Do the NextGenerationEU funds respect the biophysical limits of the planet?

FAQs on the PERTEs and critical raw materials for the green and digital transition

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Title: Do the NextGenerationEU funds respect the biophysical limits of the planet? FAQs on the PERTEs and critical raw materials for the green and digital transition

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WHY THIS GUIDE?

This document is intended as a tool for people in decision-making spaces in public institutions working on the implementation, monitoring and justification of the European NextGenerationEU funds and their principal implementation mechanism in the Spanish State, the “Strategic Projects for Economic Recovery and Transformation” [Proyectos Estratégicos para la Recuperación y Transformación Económica, PERTEs]. It also contains concrete proposals to reverse the injustices and negative impacts created by the transition model financed by the NGEU funds and to enable a just ecosocial transition. In addition, information is provided for journalists and activists involved in analysis, monitoring and advocacy in the field of public policy on critical raw materials, green transitions and their impacts on the environment, society and other countries.

1

What are the NextGenerationEU funds?

When COVID-19 was declared a pandemic by the World Health Organisation (WHO) on the 11th March 2020, public institutions at European and national level set various mechanisms and subsidies in place to rescue the European economy[1]. These included the so-called NextGenerationEU funding package. **This public aid package was announced by the European Commission (CE) in July 2020, consisting of €750 billion to be disbursed to EU member states between 2021 and 2027 in the form of direct subsidies and loans.**

In order to finance NGEU, the European Union borrowed money on the financial markets by issuing "Eurobonds". These bonds are a form of pooled debt, meaning that all 27 member states share the risks and responsibilities towards private creditors to repay the debt when the bonds expire in 10-30 years. Ultimately, therefore, both the loans and the subsidies provided through NGEU to member states will need to be paid back to creditors.

2

What sort of transition are the NGEU funds financing?

The objective of NextGenerationEU is not only to fund the economic recovery from the impacts of the COVID-19 pandemic but also to transform the economies of EU member states (which had been languishing on life-support systems since the 2008[2] crisis and did not comply with climate objectives). **The European Commission (EC) took the opportunity to tie funding to the modernisation of industries and economies** as had already been envisioned in its 2019 European Green Deal strategy, **stipulating that this modernisation should happen within the framework of a "green, digital transition": 37% of the funds are to be allocated to the green transition and 20% to digitalisation.** In addition, all NGEU investments must "do no significant harm" to the environment[3].

Specifically, the European Green Deal strategy promotes a transition based on green technologies: that is to say, renewable energy, electric transport and the digitalisation of a large proportion of the economy to reduce greenhouse gas emissions. According to the European Commission (EC), this will make Europe more competitive at a global level and stimulate European economic growth. However, the strategy does not contemplate structural changes to economic governance, nor the redistribution of wealth, nor does it properly recognise social reproduction or socially necessary work (largely performed by women). It therefore wastes an opportunity to combat multiple growing inequalities.

3

In the Spanish State, what will the NGEU funds mainly be used for?

The Spanish State and Italy are the countries set to receive most money from the Recovery and Resilience Facility (RRF), an NGEU mechanism which will channel 90% of the funds. In July 2021, Brussels approved Pedro Sánchez's government's "España puede" ["Spain can"] Recovery, Transformation and Resilience Plan[4] and thereby the €69,582 million euros in direct subsidies it sets out to be paid between 2021 and 2023 to facilitate Spain's green, digital economic transition. Recently, the government announced that it would apply for the remaining €70,000 million euros in loans from the RRF during 2022 mainly to finance the energy security measures proposed in the European strategy REPowerEU.

Looking at the NGEU subsidies approved between July 2021 and April 2022, we can see that the **NGEU funds are principally destined for three cornerstone areas: the energy transition, the transition to electric transport and digitalisation.**

The subsidies for the energy transition are directed at decarbonisation, energy efficiency, rolling out renewable energies, developing energy storage and the circular economy. Particularly significant is the Strategic Project for Economic Recovery and Transformation (PERTE after the Spanish acronym) for renewable energy, renewable hydrogen and energy storage (allocated €6,920 million in subsidy) and the PERTE for the circular economy (allocated €492 million in public subsidy).

For the transition to electric transport, subsidised areas include the electrification of the economy (in particular the automotive sector) through the PERTE for the development of the smart electric car, which is allocated €4,295 million in NGEU subsidy. They also include the MOVES III subsidies, which are direct subsidies worth €400 million allocated to the Autonomous Communities to incentivise the purchase of electric vehicles (cars, vans, motorcycles and quad bikes) and the installation of charging infrastructure. In addition, public subsidies worth €6,667 million are envisaged for the construction of railway infrastructure connecting Spain with Portugal and France, including €1,250 million for the Atlantic Corridor and €1,556 million for the Mediterranean Corridor.

