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## TEXTS ADOPTED

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### **P9\_TA(2021)0468**

#### **A European strategy for critical raw materials**

##### **European Parliament resolution of 24 November 2021 on a European strategy for critical raw materials (2021/2011(INI))**

*The European Parliament,*

- having regard to the Treaty on the Functioning of the European Union (TFEU), in particular Articles 9, 151, 152, 153(1) and (2), Article 173, which concerns EU industrial policy and refers, among other things, to the competitiveness of EU industry, and Article 208, which reaffirms that the EU must take account of the objectives of development cooperation in the policies that it implements which are likely to affect developing countries,
- having regard to the Treaty on European Union (TEU), in particular Article 3(3), which refers to the internal market, sustainable development and the social market economy, and Article 5(3), which refers to the principle of subsidiarity,
- having regard to Protocol No 2 on the application of the principles of subsidiarity and proportionality, annexed to the TEU and the TFEU,
- having regard to Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment<sup>1</sup> (the Taxonomy Regulation),
- having regard to Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste<sup>2</sup> (the Waste Shipment Regulation),
- having regard to Regulation (EU) 2017/821 of the European Parliament and of the Council of 17 May 2017 laying down supply chain due diligence obligations for Union importers of tin, tantalum and tungsten, their ores, and gold originating from conflict-affected and high-risk areas<sup>3</sup> (the Conflict Minerals Regulation),

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<sup>1</sup> OJ L 198, 22.6.2020, p. 13.

<sup>2</sup> OJ L 190, 12.7.2006, p. 1.

<sup>3</sup> OJ L 130, 19.5.2017, p. 1.

- having regard to Regulation (EU) 2016/1037 of the European Parliament and of the Council of 8 June 2016 on protection against subsidised imports from countries not members of the European Union<sup>1</sup> (the EU Anti-Subsidy Regulation),
- having regard to Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE)<sup>2</sup>,
- having regard to Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste<sup>3</sup> (the Waste Framework Directive),
- having regard to Directive 2006/21/EC of the European Parliament and of the Council of 15 March 2006 on the management of waste from extractive industries and amending Directive 2004/35/EC<sup>4</sup> (the Mining Waste Directive),
- having regard to Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions<sup>5</sup> (the Industrial Emissions Directive),
- having regard to Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment<sup>6</sup> (the Environmental Impact Assessment Directive),
- having regard to Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds<sup>7</sup> (the Birds Directive),
- having regard to Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora<sup>8</sup> (the Habitats Directive),
- having regard to Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups<sup>9</sup> (the Non-Financial Reporting Directive),
- having regard to the agreement adopted at the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21) in Paris on 12 December 2015 (the Paris Agreement),
- having regard to the UN 2030 Agenda for Sustainable Development and to the Sustainable Development Goals (SDGs), including SDG 12 on responsible consumption and production and SDG 15 on life on land,

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<sup>1</sup> OJ L 176, 30.6.2016, p. 55.

<sup>2</sup> OJ L 197, 24.7.2012, p. 38.

<sup>3</sup> OJ L 312, 22.11.2008, p. 3.

<sup>4</sup> OJ L 102, 11.4.2006, p. 15.

<sup>5</sup> OJ L 334, 17.12.2010, p. 17.

<sup>6</sup> OJ L 124, 25.4.2014, p. 1.

<sup>7</sup> OJ L 20, 26.1.2010, p. 7.

<sup>8</sup> OJ L 206, 22.7.1992, p. 7.

<sup>9</sup> OJ L 330, 15.11.2014, p. 1.

- having regard to the European Pillar of Social Rights,
- having regard to the UN Guiding Principles on business and human rights,
- having regard to the OECD Due Diligence Guidance for Responsible Business Conduct,
- having regard to the 2009 UN Environment Programme Guidelines for Social Life Cycle Assessment of Products,
- having regard to the International Energy Agency (IEA) special report of May 2021 entitled ‘The Role of Critical Minerals in Clean Energy Transitions’,
- having regard to the IEA special report of May 2021 entitled ‘Net zero by 2050: A Roadmap for the Global Energy Sector’,
- having regard to the European Environment Agency briefing of 13 January 2021 entitled ‘Growth without economic growth’,
- having regard to the European Environmental Agency report of 30 August 2021 entitled ‘Improving the climate impact of raw material sourcing’,
- having regard to the opinion of the European Economic and Social Committee (EESC) of 25 March 2021 entitled ‘Critical Raw Materials Resilience: Charting a Path towards greater Security and Sustainability’,
- having regard to the Commission’s final report of September 2020 entitled ‘Study on the EU’s list of Critical Raw Materials (2020)’, and the accompanying fact sheets on critical raw materials,
- having regard to the Commission’s foresight study of 3 September 2020 entitled ‘Critical Raw Materials for Strategic Technologies and Sectors in the EU’,
- having regard to the Commission report of 5 November 2018 entitled ‘Report on critical raw materials and the circular economy’,
- having regard to its resolution of 10 March 2021 with recommendations to the Commission on corporate due diligence and corporate accountability<sup>1</sup>,
- having regard to its resolution of 16 December 2020 on a new strategy for European SMEs<sup>2</sup>,
- having regard to its resolution of 25 November 2020 on a New Industrial Strategy for Europe<sup>3</sup>,
- having regard to its resolution of 10 February 2021 on the New Circular Economy Action Plan<sup>4</sup>,

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<sup>1</sup> Texts adopted, P9\_TA(2021)0073.

<sup>2</sup> Texts adopted, P9\_TA(2020)0359.

<sup>3</sup> Texts adopted, P9\_TA(2020)0321.

<sup>4</sup> Texts adopted, P9\_TA(2021)0040.

