mass mobilization, mass arrests, violence	<u>Conflict</u>	-	3
Medium	Visible organization, demonstration, direct action	Dispute	Kaapelinkulma Sakatti Talvivaara	2
Low	Some organization (e.g., social media group), appeal	Dispute	All other cases	1
Latent/ inexistent	No visible organization	-	Most of the projects	0

Adapted from the Environmental Justice Atlas (Temper et al. 2015);
Terminology by ICMC (2015);
Numerical values by Eerola and Solismaa (2024).

Temper, L., del Bene, D. and Martinez-Alier, J. 2015. Mapping the frontiers and front lines of global environmental justice: the EJAtlas. *Journal of Political Ecology* 22: 255-278. <https://doi.org/10.2458/v22i1.21108>

ICMC 2015. Research on company-community conflict. Social and Economic Development. London, 8 p. <http://www.icmc.com/en-gb/research/social-performance/company-community-conflict>

Eerola, T., and Solismaa, S., 2024. Environmental, social, and governance issues associated with Finnish mine tailings. In: Feltrin, L. (ed.) *Information Management and Classification of Secondary Resources and their Critical Raw Material Potential in the Nordic Countries*. Nordic Innovation Report, pp. 36-44. <https://www.norden.org/en/publication/information-management-and-classification>

Good practices:

Low-impact exploration technologies;

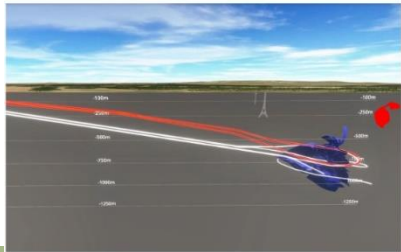
Active communication and stakeholder engagement;

Benefit sharing: Sponsorship of local associations, and events;

Underground mine;

Ecological compensation;

Community Benefit Agreement (CBA).



Community Benefit Agreement (CBA):

Agreement between companies and communities;
Locally negotiated;
Collaborative governance;
Joint problem-solving;
Increase local economic benefits,
Mitigate environmental and social impacts;
Foster long-term collaboration and trust;
Municipality in a central role.



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Current situation and challenges

- Company/community agreement in preparation (municipality);
- Environmental permit rejected;
- Uncertainty regarding water level stability in the protected mire;
- Needs change in legislation (dismantling of the mire protection programme status);
- Opposed by NGOs (FANC, XR), public debate;
- Selected as a **strategic project**_(CRMA);
- Accelerated permit process;
- Permit process: Government, EU Commission, Municipality



Summary:

Project, its holder and nationality	Commodities	Issues/context	Contentious actors	Low-impact exploration technologies	Strategies	Current situation
Sakatti AA Sakatti Mining Oy (British)	Ni-Cu-Co-PGE	Natura 2000	FANC ¹	Closed circuit drilling	Underground mine	Environmental permit rejected
		Recreation	Save Viiankiaapa movement	Full Tensor Gradiometry	Ecological compensation	Needs legislation change for permit
			Extinction Rebellion			
		Reindeer herding	Reindeer herders		Stakeholder engagement, communication	Strategic project (CRMA)

¹FANC: Finnish Association for Nature Conservation
(local association Sompio Friends of Nature)



Conclusions

- A project within Natura 2000 in Finland;
- Important discovery;
- Advanced mine project;
- Restriction by Natura 2000 and opposition;
- Adaptation strategies as best practices;
- Local acceptance and favorable municipality;
- Constraints by legislation;
- A strategic raw material project (CRMA)

Issues for discussion:

- Ecological compensation;
-
- Support for local communities;
-
- External stakeholders vs. local stakeholders;
-
- Governance aspects and industry/community agreements;
-
- Company's responsibilities towards the society (local and national governments);

Thank you

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MINE AND MINERAL EXPLORATION PROJECTS WITHIN THE NATURA 2000 AREAS: CASE STUDIES FROM ARCTIC FINLAND

Toni Eerola, Nike Luodes, Hannu Panttila, Geological Survey of Finland (GTK)

Introduction

During the last decades, only three significant mineral deposits have been found in Finland: Rompas-Rajapalot (Au-Co) in Ylitornio-Rovaniemi and Sakatti (Ni-Cu-PGE-Co), and Ikkari (Au) in Sodankylä, Lapland (Fig. 1). Here we focus on the Sakatti and Rompas-Rajapalot projects, which are partially located within Natura 2000 areas (Table 1). Those are among sensitive contexts in which mining and mineral disputes emerge in Finland (Eerola 2022a, b).

Table 1. The Rompas-Rajapalot and Sakatti projects, and their holders, low impact mineral exploration technologies (LIMET), issues/context, and contentious actors. The data is from Eerola (2021, 2022a,b). FANC = Finnish Association for Natural Conservation.

