

2) Challenges for securing sustainable supply of critical raw materials

General Challenges

To what extent do you agree with the following statement?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	I don't know / no opinion
a. The potential to extract critical raw materials from primary sources in the EU is currently underexploited.	X					
b. The EU's processing and refining capacities for critical raw materials are currently insufficient.	X					
c. The potential to re-use or recycle critical raw materials from waste is currently underexploited in the EU.		X				
d. The potential to diversify the EU's external supply of critical raw materials is currently underexploited.			X			
e. The potential to substitute critical raw materials is currently underexploited in the EU.		X				
f. The potential to increase efficiency of critical raw materials use is currently underexploited in the EU.		X				
g. Industry is not able to tackle critical raw materials sourcing challenges on the global market without further EU policy intervention.	X		●			
h. Current EU policies on critical raw materials are insufficient to effectively manage supply chain disruptions, shortages and price hikes.	X—					

You agree or strongly agree that the EU's processing and refining capacities for critical raw materials are currently insufficient. Please specify for which critical raw material(s) this is the case.

Virtually all of them. The mining and refining capacity in EU is really minimal at present.

You agree or strongly agree that the potential to re-use or recycle critical raw materials from waste is currently underexploited in the EU. Please specify for which waste stream(s) this is the case.

This is particularly true for waste streams in batteries, which includes as CRM lithium and cobalt. Other CRM with underexploited recycling potential: Indium, and heavy rare earths elements.

You agree or strongly agree that the potential to substitute critical raw materials is currently underexploited in the EU. Please specify for which critical raw material(s) this is the case.

Virtually all of them, also because substitution is often technically non viable.

You agree or strongly agree that the potential to increase the efficiency of critical material use is currently underexploited in the EU. Please specify for which critical raw material(s) this is the case.

This applies to all the cases in which second-life use is not properly exploited. Key area for improvement is automotive batteries.

To what extent do you agree that the **existing EU policy actions** contribute to secure the EU's supply of critical raw materials?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	I don't know / no opinion
a. Establishing and updating the critical raw materials list.	X					
b. Developing the European Raw Materials Alliance.		X				
c. Concluding Strategic partnerships with resource rich third countries.	X					
d. Developing a transparent and stable trade framework for facilitating trade in raw materials, including through free trade agreements with resource rich third countries.	X					
e. Funding research and innovation on resource efficiency, recycling and substitution of critical raw materials through Horizon Europe.	X					
f. Developing and coordinating knowledge through research projects, such as the raw materials information system (https://rmis.jrc.ec.europa.eu/).	X					

Supply chain vulnerability

Monitoring

To what extent do the following statements related to the monitoring of supply correctly describe the challenges in this field?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	I do not know / no opinion
a. Companies would benefit from public monitoring activities to inform them about risks of supply chains disruption.	X					
b. Companies lack sufficient information on supply risks for them to take preventive measures.				X		
c. Companies generally do not have in place contingency plans to deal with supply disruptions.			X			
d. Member State authorities do not have in place sufficient monitoring mechanisms allowing them to assess supply risks and anticipate problems.	X					
e. Member State authorities do not sufficiently cooperate and coordinate in monitoring critical raw materials supply chains.	X					

EU value chain

To what extent do you agree that the following challenges affect the roll out of critical raw materials projects (mining, refining and recycling) in the EU?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	I do not know / no opinion
a. Difficulty to access private financing for critical raw materials projects.				X		
b. Difficulty to access public funding in the EU for critical raw materials projects.				X		
c. Lack of technical standards for processes along the critical raw materials value chain.				X		
d. Fear of reputational damage for companies.		X				
e. Lack of or limited public acceptance for new critical raw materials projects in EU.	X					
f. Unfair competition from third countries.			X			
g. Price volatility and unpredictability.				X		
h. Lack of skilled workforce to design and operate critical raw materials projects.					X	
i. Lack of available technologies to carry out critical raw materials projects in line with the required environmental standards.					X	

If necessary, please further explain the consequences of the challenges encountered by critical raw materials projects, specifying for which stages of the value they apply. You can also specify any additional challenge not listed in the previous question.