- having regard to its resolution of 17 April 2020 on EU coordinated action to combat the COVID-19 pandemic and its consequences<sup>1</sup>,
- having regard to its resolution of 15 January 2020 on the European Green Deal<sup>2</sup>,
- having regard to its resolution of 25 March 2021 entitled ‘A new EU-Africa Strategy – a partnership for sustainable and inclusive development’<sup>3</sup>,
- having regard to its resolution of 27 April 2017 on implementation of the Mining Waste Directive<sup>4</sup>,
- having regard to the Commission proposal of 10 December 2020 for a regulation of the European Parliament and of the Council concerning batteries and waste batteries, repealing Directive 2006/66/EC and amending Regulation (EU) 2019/1020 (COM(2020)0798),
- having regard to the Commission communication of 3 September 2020 entitled ‘Critical Raw Materials Resilience: Charting a Path towards greater Security and Sustainability’ (COM(2020)0474),
- having regard to the Commission communication of 5 May 2021 entitled ‘Updating the 2020 New Industrial Strategy: Building a stronger single market for Europe’s recovery’ (COM(2021)0350),
- having regard to the Commission communication of 19 October 2020 entitled ‘Commission Work Programme 2021 – A Union of vitality in a world of fragility’ (COM(2020)0690),
- having regard to the Commission communication of 27 May 2020 entitled ‘Europe’s moment: Repair and Prepare for the Next Generation’ (COM(2020)0456),
- having regard to the Commission communication of 11 March 2020 entitled ‘A new Circular Economy Action Plan – For a cleaner and more competitive Europe’ (COM(2020)0098), and the staff working document of 11 March 2020 entitled ‘Leading the way to a global circular economy: state of play and outlook’ (SWD(2020)0100),
- having regard to the Commission communication of 2 December 2015 entitled ‘Closing the loop – An EU action plan for the Circular Economy’ (COM(2015)0614),
- having regard to the Commission communication of 10 March 2020 entitled ‘An SME Strategy for a sustainable and digital Europe’ (COM(2020)0103),
- having regard to the Commission communication of 18 February 2021 entitled ‘Trade Policy Review - An Open, Sustainable and Assertive Trade Policy’ (COM(2021)0066),

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<sup>1</sup> Texts adopted, P9\_TA(2020)0054.

<sup>2</sup> Texts adopted, P9\_TA(2020)0005.

<sup>3</sup> Texts adopted, P9\_TA(2021)0108.

<sup>4</sup> OJ C 298, 23.8.2018, p. 132.

- having regard to OECD publication of 12 February 2019 entitled ‘Global Material Resources Outlook to 2060: Economic Drivers and Environmental Consequences’,
  - having regard to World Bank publication of 2020 entitled ‘Minerals for Climate Action: The Mineral Intensity of the Clean Energy Transition’,
  - having regard to the Council conclusions of 17 December 2020 on making the recovery circular and green,
  - having regard to the Council conclusions of 16 November 2020 entitled ‘A recovery advancing the transition towards a more dynamic, resilient and competitive European industry’,
  - having regard to the Council conclusions of 28 November 2019 on ‘Circular Economy in the Construction Sector’,
  - having regard to the Council conclusions of 4 October 2019 entitled ‘More circularity – Transition to a sustainable society’,
  - having regard to Rule 54 of its Rules of Procedure,
  - having regard to the opinions of the Committee on the Environment, Public Health and Food Safety and the Committee on International Trade,
  - having regard to the report of the Committee on Industry, Research and Energy (A9-0280/2021),
- A. whereas critical raw materials (CRMs) are the originators of industrial value creation and therefore have a significant effect on downstream sectors; whereas it is of strategic importance that the EU reduces its dependency, safeguards its flows, value and supply chains, and supports, fosters and digitalises ecosystems since this is the new core capacity in international (industrial) competition; whereas a comprehensive CRM strategy should incorporate high environmental and societal standards;
  - B. whereas the growing population and the transition towards digital, highly energy-efficient and climate-neutral economies lead in all scenarios to significantly higher demand for CRMs<sup>1</sup>;
  - C. whereas technologies requiring CRMs will be key to ensuring the EU and the world as a whole can achieve their goals under the Paris Agreement;
  - D. whereas a comprehensive EU CRM strategy should be based on high environmental, social and human rights standards, also taking into account natural mineral scarcity;

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<sup>1</sup> World Bank, Minerals for Climate Action: The Mineral Intensity of the Clean Energy Transition; European Commission foresight study; OECD, Global Material Resources Outlook to 2060: Economic Drivers and Environmental Consequences.

- E. whereas the EU currently provides only 1 % of the raw materials for wind energy, less than 1 % of lithium batteries, less than 1 % of fuel cells, only 2 % of the raw materials relevant to robotics and only 1 % of silicon-based photovoltaic assemblies<sup>1</sup>;
- F. whereas the Commission communication on updating the 2020 new industrial strategy identifies 137 products and raw materials (representing 6 % of the total value of goods imported into the EU) used in sensitive ecosystems on which the EU is highly dependent – mainly in energy-intensive industries and health ecosystems – as well as other products needed to support the green and digital transition; whereas 52 % of these products are imported from the People’s Republic of China;
- G. whereas COVID-19 negatively affected global supply chains and led to CRM shortages in Europe;
- H. whereas one of the great challenges concerning CRMs in Europe is recycling; whereas the CRM recycling sector has significant job creation potential; whereas it is estimated that the traction battery recycling sector alone will create about 10 500 jobs by 2035 in the EU;
- I. whereas recycling, substitution and changing behavioural and consumption patterns have the potential to flatten CRM demand;
- J. whereas according to the United Nations University, in 2016, the total value of secondary raw materials in WEEE was estimated to be around EUR 55 billion<sup>2</sup>; whereas, according to the same study, up to 90 % of the world’s e-waste has been illegally traded or landfilled;
- K. whereas it is evident that – also with regard to envisaged new due diligence obligations – new sustainable sourcing is required and that the potential to source materials at high sustainability standards in the EU and its neighbourhood should be exploited, while fully taking into account circular economy options such as recycling, product design, substitution and reduced use of materials;
- L. whereas the EESC opinion of 25 March 2021 ‘emphasises the importance of widening the definition and the paradigm of critical raw materials. Conventionally, critical raw materials have been understood as materials coming mainly from mining sector. This is too narrow scope and limits the growth of green energies. Today, wood-based materials can be efficiently used in much more applications than in the past. From textiles to new lighter and more environmentally friendly battery technologies, this is an area that is advancing with great speed. Bioeconomy has the unique possibilities of adding resilience to the EU economy and geopolitical stability for our continent. Using renewable materials would simultaneously also help mitigate climate change as it allows keeping the fossil emissions in the ground, creating green resilience to fossil sectors’;
- M. whereas, as pointed out in the opinion, ‘there are extremely few examples of raw material exports in developing countries triggering sustainable economic and social