Project and its holder	LIMET	Issues/context	Contentious actors
Rompas-Rajapalot Mawson Gold Oy	Drones Snow, soil, and plant sampling Portable drill rig	Natura 2000 area Uranium	FANC
Sakatti AA Sakatti Mining Oy	Closed circuit drilling Full Tensor Gradiometry	Natura 2000 area Recreation Reindeer herding	FANC Save Viiankiaapa movement Reindeer herders

Rompas-Rajapalot

The Rompas uranium deposit was discovered by the French Areva nuclear company in 2008. The property was sold to Canadian company Mawson Oy in 2010, which also found gold and cobalt. Mawson found another deposit in Rajapalot which is not associated with uranium (Fig. 2). The company is preparing an environmental impact assessment (EIA) and plans an underground mine with tunnel departing from outside of the Natura 2000. However, the Ministry of the Environment plans to expand the Natura in the area.

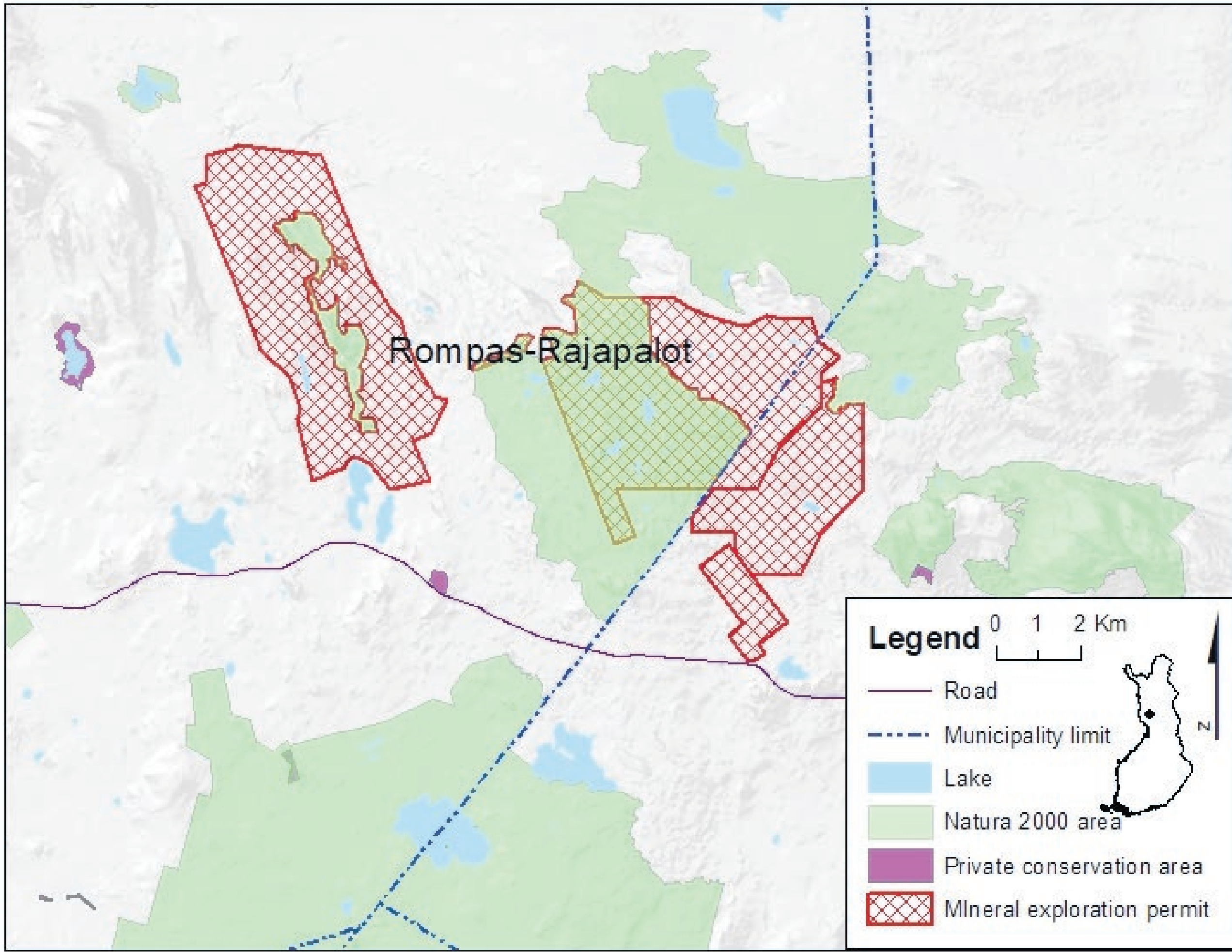


Fig. 2. The Rompas-Rajapalot prospect in Ylitornio, northern Finland (after Eerola 2022b).

Good practices and constraints

Because of Natura, both companies apply low impact mineral exploration technologies (Table 1) and plan underground mines. They also practice active stakeholder engagement and communication, and projects seem to be mostly favoured by local populations. Both projects are related to critical raw materials (CRM) important for the green energy transition. Because of its economic importance, the Sakatti may be a candidate for a strategic project within the auspices of the CRM Act of the European Commission. However, because of their association with Natura (and uranium in the case of Rompas), projects are opposed by the Finnish Nature Conservation Association as well as by reindeer herders in the case of Sakatti and Save Viiankiaapa Movement in the case of Rompas-Rajapalot (Table 1).