Do you agree with the following statements regarding the permitting procedures for critical raw materials projects?
Please specify which Member State or third country you refer to and for which type of projects (e.g. write "Country Y, recycling project" in the "Agree" box).

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	I do not know / No opinion
a. National permitting requirements and processes are not clear for permitting applicants		ITALY, mining projects	X			
b. National permitting processes are too lengthy	X	ITALY, mining projects				
c. Permitting requirements on local, regional and national level are too different	X	ITALY, mining projects				

Circularity

To what extent do you agree with the following statement regarding the circularity of critical raw materials projects in the EU?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	I do not know / No opinion
a. EU product legislation does not sufficiently incentivize the use of secondary raw materials in products.		x				
b. EU waste legislation does not sufficiently incentivise the recovery and recycling of raw materials.				x		
c. Shipments of waste containing critical raw materials between Member States are difficult, which limits possibilities for viable recycling projects.		x				
d. Export of waste containing critical raw materials increases the shortage of critical raw materials in the EU and limits potential for circularity.	x					

3) Possible measures to ensure a secure and sustainable supply of critical raw materials

Strengthening the monitoring, risk management and governance for critical raw materials supply chain in Europe

To strengthen the resilience of the supply chains of critical raw materials in the EU, new tools could be developed. To what extent do you agree that the following possible measures can help strengthen supply chain resilience?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	I do not know / No opinion
a. Enhanced cooperation between national authorities or agencies in charge of critical raw materials (data exchange, common monitoring, etc.).	x					
b. A dedicated EU-wide governance capacity tasked with monitoring actions and strengthening the EU value chain.	x					
c. Better access for companies to monitoring information at EU or at national level to enable them to identify vulnerabilities in their supply chains.		x				
d. Periodic supply chain stress testing of selected critical raw materials at EU level to better anticipate supply chain disruptions.	x					
e. Early warnings by public authorities of imminent vulnerability of a supply chain.			x			
f. Provisions to increase strategic stocks of critical raw materials at EU, national or industry level.				x		

If you have suggestion of other measures to strengthen the resilience of the EU critical raw materials supply chains, please specify.

To ensure a better monitoring of critical raw materials, it would be useful for public authorities to monitor more closely:

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	I do not know / No opinion
a. Prices of critical raw materials.	x					
b. Demand developments at national, European and global levels.	x					
c. Supply developments of critical raw materials (including forecasting).	x					
d. Trade flows of critical raw materials.	x					
e. Progress of important critical raw materials projects in the EU.	x					

If you have suggestions of other areas to monitor, please specify.

How do you consider that efforts to increase strategic stocks should be organised?

<input type="checkbox"/>	Mandatory storage or strategic stocks by industry.
<input type="checkbox"/>	Mandatory storage or strategic stocks by Member States' public bodies.
<input type="checkbox"/>	EU level guidance on voluntary storage or strategic stocks to be organised at national level, as appropriate (by public and/or private actors).
<input type="checkbox"/>	Storage or strategic stocks by an EU level body through joint procurement.
<input checked="" type="checkbox"/>	EU level guidance on rationing/redistributing stocks.
<input type="checkbox"/>	EU rules for mandatory redistribution of stocks in view of supply and demand.
<input type="checkbox"/>	Other.

Strengthening the critical raw materials supply chain in Europe

To what extent do you agree that the following policy options could help strengthen the EU critical raw materials value chain?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	I do not know / No opinion
a. A specific list of raw materials of strategic importance for the EU (and thus deserving priority attention) to guide investment decisions of companies and financial institutions.		x				
b. A specific list of raw materials of strategic importance for the EU (and thus deserving priority attention) to target public support at EU and national level.	x					
c. Setting EU objectives for increasing domestic production capacity along different stages of the value chain (exploration, extraction, refining, recycling) to guide national and European efforts (i.e. in relation to the materials on the list mentioned under a.).	x					
d. Identifying Strategic Projects across the critical raw materials value chain with strong environmental and social performance and contributing to reducing EU dependencies.	x					
e. Ensuring that these Strategic Projects benefit from streamlined and quicker permitting procedures.	x					
f. Ensuring that these Strategic Projects benefit from easier access to public and private finance.	x					
g. Ensuring that Strategic Projects and Partnerships initiatives outside of the EU also benefit from de-risking if they comply with social and environmental standards and can contribute to securing EU supply.	x					