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<sup>1</sup> Commission foresight study.

<sup>2</sup> Baldé, C.P., Forti V., Gray, V., Kuehr, R., Stegmann, P. *The Global E-waste Monitor – 2017*, United Nations University, International Telecommunication Union & International Solid Waste Association, Bonn/Geneva/Vienna, 2017.

development from which broad sections of the population would have benefited. Rather, the situation often entails social exploitation and environmental pollution with usually only a few profiteers on the winning side’;

- N. whereas the supply of many CRMs is highly concentrated outside the EU, with China providing 98 % of the EU’s supply of rare earth elements (REE), Turkey providing 98 % of its supply of borate, and South Africa providing 71 % of its platinum, 92 % of its iridium, 80 % of its rhodium and 93 % of its ruthenium<sup>1</sup>;
- O. whereas future scenarios indicate that for electric vehicle batteries and energy storage, the EU will need up to 18 times more lithium and five times more cobalt in 2030, and almost 60 times more lithium and 15 times more cobalt in 2050, compared to the current supply to the whole EU economy<sup>2</sup>;
- P. whereas four sustainable lithium mining projects totalling EUR 2 billion are under way in the EU and should be in operation between 2022 and 2024; whereas they are expected to cover up to 80 % of the EU’s lithium needs in the battery sector by 2025, thus contributing directly to our strategic autonomy;
- Q. whereas shortages of CRMs are leading to increasing industrial and security concerns, especially owing to the predicted exponential increase in production, especially the production of batteries, which are essential for the transition to producing energy from renewable sources;
- R. whereas the EU needs to improve its strategic autonomy in key areas such as CRM supply, which is also crucial for increasing its capacity in defence and space matters;
- S. whereas considering that the EU will continue to rely on international supply chains to fulfil its needs for CRMs, measures to make global trade markets more transparent, effective and predictable will also play an important role;
- T. whereas the raw materials sector provides around 350 000 jobs in the EU, and more than 30 million jobs in downstream manufacturing industries that depend on it<sup>3</sup>; whereas moving towards a more circular economy could bring a net increase of 700 000 jobs in the EU by 2030<sup>4</sup>;
- U. whereas mining activities potentially expose workers to harmful and hazardous conditions; whereas labour rights and protection vary greatly across the globe and at different mining sites;
- V. whereas CRMs do not appear separately, but are mixed in ore with base metals, and whereas their processing require a considerable amount of energy; whereas competitiveness and profitability of production is therefore determined by the

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<sup>1</sup> Commission communication entitled ‘Critical Raw Materials Resilience: Charting a Path towards greater Security and Sustainability.

<sup>2</sup> Commission communication entitled ‘Critical Raw Materials Resilience: Charting a Path towards greater Security and Sustainability’.

<sup>3</sup> EESC opinion of 25 March 2021.

<sup>4</sup> Commission communication of 2020 entitled ‘Critical Raw Materials Resilience: Charting a Path towards greater Security and Sustainability’.

availability of stable and affordable energy, as well as the identification and development of relevant methods, procedures and technologies;

- W. whereas in its report entitled ‘Growth without economic growth’, the European Environment Agency says that economic growth is closely linked to increased production, consumption and use of resources, with negative effects on nature, climate and human health and that current research suggests that it is unlikely economic growth can be completely divorced from its environmental impacts;

### *Challenges and opportunities*

1. Considers that an integrated approach throughout the value chain, from waste collection and product design for recyclability to material recovery, is an essential strategy to increase CRM supply; regrets, however, that waste collection and product design have a low technology readiness level; stresses that only focusing on recycling will not be sufficient to meet increasing CRM demand; notes that although CRM substitution has limitations in terms of product efficiency, it is an inherent goal of affected industries and respective research projects because of high prices and dependency, and can help to address CRM sufficiency challenges; stresses the need for continuous efforts in and support for research and innovation regarding the recycling and substitution of CRMs and product design;
2. Stresses that CRM sourcing is tied to geographic location, which to date has been highly dependent on fossil energy, and at risk of indirect and direct carbon leakage and exposure to unfair competition; notes that CRM sourcing is often associated with potentially significant environmental impacts such as biodiversity loss or the contamination of air, soil and water, and potential conflicts with local communities; stresses the need for a transition to renewable energy in the mining and refining sectors; notes, therefore, the need for an active industry policy to support the sector in its transformation with access to affordable sources of clean energy; further notes the favourable circumstances for low-emission and sustainable mining activities in the EU and asks for sourcing possibilities in CRM-rich Member States to be further explored;
3. Warns that the EU’s transition to climate neutrality should not replace reliance on fossil fuels with reliance on raw materials; stresses that the transition should decrease the EU’s dependence on imported CRMs; further stresses the role that innovation, new technologies, the minimisation of resource consumption and the maintenance and reuse of valuable raw materials within the EU can play in reducing dependence on CRMs;
4. Notes that the development and future large-scale deployment of technologies, including emerging digital applications, renewable electricity generation and batteries for electric vehicles and light means of transport, will boost demand for certain CRMs and other raw materials; calls for it to be taken into account that rising climate and digital ambitions by countries increases competition in global markets and puts an additional strain on the security of their supply in Europe;
5. Calls on the Commission to carefully review the criticality assessment methodology before 2023, ahead of the publication of the next list of CRMs, in order to assess whether the list needs broadening, taking into account the development of the international situation related to CRMs, scenarios for future demand for CRMs and other raw materials, and social and ecological criteria based on the UN Guiding