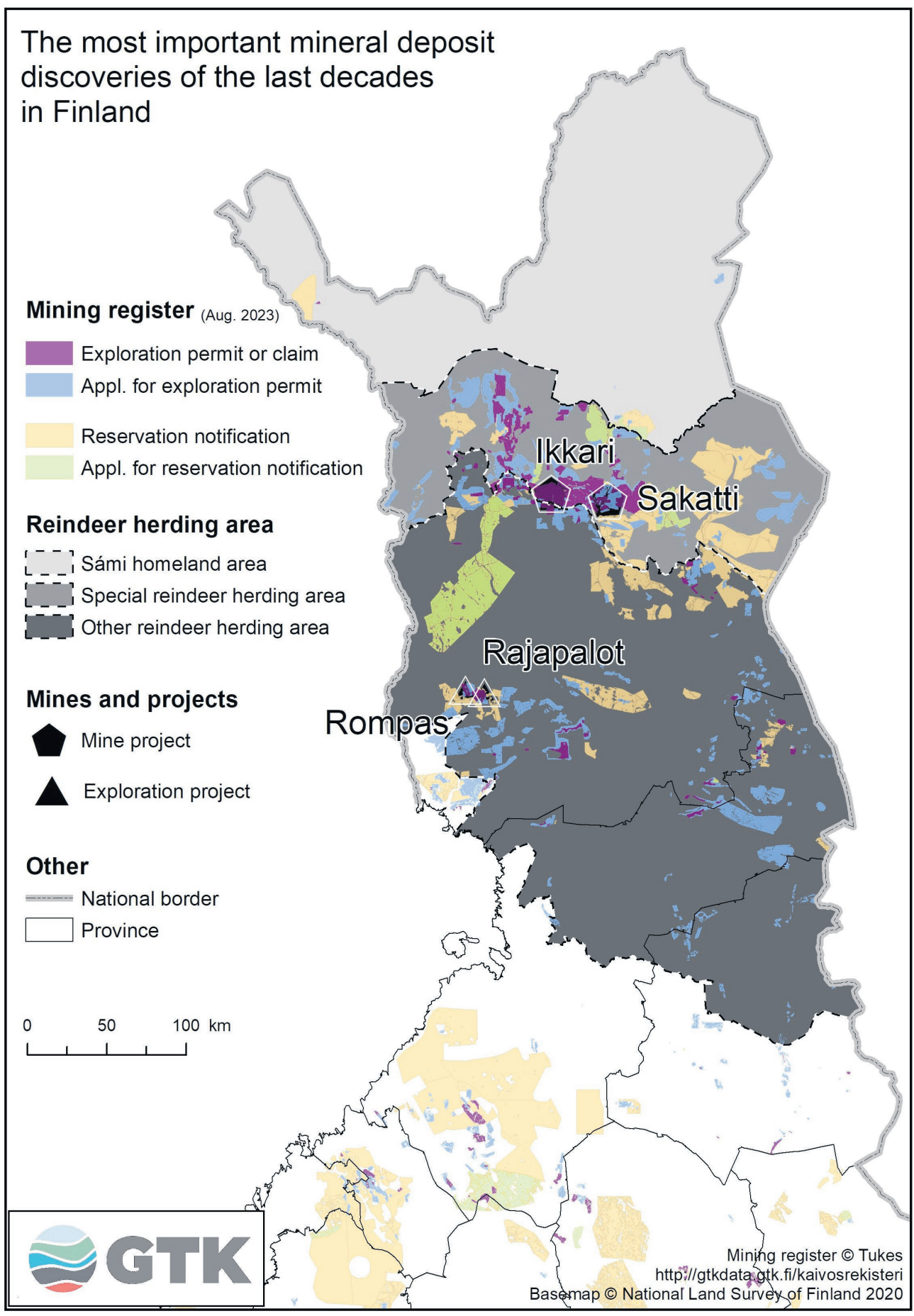


Fig. 1. Location of the Rompas-Rajapalot, Ikkari and Sakatti.

Sakatti

The world-class Sakatti deposit was discovered in 2011 by the AA Sakatti Mining Oy, a subsidiary of the British company Anglo American plc (Fig. 3). The company plans an underground mine to avoid impact on Natura 2000. Even then, the company will do ecological compensation. However, its EIA was recently rejected by the environmental authority and a legislation change is needed to establish a mine.

