Policy Brief

The European Union

Critical Raw Materials Act

– a threat to member states' water resources and economy.

www.mininginfo.fi

SUMMARY

EU's Critical Raw Material Act trashes natural assets

It is vital for the transition to a green and digital future to be made in a sustainable way - preventing climate change must not cause another environmental disaster. This change calls for responsible decision-making and clear regulation, especially in relation to the mining of critical raw materials.

The current regulation of the extractive industry in Finland does not adequately meet the environmental requirements. Finnish mining legislation is not up to date and the EU's extractive waste directive has not yet been fully implemented.

The EU's proposed regulation on critical raw materials would speed up the permitting process for strategic mining projects and allow exceptions from environmental directives. This can lead to poorly planned mining projects that have not been fully assessed for their environmental impact.

Finland's waters are among the cleanest in the world. Water bodies cover an exceptionally large area -1/10 of Finland is covered by water. In this kind of environment, mining must be done with great care. Weakened mining regulation combined with a number of large mining projects could damage this incredibly valuable asset for Finnish identity, exports and tourism.

The EU must demand high environmental standards from its mines. It must also support its member states in improving the environmental standards for the mining industry. The safety and waste management of mines fully depend on the requirements and controls set by the authorities. Poorly designed mining projects must not be accepted in the EU.

Instead of relaxing the mining standards, the EU should more strongly direct support for substituting materials and technologies in addition to circular economy solutions. Opening a mine should only be considered as the last option.

The EU-sourced minerals must be produced by high-quality extraction which respects the environment and human rights. This is in line with the expectations of the electric car battery buyers.

The main challenges of the suggested Raw Materials Act relate to promoting the circular economy, speeding up permit processes without weakening environmental requirements and involving civil society in the decision-making.

It is imperative the EU ensures that poorly designed and environmentally damaging mining projects will not be given the green light. Finland, for its part, needs to update its regulations and step up controls to prevent environmental problems related to mines from getting worse.

Decisions need to be taken responsibly and with a long-term perspective so that the green transition can be achieved without jeopardising the future's fundamental living needs, such as clean water.

See the open letter signed by associations and business sectors on the page: www.mininginfo.fi

Limiting permit processes to 24 months must not be allowed as such

Speeding up permitting processes must not lead to a deterioration in environmental standards and public consultation. Shortened processes must be sought through better regulation, guidance, supervision and risk management. It is imperative that the environmental impact assessment is not included in the fast-track procedure.

Categorical permission to deviate from the water framework and nature directives should be removed

Combined with the accelerated permitting process, this can lead to major environmental damage. Cost-benefit analysis needs to be developed further.

The proposed regulation should be suspended until detailed local impact assessments have been carried out

- impact of shortened permitting time on local permit processes and mining operations' environmental standards.
- impact on businesses in other sectors of society, local communities and indigenous Sámi people

FINLAND'S MINING LEGISLATION IS ALREADY BROKEN

The Critical Raw Materials Act in its current form changes the EU's sustainable development direction

- The mining regulation in Finland does not match the requirements of very large mining projects.
- Monitoring is by in-house control of companies.
- The risk management is insufficient.
- Mining construction standards are poor, there are no northern limit values for pollutants and dust impacts are not monitored.
- Finland's old, small mines are still releasing pollution.
- Mines today are 100 to 1000 times larger.
- The machinery is extremely powerful, toxic chemicals are used extensively and the blasting dust spreads far.
- Mining waste sites are the size of a small town.
- This, combined with the proposed compulsory fast-track licensing and the permission to degrade natural assets, would mean poorly constructed mines, risk of widespread pollution and major accidents.

Our proposal is that the Critical Raw Materials Act should be suspended. Impact assessments must be carried out for the local population, the indigenous Sámi people, nature and businesses of other sectors.

Brussels, we have a problem...

Due to insufficient mining regulation, the extractive industry is already causing serious environmental problems in Finland. The EU's proposed weakening of permit processes and environmental standards would make the situation catastrophic.

Managing mining waste is a major challenge that requires responsible regulation. The new types of very large mines have only been around for a couple of decades. Their waste problems are only just beginning to materialise.

Mining waste ponds are already leaking and the future looks worse

One of the problems is inadequate bottom and top lining structures: for an equivalent waste on a landfill site, there should be a 100 cm thick impervious layer. For similar waste in mining sites, this impervious layer is usually only 1 cm thick. In addition, mines are often located near lakes, rivers and groundwater which in Finland are everywhere. A non-functional bottom lining cannot be repaired afterwards - the only option is to build a new waste area and move the waste there.

The building plans for mines do not include any life-cycle specifications for the materials used in the bottom and top linings. In most mines, the environmental impacts and necessary maintenance work of the waste area are estimated for only 30 years after mine closure.