Principles on business and human rights and the SDGs, to get a broader picture of extraction conditions across the globe; further calls on the Commission to duly take into account all environmental externalities related to extraction and processing in its supply risk analysis; also calls for a comprehensive debate involving all stakeholders;

6. Calls on the Commission to pay attention not only to CRMs but also to the potential criticality of other raw materials needed for strong supply chains, the continuity of production and the twin transition, and their availability from EU sources, also taking into account natural mineral scarcity; underlines that, in addition to specialised minerals, ‘commonly produced’ raw materials such as copper, helium and nickel are also becoming critical as demand for them increases in a climate-neutral society;
7. Asks the Commission to take a holistic approach when assessing the implications of several low-carbon, renewable and digital technologies competing for the same CRMs and to examine critical supply chains, also with regard to the needs of individual sectors; stresses the importance of ensuring that the energy-efficiency-first principle, zero emissions and resource-efficient solutions prevail;
8. Asks the Commission to make sure that national resilience and recovery plans under NextGenerationEU tackle the challenges linked to economically, environmentally and socially sustainable CRM supply; asks the Member States to invest more in CRM recycling and include CRM requirements, sources of supply and costs in their strategic recovery plans;
9. Calls for investment in the training and reskilling of workers, including through the Just Transition Mechanism, as mining skills can be transferred to metal and mineral exploitation, processing and recycling, preferably in the same regions; calls on the Commission to ensure that respective funding also addresses the social, employment and environmental impacts of the transition in former mining areas;
10. Calls on the Commission and the Member States to create, as soon as possible, an Important Project of Common European Interest (IPCEI) on CRMs to strategically and sustainably plan for our demand for the twin transition, covering requirements, sources of supply and (social, environmental and financial) costs; stresses that the IPCEI should cover all the relevant topics in order to reduce criticality and dependence, such as recycling, reuse, substitution, reduction of material use and mining; highlights that these projects should unlock the unfulfilled potential in CRM-rich EU countries that have large untapped sources;
11. Calls on the Commission to promote research and development on and skills and competencies relating to CRMs for small and medium-sized enterprises (SMEs) as a growth strategy for EU high-tech technologies such as lithium-ion batteries, fuel cells, wind turbines, electric traction motors, photovoltaic technology, robotics, drones, 3D printing and a broad range of digital technologies and medical devices;
12. Calls on the Commission to conduct a comprehensive, scientific and evidence-based impact assessment to determine the minimum volumes of CRMs of strategic importance required for the twin transition;
13. Notes that for the EU, reliable and fully operational value chains, including prospecting and recycling, play a key role and are a prerequisite for achieving the goals of the

European Green Deal, the EU industrial strategy and the twin transition and for securing its future industrial competitiveness and innovation capacity;

14. Believes that funding opportunities for the sustainable production, processing or recycling of all CRMs listed in the Commission communication on critical raw materials resilience is indispensable;
15. Calls on the Commission to propose science-based sustainability criteria for defining what constitutes a sustainable investment in the mining sector under the Taxonomy Regulation; emphasises the need to enable the EU mining industry to contribute to the twin green and digital transitions;
16. Calls for EU support and funding for the technological development of CRMs to improve efficiency, substitution, recycling processes and closed material cycles; underlines, in particular, the need for specific financial instruments and targeted research and innovation (R&I) funds for recycling processes and welcomes the proposal to promote, in 2021, CRM research and innovation on waste processing, advanced materials and substitution under Horizon Europe, the European Regional Development Fund and national R&I programmes; further stresses the importance of R&I for increasing the feasibility of refining processes, especially of mine tailings and in small-scale mines; calls on the Commission to introduce support schemes encouraging innovation in new mining techniques and new small-scale mining projects; calls for the development of new and innovative technologies in the field of sustainable CRM mining in the EU;
17. Calls on the Commission, the European Investment Bank and the other EU institutions, in cooperation with international partners, to provide technical and strategic financial support for long-term strategic CRM investment projects, including to find new tools for sharing risks in the mining sector, and to promote and support investments in research on sustainable CRM sourcing and processing and on refining sites, to make them compliant with EU rules and high social and environmental standards, thereby ensuring a level playing field;

### ***Strategic autonomy and resilience***

18. Welcomes the creation of the European Raw Materials Alliance (ERMA), and, in the light of the geopolitical situation worldwide and potential trade tensions with rich non-EU producer countries, its current focus on the most critical CRMs, namely REE and magnets, and on quantitative domestic and non-EU sourcing targets, with the aim of supporting long-term supply relationships for a huge range of small and large manufacturers in the EU and reducing the current reliance on a few non-EU countries; underlines ERMA's role as an 'investment pipeline' and encourages it to further engage on pre-assessments to unlock public and private investments for environmentally assessed and sustainable CRM projects;
19. Considers it important to further develop ERMA, mainly with regard to materials which are of great importance for the twin transition, like CRMs needed for energy storage and conversion;
20. Welcomes the Commission's intention to launch a monitoring system, through the future Observatory of Critical Technologies, of current dependencies and the risks of

future technological dependencies, and calls for close cooperation between the observatory and those working to monitor demand for CRMs;