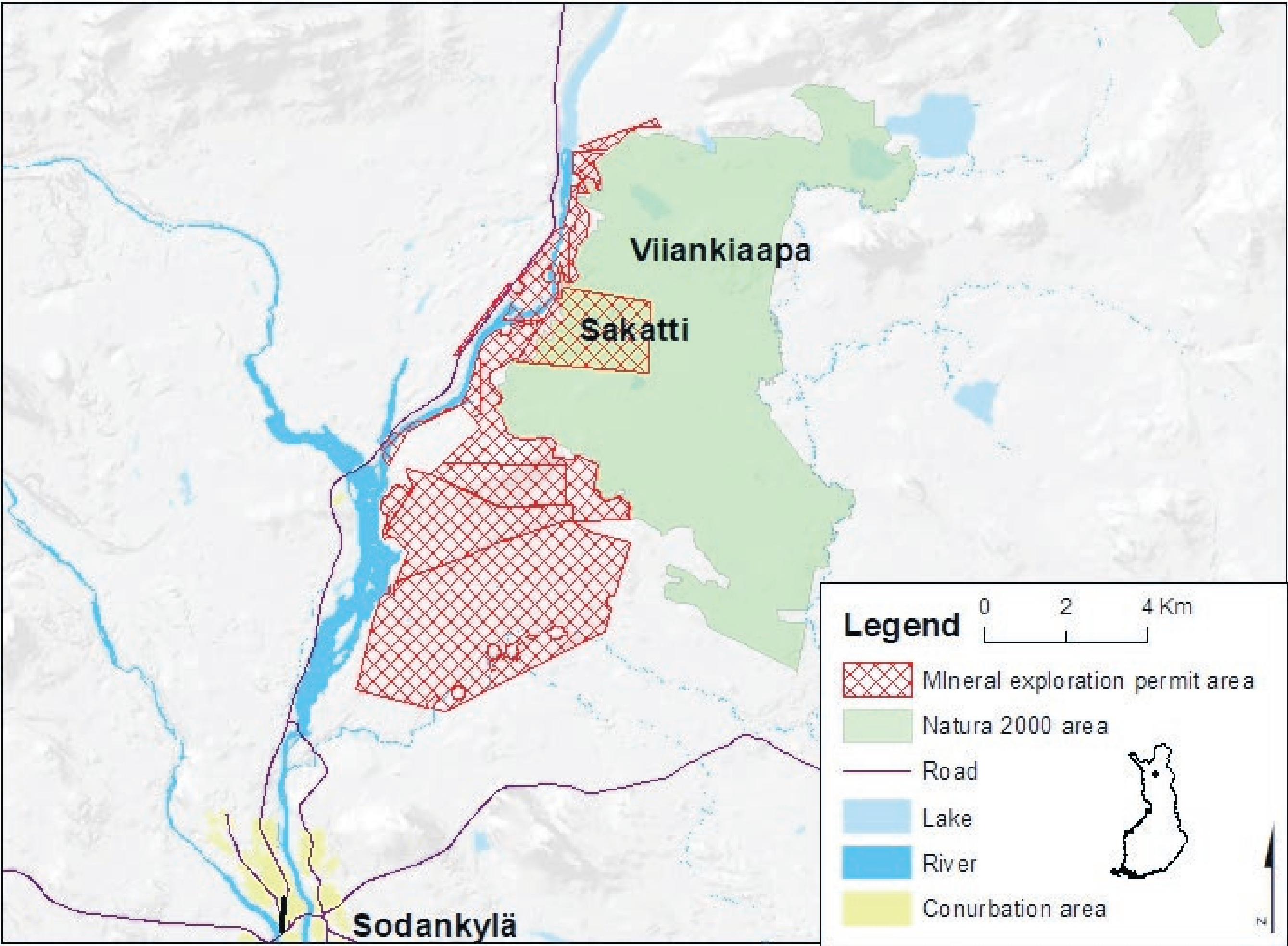


Fig. 3. The Sakatti project in Sodankylä, Lapland, northern Finland (after Eerola 2022b).

References:
Eerola T. 2021. New low impact mineral exploration technologies and the social license to explore: insight from corporate websites. Cleaner Environmental Systems 3, 100059.
Eerola, T. 2022a. Corporate conduct, commodity, and place. Ongoing mining and mineral exploration disputes in Finland and their implications for the social license to operate. Resources Policy 76, 102568.
Eerola, T. 2022b. Territories of contention: The importance of project location in mining-related disputes in Finland from the geosystem service perspective. Resources 11, 109.

Acknowledgements

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2025 OECD Conference of Mining Regions and Cities

16-18 June

Rovaniemi, Lapland, Finland



Community Development Agreements – a blueprint to reconcile minerals extraction and nature protection in Europe