However, the sulphuric acid waste which is produced by most Finnish mines is permanently hazardous and increases the leaching of pollutants. When structures fail, waste uncontrollably leaches into groundwater and spreads into water bodies. According to the Swedish National Audit Office, impervious lining structures should last at least 1,000 years with such waste. [1]

TERRAFAME/TALVIVAARA

Problems forming already

- The dam collapse and environmental disaster. [2]
- The promise of water balance and a closed system did not materialise:

a wastewater discharge pipe had to be made to Lake Nuasjärvi

- Leaks in the plastic lining of bioleaching heaps: protective pumping

Massive amounts of waste

- 1.5 billion tonnes of waste for 30 years of operating time.

3 billion tonnes of waste for 60 years of operating time. [3]

- For its concentration of hazardous materials, the waste equals or exceeds the hazardous waste definition.
- Impervious layer of the waste area 1 cm thick bentonite carpet with HDPE film on top. It is known to leak sooner or later [4] - the first leaks have already started. Corresponding waste at a landfill site would require a 100 cm thick impervious layer.
- Located by a watershed, the location is very risky. If the structures fail, it has the potential to pollute the lower Oulujoki and Vuoksi waterways for a thousand years or longer.

Research: Terrafame's wastewater has polluted the bottom of Lake Nuasjärvi around the discharge pipe. According to a study by the University of Helsinki, the benthic communities have clearly changed and become less diverse in the sampling sites near the pipe. (YLE 18.10.2019)

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1 Gruvavfall - Ekonomiska risker för staten (2015). En Granskningsrapport från Riksrevisionen. Riksrevisionen, Stockholm.
2 Kauppi, S. et al () Assessment of the harm and risks of the Talvivaara mine gypsum sediment pond leakage for the aquatic environment. Finnish Environment Institute reports 11/2013.
3 EIA of the Terrafame extension 2020, p. 81. Total extraction estimated at an average of 63 Mt per year https://www.ymparisto.fi/fi/osallistu-javaikuta/ymparistovaikutusten-arviointi/kolmisopen-esiintymanhyodyntaminen-ja-kaivospiirin-laajennus-sotkamo
4 Tuomela, A. (2016) Synthetic materials as impervious materials in mine basins. Water and Environmental Engineering Research Group, University of Oulu

The problems continue...

The Barents Observer

Mon, 16 Nov, 2015 12:07:26 AM

Kittilä gold mine leak under control

FTimes – STT Report, Nov 16

Agnico-Eagle Mines Ltd.'s Kittila mine is the Suurikuusikko gold deposit, located Approximately 900 km north of Helsinki in the town of Kittila in Finnish Lapland. File Photo – Lehtikuva.

Mining chemicals threaten Lapland rivers

Company Agnico Eagle has major problems at its gold mi... northern Finland, as mining chemicals leak from a wast...

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Gold mine receives permit to discharge waste water

A gold mine located near the western town of Raahe has been given a temporary permit to freely discharge its waste water.

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Hitura nickel mine cleanup effort to cost state €16m

The dormant mine in northwest Finland was active for 45 years before its last owner declared bankruptcy in 2015.

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Talvivaara waste water pond still leaking

...ourth back-up pool, built to help contain waste water leaked ...gypsum pond, is expected to be completed by Sunday ...g. With this, waste water should no longer be drained ...the mine's area.

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Talvivaara mine discharges 750M litres of water

A total of 750,000 cubic metres - the equivalent of 750 million li... - of waste water will be discharged from the Talvivaara nickel a... zinc mine. According to the state-owned Terrafame Mining Company which runs the mine, there is a risk that water will continue to leak into the surrounding area.

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...alvivaara struggles to find leak

Waste water continues to escape from a gypsum waste pond at the Talvivaara mine in Kainuu as the company has failed to locate the site of the leak.

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Mine leak environmental impact worsens

...ts show that the environmental load of heavy ...er the past week in areas both north and south ...e in Kainuu. However, as of Monday, no ...adioactivity had been detected outside the

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Ministers silent on Terrafame owner's suspected money laundering links

Banks had been closely monitoring financial flows by Terrafame part owner Trafigura for years, a new data dump revealed.

KEVITSA

- Waste pond dam leaking, protective pumping constantly ongoing. Waste sand from the tailings pond also leaked through the dam.
- The impervious lining structures of waste ponds are also of insufficient quality.
- As an exception in Finland the environmental impact and necessary maintenance work of waste areas are estimated for a period of 200 years
- in all other mines, this period is 30 years. However, the estimation states that significant levels of harmful substances will leach into the environment.

According to the extractive waste directive and Finland's decree on extractive waste, mining waste must not cause any pollution of the environment, even over a long period of time. The technology for the sealing of waste areas and for the controlled removal of seepage water exists - it is a question of adequate investments

Lapland's nature organisations want an end to uncontrolled Boliden's Kevitsa mine emissions - the effects are already visible in the satellite images. Nature conservation organisations are calling for the Kevitsa mine to change its operation mode to prevent or at least minimise environmental pollution. (YLE 21.2.2023)

The municipality of Sodankylä reassures residents: The water in the Kevitsa area is not used for domestic purposes. Yle reported on rising nickel concentrations in the groundwater at the Kevitsa mine site. (YLE 14.10.2017)

KITTILÄ

Europe's largest gold mine, owned by Canadian Agnico-Eagle

- Waste pond leak and wastewater discharge into the Loukinen and Ounas rivers.