Investment

To what extent do you agree that the following policy options would facilitate access to finance for critical raw materials projects?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	I do not know / No opinion
a. Public support to bring together downstream users and project promoters to facilitate the conclusion of long-term supply contracts and offtake agreements.			x			
b. Target existing EU funds that have the possibility to finance critical raw materials projects of particular strategic relevance identified under the future legislation.		x				
c. Increased financial support from national and European promotional banks for critical raw materials projects.	x					
d. A dedicated financial platform to de-risk critical raw materials projects that meet certain requirements (e.g., high environmental and social standards, while contributing to EU supply) by blending private, national and EU funding.	x					
e. Explore opportunities offered by the existing State aid rules for critical raw materials projects, such as Important Projects of Common European Interest, State aid Framework for research, development and innovation, Regional Aid Guidelines, Guidelines on State aid for Climate, Environmental protection and Energy or relevant State aid General Block Exemption Regulation provisions.	x					
f. Support a level playing field to promote transparency and good governance with partner countries, aiming to gather sustainable and responsible investments and partnerships in the sector.	x					

Do you foresee any other option to facilitate access to finance for critical raw materials projects?

Sustainability

Would you agree that products containing critical raw materials should be accompanied with information on the environmental footprint of producing those materials?

<input checked="" type="checkbox"/>	Strongly agree
<input type="checkbox"/>	Agree
<input type="checkbox"/>	Neutral
<input type="checkbox"/>	Disagree
<input type="checkbox"/>	Strongly disagree
<input type="checkbox"/>	I do not know / No opinion

Would you agree that products containing critical raw materials should be accompanied with information on the ethical sourcing of those materials?

<input checked="" type="checkbox"/>	Strongly agree
<input type="checkbox"/>	Agree
<input type="checkbox"/>	Neutral
<input type="checkbox"/>	Disagree
<input type="checkbox"/>	Strongly disagree
<input type="checkbox"/>	I do not know / No opinion

Which measures would you propose to increase resource efficiency and reduce the pressure on primary raw material consumption?

Make any effort at the legislation level to promote businesses in re-use and repairing

Substitution of critical raw materials is an important way to mitigate the demand needs. Which actions should be further pursued to develop substitution?

<input checked="" type="checkbox"/>	Strengthened support for EU research and innovation funding on substitution.
<input checked="" type="checkbox"/>	Strengthened cooperation across Member States on the research for substitution.
<input type="checkbox"/>	Strengthened public-private cooperation on the deployment of substitution alternatives.
<input type="checkbox"/>	Strengthened private-private cooperation (horizontal or vertical) on the development of substitution alternatives (in accordance with competition law and parameters).
<input type="checkbox"/>	Other.

Which measures or techniques would contribute to lower the environmental impact of extraction?

Assess water availability at potential mining sites avoiding conflicts with other sectors such as agriculture.

Circularity

Would the following measures help develop the market for secondary raw materials in the EU, hence lowering the pressure on demand for primary raw materials?

a. Developing targets for waste operators related to the recycling efficiency of critical raw materials from different waste streams (electronics, vehicles, etc.).	x					
b. Developing targets for waste operators related to the material recovery of critical raw materials from different waste streams (electronics, vehicles, mining waste etc.).	x					
c. Requiring Member State to design waste management plans including specific measures to promote the recovery of critical raw materials, from historical mining waste.	x					
d. Setting design requirements for products containing critical raw materials to increase their ease of dismantling and recycling.	x					
e. Setting minimum content of recycled critical raw materials in relevant products.	x					
f. Setting design requirements for products containing critical raw materials to increase the length of product life.	X					
g. Strengthening support for EU research and innovation funding on recycling and material recovery technologies for critical raw materials.	x					
h. Strengthening exploration and documentation of critical raw materials in secondary deposits and waste streams.	X					

Are there any other policy options that would facilitate the circularity of critical raw materials?