Vitor Correia, W. Eberhard Falck / INTRAW

Nike Loudes, Hannu Pantilla, Nikolas Ovaskainen, Toni Eerola / GTK

Jerry Barnes, Sybil Berne / MDB

Helena Robert i Campos, Ariadna Ortega, Luis Lopes, Raquel Pino / LPRC

Mauro Lucarini / ISPRA

Marzia Ceson / ALDA

Luis Rosendo / GEN

Ludwig Hermann / Proman

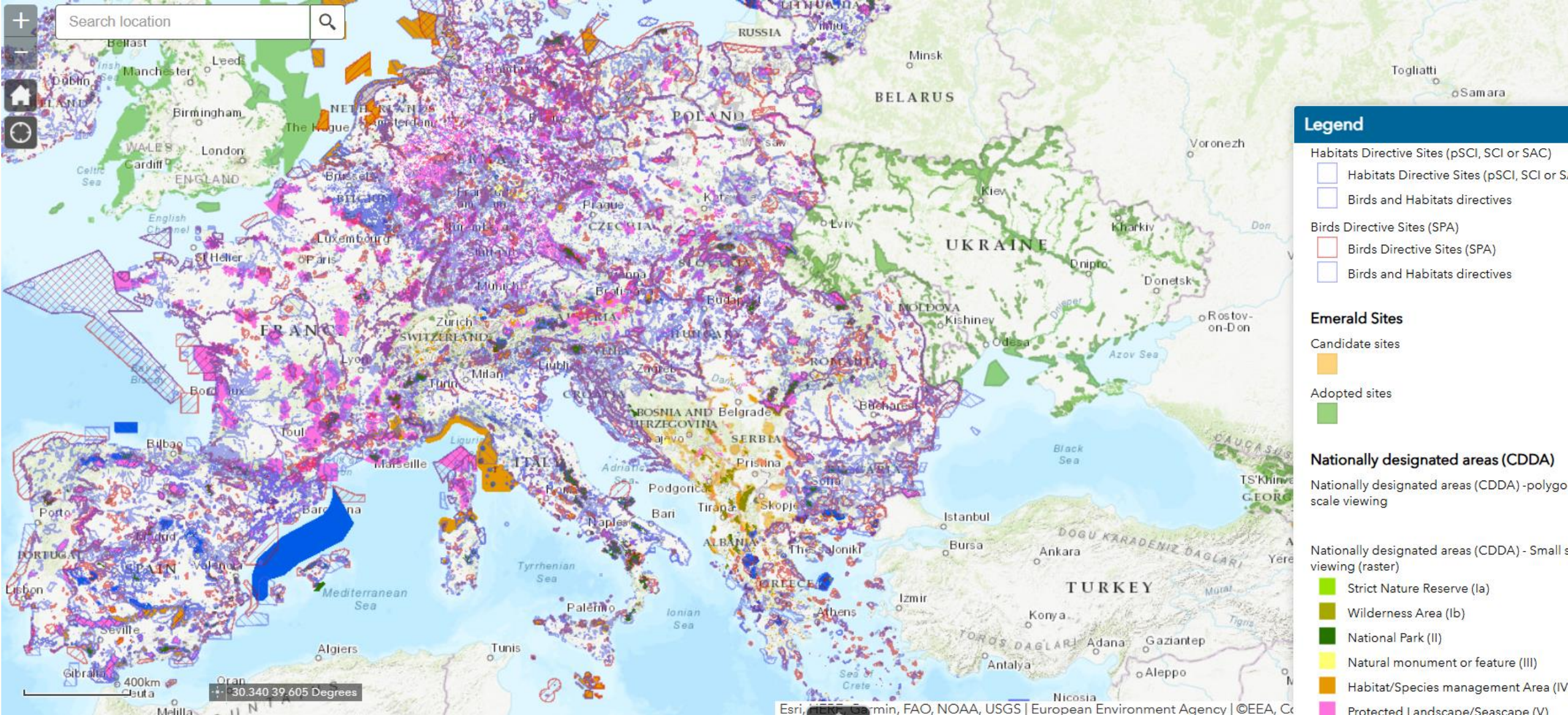
Julian Hilton , Malika Moussaid / Aleff Group

Sigurd Heiberg / Petronavitas

Ronald Arvidsson / SGU



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Europe's protected areas





Strong public opposition to mining



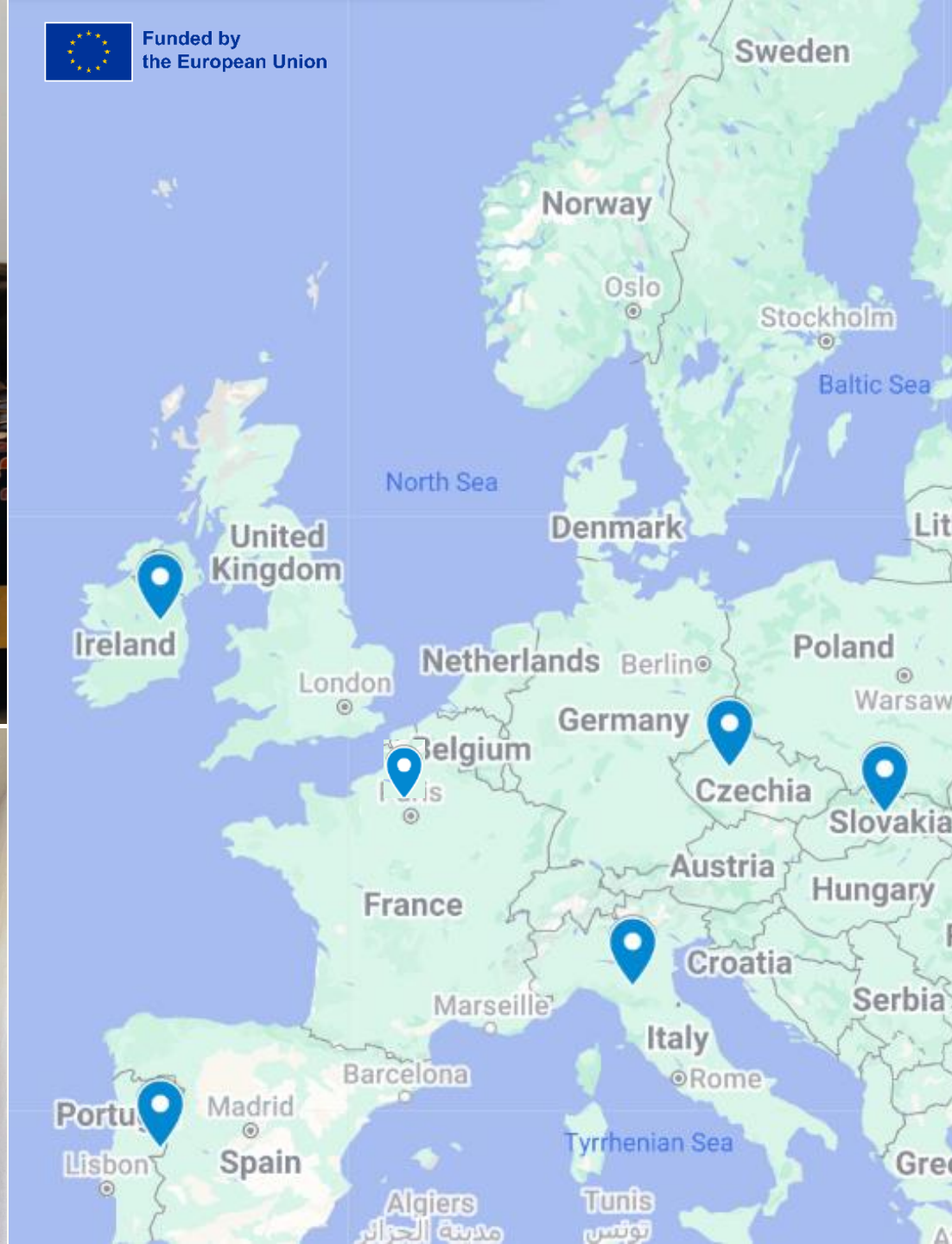
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Understanding stakeholders