The Kittilä gold mine discharge pipe has been given permission again - fear of overflowing discharge basins in the background. Supreme Administrative Court issued an interim decision and annulled previous decisions of the Vaasa Administrative Court. The Kittilä gold mine is Europe's largest gold mine. The expansion of its production and the wastewater pipeline has been in the headlines for a couple of years now. (YLE 1.11.2022)

Do we want more environmental problems created by poor legislation and the Critical Raw Materials Act?

The EU extractive waste directive has not yet been effectively implemented in Finland. According to the extractive waste directive, mining waste must not pollute water bodies, even over a long period of time. Finland's Ministry of the Environment launched a two-year project on 7 March 2023, because "national regulations on extractive waste do not fully meet the requirements of the EU's extractive waste directive." **(1)**

Inadequate permit processes

Weak applications and environmental impact assessments **(2)** are behind many lengthy licensing processes, as incomplete information has to be repeatedly supplemented. The reports on permit applications are usually commissioned from consultancy firms, which unfortunately often use incomplete or incorrect information in permit applications. This contributes to the delay in processes. Improving the national regulation and guidance on applications should therefore be the way to improve the licensing processes' efficiency and thereby reduce the number of incomplete applications. Application reports should be prepared by fully independent scientific experts or expert authorities subject to official liability. There are also major challenges with the officials' limited resources to deal with applications and sometimes with their level of scientific expertise.

The officials often do not have the opportunity to consult experts in different fields, even though the level of knowledge required for permit applications is very high. Unfortunately, the same people often rotate between working for the authorities and working for the mining companies. Finland does not have any relevant anti-corruption guidelines in place.

There is also room for improvement in obtaining the social licence to operate, i.e. taking into account the local citizens, other economic activities and the indigenous Sámi people of the area subject to the licensing procedure. There is no established procedure in Finland that would, for example, sufficiently consider the compensation for businesses and landowners undergoing harm which is however

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1 https://ym.fi/-/kaivosten-ymparistonsuojelua-parannetaan-lakihankkeella

2 For example, the shortcomings of the environmental impact assessment (EIA) programme for Hannukainen have been put forward to the EU's Committee on Petitions, which found that the EIA had significant shortcomings, Petition no. 0757/2022.

granted by the law. This, combined with incomplete permit applications, leads to a high number of appeals in various court instances.