21. Regrets that the creation of strategic stockpiling is not yet part of the action plan and calls on the Commission to also focus on securing supplies of CRMs in the EU by encouraging Member States to carry out strategic stockpiling as part of a coordinated approach, where analysis deems it appropriate; believes that strategic stockpiling in combination with other strategic measures contributes to reducing CRM dependencies; underlines that increasing availability should go hand in hand with a decrease in demand by looking at the entire value chain – design, operation and end of life;
22. Believes that awareness of possible scarcity problems with CRMs is too low and should be improved; calls on the Commission to expand ERMA in order to increase cooperation between industrial actors throughout the value chain, Member States, regions and non-EU countries, trade unions, civil society, research and technology organisations, investors and non-governmental organisations within the sectors of the EU economy most affected by bottlenecks in CRM supply, either through the framework offered by ERMA or by forming sector-specific industry and stakeholder alliances; emphasises the employment potential of domestic projects and therefore calls for a comprehensive social dialogue to be promoted; stresses, in this regard, the urgent need for closer partnerships between CRM actors, especially in mining regions, and downstream users, notably other industrial alliances, and for common awareness and an obligation to ensure value chains are sustainable and circular;
23. Believes that more coordination and joint efforts are necessary to develop resilient supply chains to meet the demand for current and future CRMs for the EU's industrial needs, in order to avoid supply chain disruptions, reduce dependency and maintain high social and environmental standards; calls on the Commission to ensure that, in the EU, the assessment of imports and exports and global supply of and demand for CRMs, the coordination of stockpiling and the monitoring of CRM sourcing are implemented in a coherent and cohesive way, for example by establishing a CRM taskforce;
24. Asks the Commission to diversify supply chains for both primary and secondary sources and calls for better transparency regarding information on supply chains;
25. Notes that increasing tensions between major powers have exposed strategic vulnerabilities for the EU, particularly in securing key resources including CRMs and processed material; further notes that monitoring commodity dependencies and securing access to CRMs can ensure the greater resilience of sustainable supply chains; notes that in the transition to a circular economy, particular attention should be paid to key supply chains where the EU's dependence on CRMs is particularly high;
26. Reiterates the circular economy potential of optimised use of products and services; calls on the Commission and the Member States to support new sustainable and circular business models in the new sustainable products initiative, including product-as-a-service, provided they save resources, reduce environmental impacts and guarantee consumer protection; calls on the Commission and the Member States to facilitate these approaches by introducing regulatory frameworks;
27. Considers it important to support a circular economy approach throughout the value chain, from design to material recovery, of the key technologies for the energy, digital

and mobility transitions, such as wind plants, solar plants, battery production, electric mobility and smart grids; calls on the Commission to make the transition to a circular economy a priority, reducing the EU's import dependence, improving resource efficiency, optimising resource consumption and keeping and reusing valuable raw materials within the EU; recalls its demand in its resolution on the New Circular Economy Action Plan to consider proposing, based on a comprehensive impact assessment, clear and easily understandable harmonised labelling on durability, which could take the form of an index, and reparability, which could take the form of a uniform repair score;

28. Calls on the Commission to strengthen cooperation with non-EU countries on the sustainable sourcing of CRMs, particularly like-minded partners, as well as in its engagement at the World Trade Organization (WTO);

### *Closing material loops*

29. Underlines the need to build well-functioning secondary CRM markets in order to guarantee constant secondary CRM flows to strengthen the EU's industrial ecosystems and to keep jobs in the manufacturing sector; calls, in this regard, on the Commission to examine the balance of imports and exports of secondary CRMs in the EU and to rapidly establish a market observatory for key secondary materials, including CRMs; stresses that CRM treatment in non-EU countries needs to comply with EU standards; notes that there is no one-size-fits-all approach; stresses that the achievement of clean and safe material cycles is a prerequisite for the creation of a credible secondary raw materials market in the EU;
30. Welcomes the proposal to map the potential supply of secondary CRMs from EU stocks, waste and the processing of by-products; encourages the Commission to make this mapping exercise a priority and carry it out earlier than envisaged; encourages the Commission, furthermore, to extend it to current available technologies used to decrease demand for CRMs and increase the reuse of CRMs in the supply chain; stresses the need to encourage the introduction of collaborative instruments for the CRM market, such as an EU raw materials platform, which should also cover circulating product fluxes and their trends, in order to evaluate which secondary materials can be recycled;
31. Calls on the Commission and the Member States to unlock the potential of secondary processing projects through specific incentives, including expedited licensing, and to provide incentives for recovering CRMs to ensure reliable, secure and sustainable access to them;
32. Notes the importance of waste recycling given the significant presence of CRMs in electrical and electronic equipment; notes that the increase in recycled volumes might not be sufficient in the long term to reduce mining; further notes that by moving towards a more circular economy, 700 000 jobs<sup>1</sup> could be created, especially additional jobs in recycling plants and repair services; notes that disassembly and recycling is a major opportunity to bring industrial jobs back to the EU; further highlights that the development of recycling can be used to respond to future raw material needs;

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<sup>1</sup> Commission communication entitled 'Critical Raw Materials Resilience: Charting a Path towards greater Security and Sustainability'.