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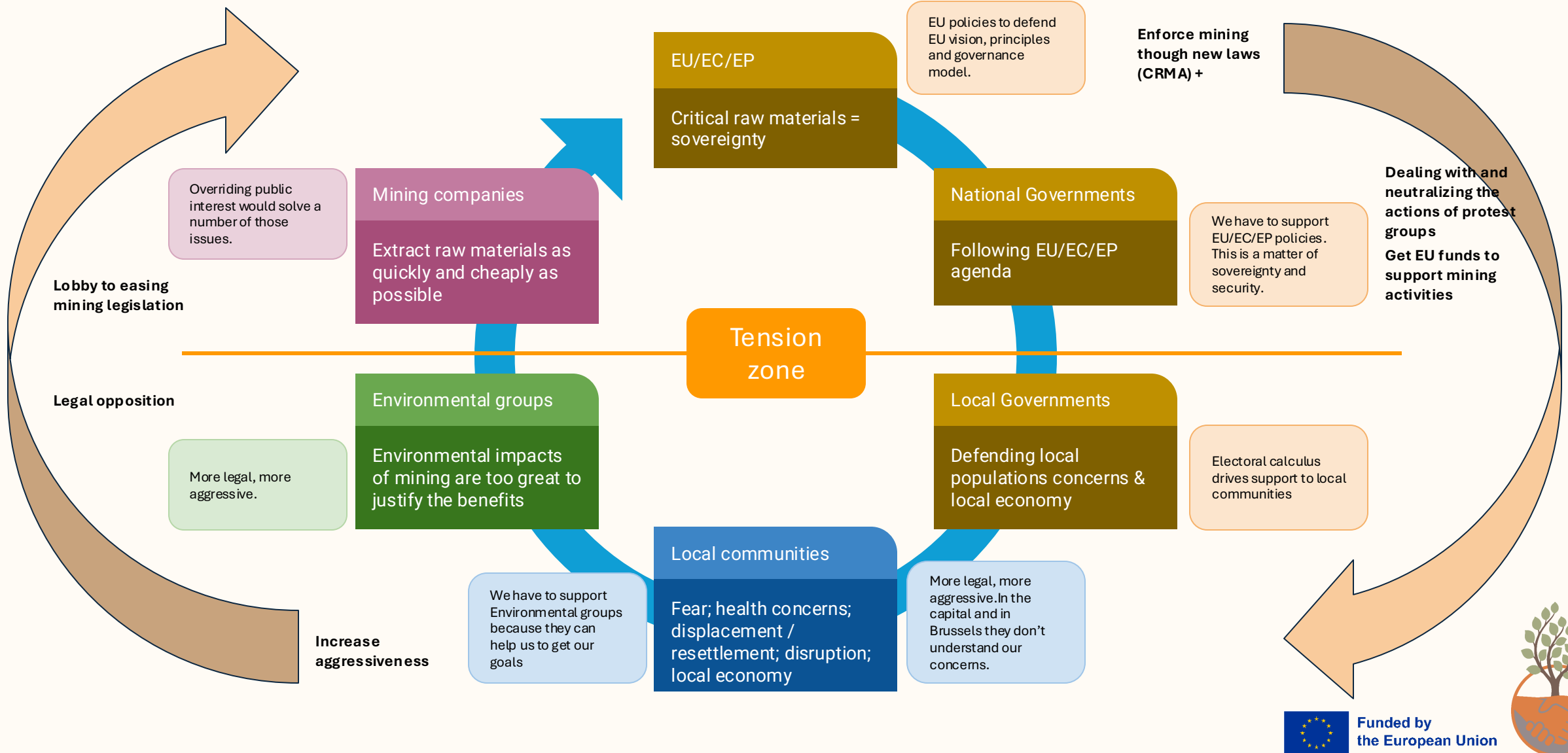
Green or greed?