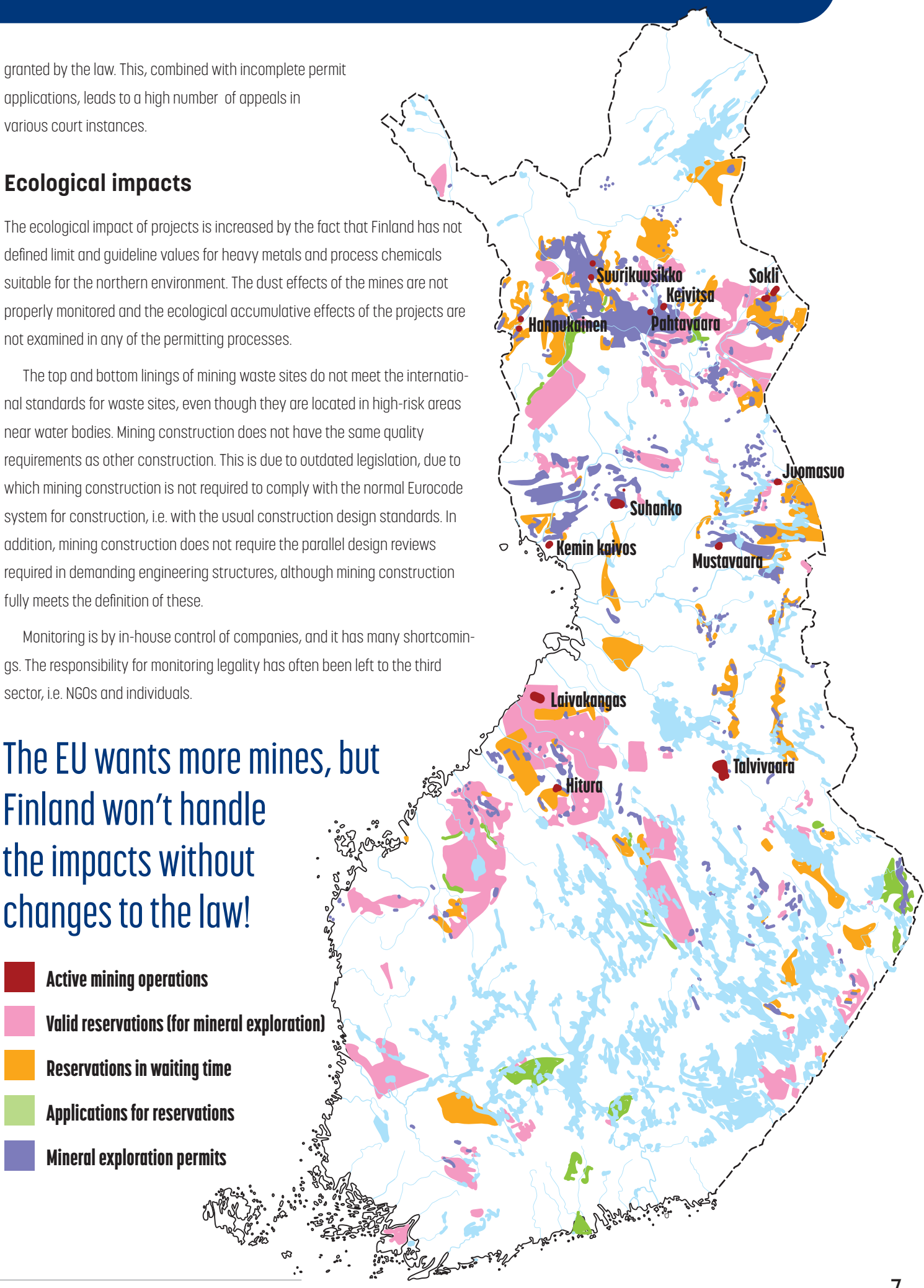
Ecological impacts

The ecological impact of projects is increased by the fact that Finland has not defined limit and guideline values for heavy metals and process chemicals suitable for the northern environment. The dust effects of the mines are not properly monitored and the ecological accumulative effects of the projects are not examined in any of the permitting processes.

The top and bottom linings of mining waste sites do not meet the international standards for waste sites, even though they are located in high-risk areas near water bodies. Mining construction does not have the same quality requirements as other construction. This is due to outdated legislation, due to which mining construction is not required to comply with the normal Eurocode system for construction, i.e. with the usual construction design standards. In addition, mining construction does not require the parallel design reviews required in demanding engineering structures, although mining construction fully meets the definition of these.

Monitoring is by in-house control of companies, and it has many shortcomings. The responsibility for monitoring legality has often been left to the third sector, i.e. NGOs and individuals.

The EU wants more mines, but Finland won't handle the impacts without changes to the law!



The current Finnish mining regulation does not match the standard required for the new type of mines

A sustainable transition requires responsibility. The Critical Raw Materials Act in its current form will represent a major step backwards in the mining environmental standards.

The green and digital transition must be done sustainably, without creating new environmental problems. The Critical Raw Materials Act proposes the classification of mines as critical and strategic mining projects. For strategic mines, a mandatory shortening of permit processes to 24 months is proposed. They are also proposed to be categorically authorised to deviate from the water framework directive, i.e. to worsen the status of water bodies, and to deviate from the nature protection directives.

It must be taken into account that, in Finland for example, the mining legislation is not currently up to the requirements of modern, very large mining projects. The EU's extractive waste directive has not yet been implemented at the national level. The Finnish Parliament's Environment and Economic Affairs Committees expressed their concerns relating to the matter during the discussion of the Mining Act in the last government term. Finland's Ministry of the Environment launched a two-year project on 7 March 2023, because "national regulations on extractive waste do not fully meet the requirements of the EU's extractive waste directive." [1]

The EU's environmental targets have been ambitious and have set a benchmark for the rest of the world. For mines, too, the mining waste directive has shown the direction to develop a truly sustainable mining industry. According to the extractive waste directive, mining waste must not cause pollution of surface water, groundwater or soil, not even during a long period of time.

The EU's Critical Raw Materials Act would represent a step backwards and allow poorly and hastily planned mines to be constructed in EU countries under the pretext of fighting climate change. Failing to ensure environmental standards within the Act could have far-reaching and serious consequences, as mining is an extremely heavy industry with an exceptionally high environmental impact. Surface and groundwater purity is also at risk in other countries where a large proportion of the EU's strategic mines are likely to be located, such as Sweden and Portugal.

The EU could lead the way in sustainable extractive industries.

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1 https://ym.fi/-/kaivosten-ymparistonsuojelua-parannetaan-lakihankkeella

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The EU's continued growth in demand for battery materials is turning the spotlight on peripheral countries such as Finland.

The weakened standards proposed by the Critical Raw Materials Act would be disastrous for Finnish nature

- Even at present, Finnish mining regulations do not meet the requirements for new, very large mines.
- Water bodies cover an exceptionally large area of Finland -1/10 of the country is covered by water. In this kind of environment, mining must be done with great care.
- Many strategic mineral deposits are expected to be found in Finland, which is why the weakened standards proposed in the regulation could have a huge, irreversible impact on large watersheds.
- Extreme weather events caused by climate change will make poorly managed mining waste sites even more hazardous.
- Finland's northern water bodies and groundwater are fragile. They are easily damaged and recover slowly, if at all.
- More than 87% of Finland's lakes have a good or excellent ecological status [1]. More than 90% of the assessed aquifers have a good groundwater status. [2]
- Finland's groundwater quality is among the best in the world [3], and drinking water is rated the best in the world. [4] Approximately ten times more groundwater is produced each year than what is used. [5]
- Finland's clean fresh water is a major asset for the future. The importance of clean freshwater is only projected to increase with climate change. [6]
- Nature and purity are the key strengths of Finland's tourism and food exports. The role of architectural heritage and culture in tourism is not as important as in many other EU countries. Northern Europe has a short growing season compared to Central and Southern Europe - so the competitive advantage comes from product purity and quality.
- Practices that damage nature's purity, such as poor mining legislation, can damage the vitality of other industries and, in the long term, reduce jobs.