33. Notes that the share of collected recyclable lithium-ion traction batteries is expected to grow markedly by the mid-2030s, thus creating a significant secondary source of supply;
34. Notes that for industrial CRM recycling processes to be successful, massive private and public investment is still needed in sorting, pre-processing and recovery infrastructure, in innovation, research and the scaling up of technologies, and in skills, which will provide job opportunities that are projected to vastly increase in the coming decades; calls on the Commission to provide incentives for the recycling and recovery of CRMs from mining, processing and commercial waste streams to ensure reliable, secure and sustainable access to them;
35. Encourages the Commission to propose minimum recycled CRM content targets and dedicated CRM recycling targets accompanied by a robust monitoring framework, drawing inspiration from the proposal for a regulation concerning batteries and waste batteries and based on a comprehensive, scientific and evidence-based impact assessment assessing the minimum volumes of CRMs required for products that will facilitate the twin transition, the percentage of this demand that could be covered via recycling in line with existing assessments, and the availability of the necessary technology; notes that any reduction targets for primary raw materials should not lead to the overall raw material yield dipping below these minimum volumes;
36. Recognises that brownfield sites (industrial waste dumps and mine tailing dams) often contain discarded CRMs, REE and other minerals and metals used in technology products; therefore encourages the documentation, evaluation, and extraction of the valuable materials found on these brownfield sites, wherever possible and practicable; underlines the need for improved refining technologies to be covered under the relevant research, development and innovation funding mechanisms to unlock this potential;
37. Underlines that stronger controls for EU exports of key CRM waste products are needed and that a level playing field for recycling operators who meet the necessary standards for safe and efficient recovery needs to be established; calls on the Commission, when it revises the Waste Shipment Regulation, to prevent the illegal export of waste products containing CRMs; calls for the setting of requirements that only allow waste products containing CRMs to be exported with a guarantee that they will be processed in the destination country under conditions equivalent to EU social and environmental standards;
38. Calls on the Commission and the Member States to enhance efforts to properly collect and recycle end-of-life-products with CRMs instead of stockpiling them in households or landfills or incinerating them;
39. Asks the Commission to propose product design measures, tailored to different product categories, for the easy identification and removal of parts or components containing CRMs, especially with regard to post-consumer waste, in addition to eco-design requirements to significantly improve the longevity, durability, reparability, modularity, reusability and recyclability of end-of-life products manufactured or sold in the EU; stresses that these measures should create competitive advantages for EU businesses, should not place a disproportionate financial burden on them, and should trigger innovation;

40. Believes that substitution is helpful where a CRM could be substituted by an abundant material, but has little benefit if the substitute itself is not sustainable, leaves the finite nature of resources unaddressed, is critical or might become so because of the substitution; recognises the importance of maintaining the quality performance of the products and their economic viability; calls on the Commission to encourage and increase research on and innovation of substitutes for CRMs for different uses;

### *Sourcing from the EU*

41. Notes that while smart product design, the reuse of materials, substitution with recycled materials and promoting the reduction of materials and consumption footprints can significantly reduce primary demand, and its potential should be fully exploited, responsible and sustainable CRM sourcing with prior impact assessment to mitigate potential social and environmental impacts is needed when CRM supply cannot be kept economically viable by the measures mentioned or would lead to lower quality products;
42. Highlights that primary and secondary sourcing in the EU is subject to the highest environmental and social standards worldwide, which have to be properly enforced, provides thousands of highly qualified jobs and is an indispensable prerequisite for the green and digital transitions; calls, therefore, on all actors to promote responsible and sustainable CRM sourcing projects in the EU to support local production and raise awareness of the environmental footprints of imports of CRMs from outside the EU; considers that this must be set through an open, transparent and science-based process, with the early involvement of relevant stakeholders and local communities;
43. Strongly believes that responsible sourcing in the EU can only be based on an effective social dialogue promoting the health and safety of workers, securing decent jobs and working conditions and protecting workers' rights by promoting gender equality; calls on the Member States to ensure workers in this sector are protected with appropriate personal protective equipment;
44. Notes the opportunity to develop a responsible and sustainable battery value chain by sourcing CRMs such as graphite, cobalt and lithium from new facilities in the EU;
45. Notes the Commission's plan to roll out earth observation programmes and remote sensing for resource exploration, operations and post-closure environmental management; points out that in-service regulatory oversight can be enhanced with the use of remote sensing methods;
46. Notes that the reorientation towards the circular economy in many EU industries and services requires specific skills and competencies to ensure high environmental performance and worker safety, and emphasises the specific role that first movers, SMEs and start-ups are playing in this transition; further notes that the mining sector is being increasingly automated, while recycling and remanufacturing are still more labour-intensive; underlines the importance of maintaining, developing and building up relevant expertise and skills in mining and processing technologies as well as recycling and other relevant technologies in the EU in relation to both CRMs and by-products, as some of them can be used for the production of highly advanced chemical products; notes with regret that raw materials currently mined in the EU often need to be exported

to Asia for refining, as the relevant know-how and technology have been lost in the EU, which constitutes another dependency;

47. Calls on the Commission to request that industrial side streams containing CRMs be effectively used; underlines that especially in the mining industry, there is a great deal of potential for the recovery and separation of rare earths;
48. Notes the important role of Member States in increasing the sustainable domestic supply of CRMs from primary and secondary sources; calls on the Member States to improve the timeliness, predictability and transparency of the authorisation processes for prospecting and sourcing projects without lowering environmental and social standards;
49. Calls on the Commission and the Member States to make sure that sustainable CRM sourcing is based on an approach diligently balancing both the EU's increased need for sustainably sourced CRMs and the need to protect nature and biodiversity;
50. Highlights that improved and more flexible predictability and efficiency, as well as prioritising key enablers such as a competitive renewable and transitional low-carbon energy supply, will help to unlock necessary investments;
51. Expects the Commission to provide further details on the operationalisation of CRM projects as an alternative business model and a source of regional employment in coal mining and other regions in transition;