Politics

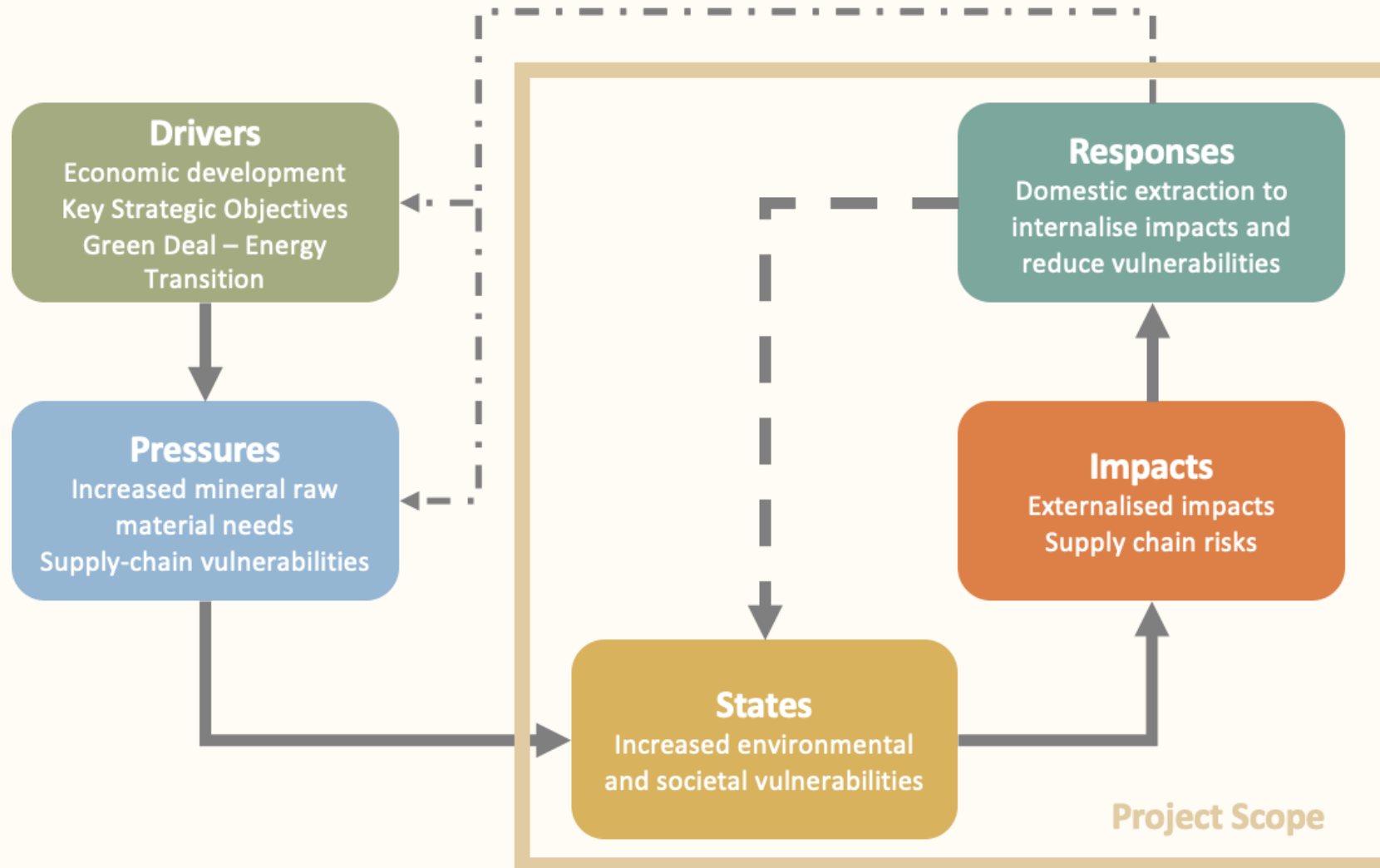
Local communities

Environmental groups

Mining companies



Consequences of decision-making



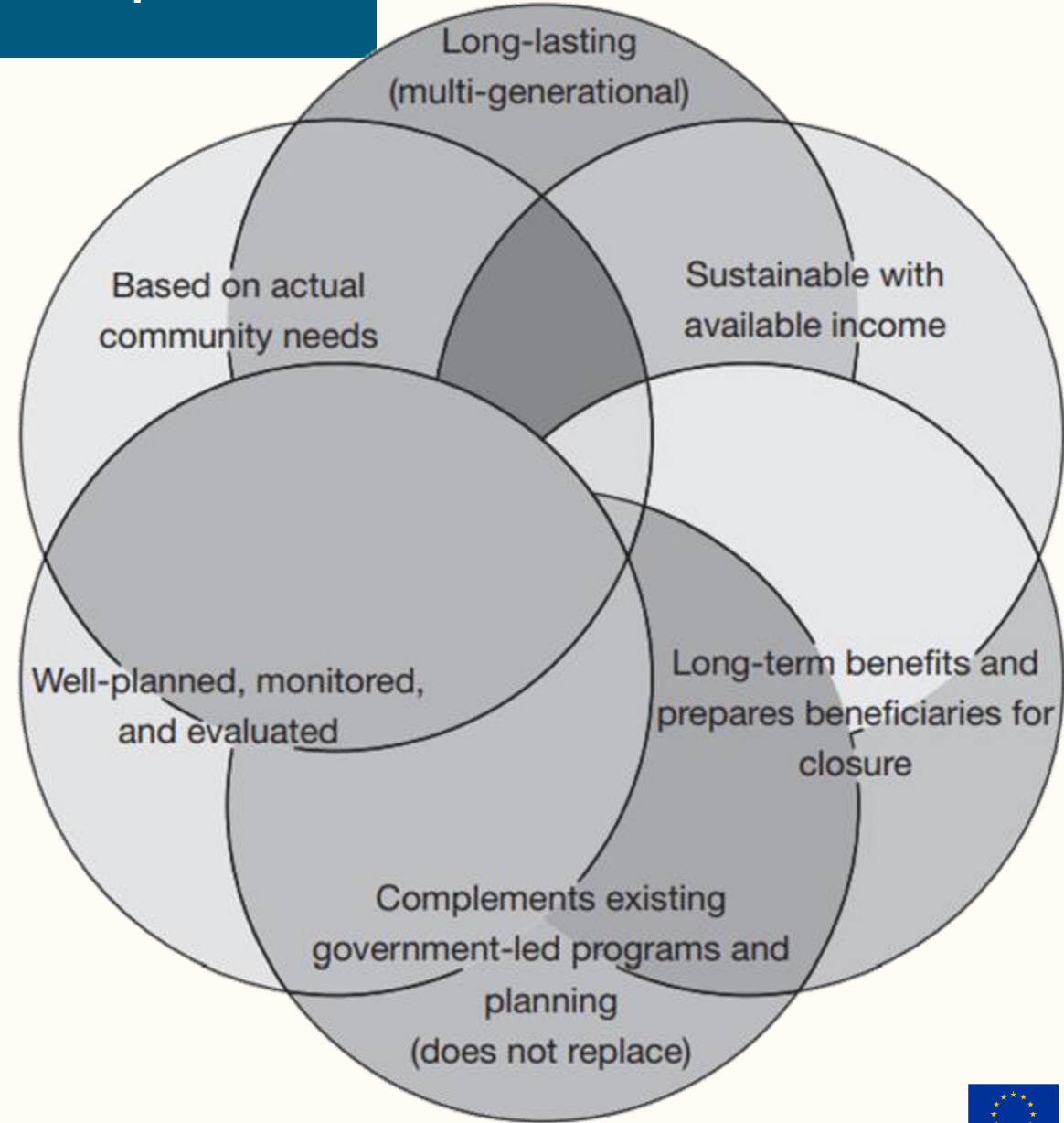
The map displays the following labels:

- Oceans:** Océano Pacífico Norte, Océano Atlántico Norte, Océano Atlántico Sur, Océano Pacífico Sur.
- North America:** Canadá, Estados Unidos, México.
- South America:** Venezuela, Colombia, Perú, Brasil, Bolivia, Chile, Argentina.
- Europe:** Islandia, Suecia, Noruega, Reino Unido, Polonia, Alemania, Ucrania, Francia, Italia, España, Turquía.
- Africa:** Argelia, Libia, Egipto, Sudán, Nigeria, Angola, Namibia, África del Sur.

There are 25 blue location pins on the map. A significant cluster of approximately 15 pins is located in Africa, primarily along the Sahel (Chad, Nigeria, Mali, Burkina Faso, Niger) and in Southern Africa (South Africa, Mozambique, Zimbabwe, Botswana, Namibia). Other pins are located in Central America (Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panamá), the Caribbean (Cuba, Haití, República Dominicana, Puerto Rico), and South America (Venezuela, Colombia, Perú, Chile, Argentina).



Core principles for CDA development



World Bank. 2012. *Mining Community Development Agreements*,
Source: <http://hdl.handle.net/10986/12641>



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Key components of CDAs

1. Stakeholder Engagement

Are all relevant stakeholders **represented**?

2. Capacity Building

Do local stakeholders need **training** (e.g., in negotiation or other areas)?

3. Benefit Sharing

Do the mine operator, government, and community **agree** on the benefits and their distribution?

4. Monitoring and Evaluation

Is monitoring **transparent**, and is there an independent commission in place?



Relationships among elements of community development (example)

Source: *A Good Community*, 2024. Definition of Community Development Can Be Broad:
<https://www.agoodcommunity.org/definition-of-community-development.html>



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Thank you for your attention

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