1 https://www.ymparisto.fi/fi/ymparisto-tila/vesi/sisavesien-ekologinen-tila
2 https://www.ymparisto.fi/fi/ymparisto-tila/vesi/pohjavesien-tila
3 https://www.ymparisto.fi/en-US/Waters/Protection_of_waters/Groundwater_protection/Groundwater_in_Finland
4 UNESCO
5 https://www.ymparisto.fi/fi/ymparisto-tila/vesi/pohjavesien-tila
6 https://www.unwater.org/water-facts/water-and-climate-change

WE ARE NOT AGAINST MINES,
WE ARE AGAINST THEIR POLLUTION

Right now, the EU and Finnish legislation protect the environment. The problem is that the regulations and processes governing mining and mining construction in Finland are not adequate to uphold sustainable mining practices.

The EU extractive waste directive is guiding the way towards a sustainable mining industry. The Critical Raw Materials Act in its current form would represent a step backwards.

EU's minerals must be sustainably produced, respecting the environment and human rights. The required technology does exist. It just needs to be put in place.

The states' muscle is legislation. Politicians must legislate to set standards for mining and battery industries.

Lähde: GTK kaivosrekisteri 2023

The EU must require mines to meet high environmental standards.

The safe operation of mines and the proper management of extractive waste largely depend on the expertise and adequate investments of the mining company. This, in turn, depends entirely on the requirements set by the authorities, as the mines operate according to the standards imposed on them.

The EU must not allow poorly constructed mines in its area. As a minimum requirement, the EU must not prevent a member state from setting high environmental standards for mines operating on its territory. Minerals produced in the EU must be produced sustainably, respecting existing laws, the environment and human rights.

The EU's raw materials will be produced mainly in the EU's more remote regions, such as Finland, but consumption will likely be concentrated in the major centres of central Europe. Forcing producer countries to lower the permit standards and mining environmental standards in favour of the consumer countries is an action that could even be called neo-colonial.

In order to obtain a social licence to operate, mines must respect the environment, local communities and indigenous Sámi people.

It is also not a fair policy from the side of Finnish taxpayers if they in future have to upkeep and manage badly constructed, huge mining waste sites. **Mining companies are already now the most significant company sector of which costs have had to be compensated by the Finnish state.** [1] Weaker mining permits and environmental standards are also likely to affect the social licence to operate for mines. In order to obtain approval for their operation, the so-called social licence to operate, mining companies must follow sustainable development practices and respect the environment and local communities. [2]