Key issues addressed

International dimension

Securing the EU supply of critical raw materials implies further diversification of EU sourcing, given the present high concentration of origin of EU imports for many critical raw materials. The EU action plan on critical raw materials adopted in 2020 includes an action to develop partnerships with resource rich countries, with the aim of ensuring diversification of sourcing. The EU has already concluded Strategic Partnerships with third countries (with Canada and Ukraine) to further integrate the partner countries' supply chain with the EU and is negotiating others.

In parallel, the EU has a vast network of trade agreements with important disciplines on export restrictions, investment facilitation etc. In addition, some finalised agreements (e.g. with UK) and ongoing negotiations (e.g. with Chile, Australia) include additional provisions on Energy and Raw materials in dedicated chapters.

To what extent do you agree with the following statements?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	I do not know / No opinion
a. The EU lacks a strategy for increasing the diversification of EU industry supplies from third countries.	<input type="radio"/>	x	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. The potential to extract critical raw materials from primary sources in third countries is currently underexploited.	<input type="radio"/>	<input type="radio"/>	x	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. The global processing and refining capacities for critical raw materials are currently insufficient.	x	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. The exchanges and cooperation between Third Countries and EU/ Member States authorities on critical raw materials (data exchange, common monitoring, etc.) are not sufficient.	x	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. The extraction of critical raw materials from primary sources in third countries contributes to environmental degradation.	<input type="radio"/>	<input type="radio"/>	x	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What are the underlying reasons for supply chains disturbances and supply constraints of raw materials?

<input checked="" type="checkbox"/>	Insufficient global production.
<input checked="" type="checkbox"/>	Increased geopolitical tensions.
<input type="checkbox"/>	Market manipulation.
<input type="checkbox"/>	Volatile trading conditions.
<input type="checkbox"/>	Untransparent market mechanisms.
<input type="checkbox"/>	Other.

To what extent do you agree that the following policy statements can help support the EU's global efforts to secure critical raw materials?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	I do not know / No opinion
a. The EU should strengthen the ongoing strategic partnerships on critical raw materials and conclude additional ones with resource rich third countries	x					
b. Such partnerships should rely on clearly established pillars, such as the integration of raw materials value chain, research and innovation cooperation and alignment on environmental, social, and governance (ESG) criteria and standards.	x					
c. Partnerships on raw materials value chains with developing countries need to include a pillar for capacity building, skills and training and one for deploying infrastructure.	x					
d. The EU should diversify its global supply through its free- trade agreements and trade relations.			x			
e. The provisions (on investment, licencing and standardization) in dedicated Energy and Raw materials Chapters in the latest trade agreements have the necessary disciplines to unlock the potential in opening access and encouraging investment in raw materials.			x			

If you have suggestions on other instruments that should be used to diversify the EU's global supply, please specify.

Search for untapped domestic critical material resources

Which of the following barriers, often adopted by third countries, have the most trade distorting effect on your business? **I do not have a business, so I am not qualified to answer this**

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	I do not know/ no opinion
a. Export taxes.						
b. Export licencing.						
c. Export pricing (dual pricing, minimum export prices).						
d. Denial of VAT tax rebates when exporting.						
e. Restrictions on customs clearance points for exports.						
f. Export monopolies / qualified exporters lists.						
g. Domestic market obligations.						
h. Other trade barriers.						

Skills

A skilled workforce is indispensable to the strengthening of the EU value chain. In your opinion, which public action (at local, national or European levels) could help tackle the skills challenge of the EU raw materials value chain?

Promote partnerships with and among universities across Europe to expand the supply of skilled workforce

If you wish to share any further information or opinion on the one of topics raised above, please do so below:

To share information relevant to this survey, please attach your file(s).

Only files of the type pdf,txt,doc,docx,odt,rtf are allowed

Thank you for the time taken to participate to this survey.

Contact

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