### ***Diversification***

52. Urges the Commission to foster relations with all existing CRM supplier countries of the EU, to systematically and strategically build new CRM partnerships, in cooperation with our allies, where possible, taking into account the sovereignty of non-EU countries over their resources, so as to ensure that CRM becomes a source of welfare for developing countries, to promote the participation of SMEs and make this endeavour a horizontal task of its external and internal policies, and to present the results in 2021; welcomes the Commission's plans to establish strong and supportive international partnerships by endorsing a global agenda on raw materials, aiming for EU strategic partnerships that ensure both security of supply and development benefits;
53. Stresses that if the European Green Deal simply displaces the EU's greenhouse gas emissions to its trading partners, it will have no impact at all on climate change; urges the EU, therefore, to push for enforceable multilateral agreements on containing global warming and exporting its environmental standards, including for sourcing and processing; considers that the EU will need to develop new trade and investment agreements, new models of financial and technical assistance and, more generally, a new approach to international diplomacy aimed at ensuring a level playing field;
54. Welcomes the EU's commitment to responsible and sustainable sourcing and encourages the Commission to take the standard for responsible mining developed by the Initiative for Responsible Mining Assurance as a starting point, taking into consideration the needs of SMEs; stresses the need to underpin this commitment with concrete technical support, knowledge transfer, building of skills, institutions and legal frameworks, institution-building and political dialogue with partner countries; stresses

the need for homogeneous policies related to ethical standards for CRM sourcing; stresses the need to mobilise more state and private actors to also subscribe to and implement sustainability standards;

55. Welcomes the Commission's public commitment to introducing a legislative proposal on corporate due diligence and corporate accountability in 2021, and insists that this legislation contribute to addressing human rights abuses and social and environmental standards in value chains; recalls its resolution with recommendations to the Commission on corporate due diligence and corporate accountability;
56. Believes that international agreements should pave the way for more responsible and sustainable sourcing globally; calls for enhanced cooperation to develop international agreements for better monitoring, notification and implementation of CRM export restrictions to promote responsible sourcing and increase circularity in this sector;
57. Reiterates its call in its resolution on a new EU-Africa Strategy for fair and sustainable exploitation of CRMs in Africa; supports the Commission in its endeavours to conclude new CRM partnerships with African countries to strengthen the value chain in Africa to make it ethically, environmentally and technologically more sustainable and enable EU support for capacity building;
58. Calls on the Commission to strengthen standardisation activities with regard to CRM-related high-quality components in relevant international fora, since this is important for EU companies, in particular SMEs;
59. Calls for the scaling up of sustainable agricultural practices beneficial to sustainable phosphorus management; highlights the synergies of such practices with reduced climate and biodiversity footprints;
60. Asks the Commission to propose effective EU-wide collection scheme rules to increase collection rates of waste products containing CRMs; calls on the Commission to assess, among other options for extended producer responsibility, introducing deposit refund schemes in EU waste legislation, in particular in the WEEE Directive, taking into account the characteristics of different products, while ensuring the schemes are compatible across Member States, in order to incentivise consumers to bring their end-of-life electrical and electronic equipment – particularly small items – to dedicated collection and recycling facilities, building on positive experience from deposit refund schemes for glass and plastics in many Member States;
61. Regrets that the low level of recycling in some uses<sup>1</sup> and the export of aluminium waste and scrap<sup>2</sup> have led to a lower end-of-life recycling input rate (EOL-RIR) than could have otherwise been achieved; stresses that the EU should aim to put in place measures to achieve 100 % EOL-RIR for aluminium;
62. Calls on the Commission to prioritise CRM extraction from existing domestic mines – i.e. from mine tailings, waste rock, landfills and through more effective urban mining –

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<sup>1</sup> While EOL-RIR in Europe for aluminium used in transport and buildings was over 90 %, only 60 % of the aluminium used in packaging was recycled in 2013.

<sup>2</sup> 'If the EU had processed domestically the flow of aluminium waste and scrap exported in 2015, the EoL-RIR would have increased to 16 %' (Passarini et al., 2018), from the Commission Study on the EU's list of Critical Raw Materials.



in preference to new mining, if sustainable, i.e. if the environmental impacts, including from energy and chemical use, are smaller; stresses that this extraction and subsequent restoration must be carried out using the best available techniques, guaranteeing best ecological performance and economic viability;

63. Calls on the Commission to pay particular attention to the post-extraction phase of mining projects and the end-of-life phase of CRMs, in accordance with the waste hierarchy established in the Waste Framework Directive, and especially where CRMs are also hazardous substances;
64. Believes that mining permits and concessions should include requirements for the safe, efficient and sustainable recovery and processing of all economically and technically recoverable CRMs; asks the Commission to urgently implement Parliament's demands in its resolution on implementation of the Mining Waste Directive; reiterates that the questionnaire currently used as a reporting system under Article 18 of the directive is not fit for purpose, and asks the Commission to create a harmonised, digitised and transparent EU registration system that is based on harmonised definitions of and treatment criteria for mining waste and that includes all the relevant environmental impact data, including the content concentrations of waste deposits;
65. Calls on the Commission to tighten enforcement and ensure full implementation of current EU environmental legislation and to propose amendments to legislation where necessary;
66. Encourages a comprehensive assessment of the mining sector's inclusion in the scope of the Industrial Emissions Directive given the high environmental impact of mining activities, the on-average large size of mining projects, the variations in the pollution management standards applied in mining sites across the EU, and the potential expansion of CRM mining activities in the EU; suggests that best available techniques be identified for mine restoration specifically relating to soil and water;
67. Encourages the Commission to review the Environmental Impact Assessment Directive to ensure that an environmental impact assessment is carried out for mining projects of all sizes, and that these assessments are performed by an independent third party;
68. Considers that mining emissions and CRM imports should be covered by the future carbon border adjustment mechanism;
69. Notes the challenges and risks associated with mining in protected areas, i.e. Natura 2000 areas, and believes that mining in these areas should remain tightly restricted; underlines that mining in protected areas is subject to the conditions laid down in the Birds and Habitats Directives and stresses that any new mining or extractive project must undergo a thorough environmental impact assessment in order to minimise its environmental impact; calls on the Member States and the mining industry, in line with the polluter pays principle, to take appropriate conservation measures to maintain and restore to a favourable conservation status the habitats and species for which the site has been designated; highlights, in this regard, the Commission's guidance document on

non-energy mineral extraction in relation to Natura 2000<sup>1</sup> as well as its respective case studies and best practices;