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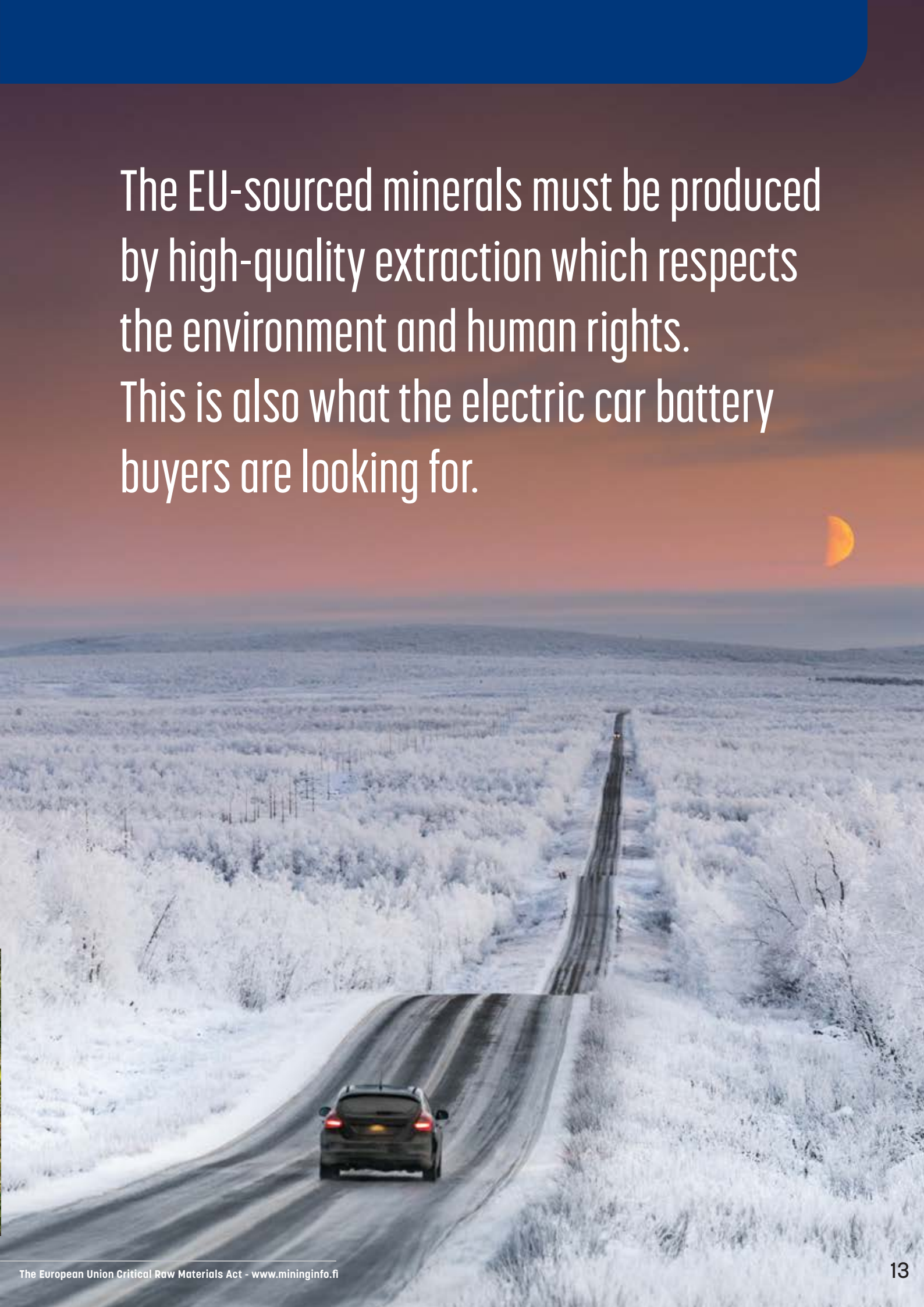
1 Perspectives on sustainable mining in Finland (2021), Perspectives of the State Auditor's Office 2/2021, State Auditor's Office, Helsinki. p. 40
2 Perspectives on sustainable mining in Finland (2021), Perspectives of the State Auditor's Office 2/2021, State Auditor's Office, Helsinki. p. 31

The EU-sourced minerals must be produced by high-quality extraction which respects the environment and human rights. This is also what the electric car battery buyers are looking for.



Critical Raw Material Act problems and solutions

The 24-month timeframe for permit processing is far too short - the Act does not ensure that this does not lead to lower environmental standards.	The environmental impact assessments should under no circumstances be included in the fast-track process.
Strategic mines would be granted a categorical exemption from the water framework directive and the nature directives (overriding public interest).	Pursuing carbon neutrality as the single target is not in the interest of the environment or the people. The significance of clean water will be emphasised by climate change
The assessment of critical raw materials does not sufficiently take into account the development and promotion of substituting technologies and materials.	Opening a new mine should only be the last option when substituting solutions are inadequate.
The regulation has been drafted taking into account the objectives of the mining industry, while other sectors of the economy and the environment have not been sufficiently considered.	Participation needs to be strengthened so that decisions will reflect wider interests.

THE CONSTITUTION OF FINLAND, SECTION 20 §

Responsibility for the environment

Nature and its biodiversity,
the environment
and the national heritage
are the responsibility of everyone.

The public authorities shall endeavour to guarantee for everyone the right to a healthy environment and for everyone the possibility to influence the decisions that concern their own living environment.

Problems and proposed solutions:

Central problems of the Act

PROBLEM 1:

Too short a time for permit processing can weaken environmental standards.

The 24-month timeframe for permit processing is far too short - the Act does not ensure that this does not lead to lower environmental standards. It is not clear which permit stages are covered by the 24-month period; for example, the role of the environmental impact assessment is unclear.

Speeding up the permit processes to 24 months is not possible in Finland. The accelerated, mandatory timeframe is likely to lead to the approval of incomplete mining plans. There are current examples of rushed and incomplete permit processes leading to catastrophic consequences for the environment and public finances.

Solutions

If EU-driven efforts are made to streamline permitting processes, the EU must ensure that this does not lead to a lowering of environmental standards in mines.

More efficient processes must be achieved by improving and clarifying national practices, taking into account national aspects.

If a maximum time limit will be set for the permitting process, it is extremely important that the environmental impact assessment (EIA) is not included. The EIA is a tool for assessing the impact of a mine on its environment. It examines impacts on nature, the built environment, human health and well-being, and influences the design and construction of the mine.

The time limit should also not include the possible supplements to the application required from the mining company - it should be taken into account that mining companies can try their luck and submit incomplete applications at first.

PROBLEM 2:

Strategic mines would be granted a categorical exemption from the water framework directive and the nature directives (overriding public interest).

A categorical exemption for strategic mines would imply a permit to weaken water status or degrade natural values. Normally, a permit to deviate from the water framework directive requires a cost-benefit analysis. Deviations from nature conservation require a permit from the Government or changes to the law.

Solutions

F**or mining companies to continue to improve environmental standards, a case-by-case assessment of impacts must be maintained**. Automatic deviations from the water framework or nature directives' standards should not be allowed.

The implementation and evaluation of the cost-benefit analysis should be developed and tools should be created.

It should be explicitly ensured that the prohibition of polluting surface water, groundwater and soil even after a long period of time, as stated in the extractive waste directive, is always in force.

Pursuing carbon neutrality as the single target is not in the interest of the environment or the people. The importance of clean water will be emphasised by climate change.

PROBLEM 3:

The assessment of critical raw materials does not sufficiently take into account the development and promotion of substituting technologies and materials.

The Act's raw material assessment lacks a comprehensive analysis of the impact of emerging technologies on raw material demand and global production projections for pending mining projects. It is possible that the raw material will no longer be critical when the mine starts operating.

The Act's proposed assessment of critical and strategic raw materials is not sufficiently comprehensive. It should be ensured that the Act does not unduly give some projects an unfair advantages and backing of the society, thereby distorting competition.

Solutions

In line with circular economy principles, **opening a new mine should only be the last option if circular economy solutions prove inadequate, and if no substituting technology or material for the mineral exists.**

The critical raw material assessment should better assess the impact of emerging technologies on raw material demand, as well as the global production projections of pending mining projects, for example. It should also be noted that the concentration of the strategic raw material must be at a significant level.

It should be ensured that the Act does not unduly give some projects unfair advantages and backing of the society, thereby distorting competition.

Legislation and targeted funding should be used to steer development away from primary materials. An industry that uses outdated technology or minerals that are replaceable should not gain a competitive advantage. Instead, the development of new technologies should be rewarded.

Opening a new mine should only be the last option when substituting solutions are inadequate.

PROBLEM 4:

The regulation has been drafted taking into account the objectives of the extractive industry, while other sectors of the economy and the environment have not been sufficiently considered.

According to a report by Friends of the Earth Europe, the extractive industry played a remarkable role in the preparation of the Act. [1] The ITRE mentions only the extractive industries as having a role in the future development of the regulation and does not mention any civil society instances. [2]

It should be kept in mind that the extractive industry is a sector which typically has strong competing interests with other business sectors and areas of society. The aim of mining companies is to maximise profits for shareholders; the aim of the interest groups is to maximise profits for companies. **Mining companies usually do not have their own innate will to operate in the most environmentally friendly way, or to take into account the requirements of other parties.**

As the Finnish Government states in its communication, speeding up **environmental impact assessment (EIA) processes in the way proposed by the Act could prevent the consultation of citizens as required by the Finnish Constitution and the Aarhus Convention.** This would undermine public participation in the planning phase of the mine. This is a worrying direction of development and must not be allowed.

Solutions

Those actors in society who advocate for the environment, rights of citizens and other economic sectors must be involved at the legislative negotiating table: environmental organisations and experts, local communities, economic sectors and Sámi indigenous people must be better taken into account. This applies both to the preparation of the Act and to the transnational committee proposed in it.

To ensure the overall benefit, the assessment must also take into account the disadvantages caused by a mining project, such as environmental harm, harm to other economic activities, and harm to property values and other land uses. Industries that typically have conflicting interests with the mining industry, such as **tourism, agriculture, fishing and reindeer husbandry, are important long-term employers.**

The importance of reindeer husbandry in maintaining the culture of the indigenous Sámi people is crucial.

The mining industry is a relatively short-lived source of employment, especially in the low-mineral content mines which are common in Finland.

Participation needs to be strengthened so that decisions will reflect wider interests.