70. Recalls the Commission's commitment to ensure marine minerals in the international seabed cannot be extracted or used before the effects of deep sea mining on the marine environment, biodiversity and human activities have been sufficiently researched, the risks are understood, and it is proven that the technologies and operational practices do no serious harm to the environment, in line with the precautionary principle, and calls for Parliament and the Council to make the same commitment; encourages the Commission to translate this commitment into concrete actions to protect these highly vulnerable ecosystems;
71. Calls on the Commission to consider legislative options in line with the Espoo and Aarhus Conventions to ensure that local authorities adopt and enforce the right of local communities to effective and inclusive participation in permit procedures for new mining prospecting and extraction projects, throughout all stages of mining projects and when permit requests for the extension of existing mines are submitted, and to ensure that local communities have the right of recourse to effective redress mechanisms governed by independent courts and oversight bodies free from any conflict of interest;
72. Welcomes the emphasis on CRMs in the Commission's communication on the Trade Policy Review; calls for an assertive trade policy emphasising the diversification and resilience of supply chains, and prioritising the improvement of global and EU mechanisms to create a favourable trade environment for EU industry;
73. Stresses that EU industry faces fierce international competition for access to raw materials and is vulnerable to export restriction measures by non-EU countries; acknowledges that a global increase in demand is likely to lead to an increase in prices and encourages the Commission to present an analysis of this point;
74. Calls on the Commission to diversify the supply sources of CRMs as much as possible, increase resource efficiency and reduce current reliance on a few non-EU countries by supporting investment which engages EU and global partners and SMEs as a part of a long-term international sourcing strategy; stresses that this goal should be achieved by strengthening existing partnerships and trade agreements and building new strategic agreements or EU joint ventures with resource-rich and other like-minded sourcing countries, in accordance with clearly defined priorities; welcomes in that sense the ongoing dialogue with Canada, Australia and Chile, aiming to strengthen trade relations in the area of CRMs; calls on the Commission to further reinforce cooperation during the next EU-US-Japan Conference on Critical Materials; emphasises the need for closer cooperation with key international suppliers in the Western Balkans, eastern Europe, Latin America and Africa, as well as with China and other developing countries in the global south;
75. Underlines that future EU free trade and partnership agreements can provide not only greater supply security but also a reliable political and economic framework, and that they should include specific provisions on CRMs, as announced by the Commission in its Trade for All Strategy, in order to promote cooperation, ensure compliance with

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<sup>1</sup> Directorate-General for Environment, 'Guidance document on non-energy mineral extraction and Natura 2000: a summary', European Commission, Brussels, 2019.

international commitments, eliminate and avoid export restrictions and comply with the current rules for pre- and post-establishment of foreign direct investments; calls on the Commission to further enhance the monitoring and enforcement of free trade agreements, including trade and sustainable development chapters, to ensure that commitments and provisions on the responsible sourcing of CRMs are defined and are met by trading partners and that the possible concerns of communities affected by extractive activities are considered; underlines that this should be among the priority tasks of the Chief Trade Enforcement Officer;

76. Calls on the Commission to launch a discussion at the WTO on the constraints placed on the scaling up of a circular economy by local content requirement measures, to build a stronger partnership with different world regions, in particular Africa, and to ensure that free trade agreements reflect the enhanced objectives of the circular economy;
77. Calls for rules of origin to be used in a stricter way to safeguard raw material production and prevent circumvention in regions where operators are subject to less stringent sustainability and industrial subsidy requirements; underlines that any new sourcing activities by companies operating in the EU market have to be consistent with the Conflict Minerals Regulation, the rules on responsible sourcing described in the Non-Financial Reporting Directive and international standards for responsible commodity sourcing; calls for a ban on the import of CRMs linked to human and workers' rights violations such as forced labour or child labour;
78. Underlines that a fully functioning rules-based multilateral trading system is key to ensuring open and sustainable trade flows of CRMs; expresses concern at the use of export restrictions on CRMs by some WTO members, including China, and urges all members to refrain from pursuing such policies; calls on the Commission, therefore, to use international fora to curtail such distortive export restrictions on CRMs; renews its call on the Commission, in this regard, to redouble its efforts to achieve an ambitious reform of the WTO in order to fight distortions of international trade and unfair trade practices, provide a stable and predictable international trading environment and guarantee fair and effective competition worldwide;
79. Welcomes the Joint Statement of the Trilateral Meeting of the Trade Ministers of Japan, the US and the Commission, and supports the proposed definition of industrial subsidies; welcomes the fact that the definition extends beyond those set out in the WTO Agreement on Subsidies and Countervailing Measures and the EU Anti-Subsidy Regulation, and provides a broader definition of a subsidy; believes that such measures are crucial in levelling the international playing field in the area of CRMs, as industrial subsidies, particularly in China, pose a serious threat to EU industry and workers since they distort international competition;
80. Welcomes the joint EU-US initiative on addressing global steel and aluminium excess capacity and calls for comprehensive and expeditious measures to hold to account countries such as China that support trade-distorting policies; reminds the Commission, however, that for the time being the US Section 232 tariffs remain in full force and that this issue must urgently be resolved;
81. Agrees with the Commission's assessment that shifting EU import payments for CRMs from other international currencies to the euro would have some advantages, such as

reducing price volatility and helping to make EU importers and non-EU exporters less dependent on US dollar funding markets;

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82. Instructs its President to forward this resolution to the Council and the Commission.