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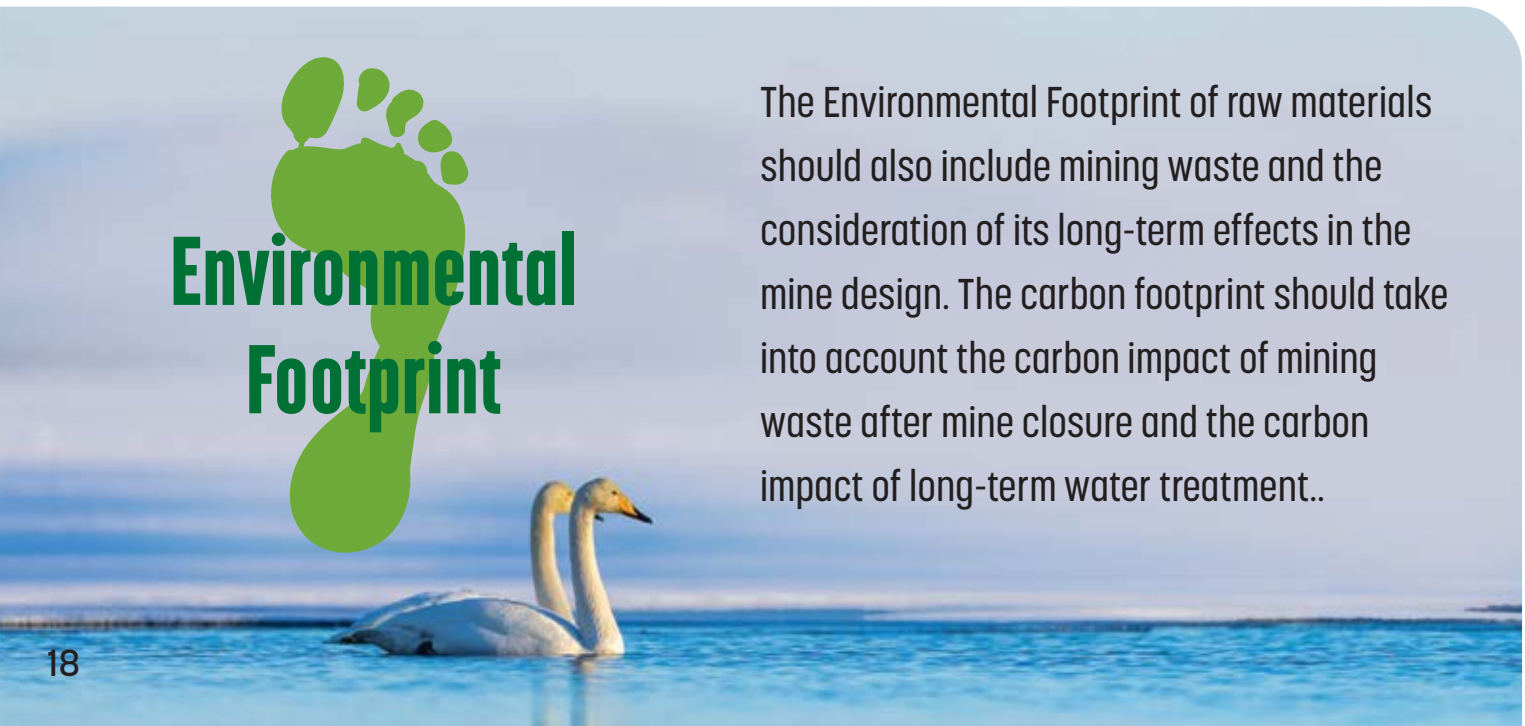
1 Friends of the Earth Europe (2023) Mining the depths of influence - How industry is forging the EU Critical Raw Materials Act. https://friendsoftheearth.eu/wp-content/uploads/2023/07/Mining-the-depths-of-influence.pdf



The Environmental Footprint of raw materials should also include mining waste and the consideration of its long-term effects in the mine design. The carbon footprint should take into account the carbon impact of mining waste after mine closure and the carbon impact of long-term water treatment..

What direction does the Act lead the society?

The ambitions of the EU's Critical Raw Materials Act are not high enough in terms of the environment or the circular economy. It has been pointed out on several occasions1 that the true environmental cost of electric vehicles depends in particular on how the minerals for the batteries are extracted. Thus, mining for battery minerals in the EU in a way that weakens the licensing process and allows the degradation of water bodies is not in line with green objectives. Polluting waterways in countries such as Finland or Sweden is neither ethical nor does it follow the principles of sustainable development.

In any case, critical and strategic raw materials are limited resources that can only be extracted once. The EU must therefore do more to promote the technologies and materials that can replace them. This means shifting funding specifically to support these new technologies, away from old-fashioned technologies. The regulation on critical raw materials should support this objective.

Substituting materials and technologies already exist. For example, Finland has already developed advanced salt battery technology and a graphite substitute. EU funding should therefore be directed first and foremost towards these future solutions. Now they are most strongly promoted in China.

To reduce the need for raw materials, consideration could also be given to maximise the lifetime of the existing fleet, machinery and other equipment. This should be made possible by providing suitable carbon-neutral, synthetic or waste-based fuels. Increasing the lifetime of products would accelerate emission reductions and allow more time for fleet replacement.

The EU's Critical Raw Materials Act needs a stronger green direction and a more sustainable basis.

1 For example https://www.nature.com/articles/s41578-021-00333-9

The mining and battery industry is welcome, as long as it does not contaminate nature.

1. The proposed regulation must be suspended and impact assessments carried out on the local population, indigenous Sámi people, nature and other livelihoods. Further studies are needed on how to better take into account the circular economy and how to improve permitting in different EU countries without lowering environmental standards.
2. The clean water and natural values of producer countries must not be subordinated to the general interest of consumer countries. This goes against the EU's ethical and sustainable principles and could be considered a neo-colonialist practice.
3. Permitting procedures must not be shortened without strong simultaneous improvements in laws, regulation, supervision and risk management.
4. The mining and battery industries must act in accordance with the extractive waste and water framework directives, and not pollute the environment, even over a long period of time.
5. The extractive and battery industries must be obliged to invest in environmental technology so that no contamination is caused. The technology does exist.
6. The EU should focus its investments on the development of substitute materials and technologies, environmental technologies and reuse instead of the old-fashioned mining and battery industry.
7. If mines and the battery industry cannot operate in a sustainable manner, their operations must be suspended or terminated. The EU has an outstanding opportunity to encourage new and sustainable industries.

MININGINFO

See the open letter signed by associations and business sectors at: www.mininginfo.fi