Digitalisation is a thread which runs through all the NGEU projects. From July 2021 to April 2022, this area saw subsidies for digitalising processes and activities in SMEs (for example, the €500 million Kit Digital programme for digitalising business and the €2,000 million Next Tech fund for innovative digital projects), in specific sectors (such as agrifood, water, care and tourism) and in areas of the public sector (digitalisation projects in healthcare, justice and employment). Calls for proposals have also been launched for developing 5G, connectivity and cybersecurity. The PERTE with the largest funding allocation is expected to be launched in 2022, comprising €11,000 million to be invested in the production of microchips and semiconductors.

It is worth highlighting that almost all of the significant investments which the government categorises as gender equality measures are to be found in the package of digitalisation investments. For example, in the PERTE for cutting-edge healthcare (a feminised sector) investments are directed towards digitalisation and research and not to improving the employment conditions of the (largely female) workforce. Another example is the allocation of €1,800 million to the Autonomous Communities for the development of basic digital skills training aimed at women to increase their competitiveness in a digitalised economy, while there is no support for initiatives which fight for the recognition of reproductive and socially necessary work (largely performed by women) which the COVID-19 pandemic demonstrated to be essential for sustaining basic economic activities.

4

How is the funding being distributed?

The Spanish government will use three mechanisms to distribute the RRF funds: **(1) strategic projects for economic recovery and transformation (PERTEs)** - large public-private partnerships coordinated by government ministries, with the 11 PERTEs approved so far accounting for €32,293 million in public subsidies[5]; **(2) transfers of funds to the Autonomous Communities,** a sum of €13,000 million to date[6] and **(3) calls for proposals and direct tenders managed by the State** through its ministries, with the funds going to private companies or local entities, accounting for a sum of €8,500 million to date.

Throughout the whole process (from project design to the distribution of funds) the government has played a central role in governance and decision-making. It is government ministries which have prioritised certain projects, partnerships and investments (especially in the case of the PERTEs)[7]. Only 12-16% of the RRF funds are set to be allocated by the Autonomous Communities, which will take on the role of the funds' executors, collaborating with the central government through sectoral conferences. Local councils play a secondary role in the governance of the funds[8] as the beneficiaries of some of the tenders.

5

How are PERTEs structured, and why is this important?

A PERTE is a new form of public-private partnership (PPP) created by means of Royal Decree-Law 36/2020[9] on approving urgent measures for the modernisation of Public Administration and executing the Recovery, Transformation and Resilience Plan. **The PERTEs form part of a "mixed economy" model, very weakly regulated in the Spanish State[10], in which the public sector takes on risks and backs projects with guarantees whilst the private sector profits from the construction and/or management of goods and services.**

Public-private partnerships have been called into question by experts, non-governmental organisations and the European Court of Auditors[11], itself as there have been numerous cases where states have ended up taking on debt to pay bills to private companies, which assume fewer and fewer of the risks. A clear example is the Castor case[12], a gas storage project led by Florentino Pérez's ACS in collusion with the PSOE (Spanish Socialist Worker's Party) and PP (Popular Party) governments which caused earthquakes, never functioned and will cost citizens more than €3,000 million. The same model (that is to say, that private companies keep the profits and the state takes on risks and losses) also applies to the PERTEs. If a company squanders money or does not comply with the requirements set out for receiving NGEU funds (for example, "doing no significant harm" to the environment)[13] then according to Royal Decree-Law (RDL) 36/2020, it is the Treasury (and ultimately, the taxpayer) that will need to repay the money to Brussels if the European Commission detects serious irregularities (fraud, conflicts of interest, corruption), double funding or a serious breach of the obligations agreed to in the funding agreements between the Spanish State and the European Commission[14].

The danger is that the projects funded by NGEU will not comply with European regulations (in particular the requirement to "do no significant harm" to the environment) since Royal Decree-Law 36/2020 itself has still not been debated and passed as a law by the Congress of Deputies. This Decree-Law substantially reduces the time allowed for completing the environmental impact assessments established by the Legal Framework of the Public Sector (Law 40/2015), the law on Public Sector Contracts (Law 9/2017), the law on Environmental Assessment (Law 21/2013) and other regulations on the prevention and control of pollution and industrial emissions "with the aim of shortening the timelines foreseen for granting environmental approval" to the projects to be funded[15].

6

Do we know which companies will receive NGEU subsidy through the PERTEs?

To ensure better transparency regarding the companies benefitting from the funds, in March 2022 (almost 12 months late according to RDL 36/2020) the Treasury published a Ministerial Decree for a national Register of the companies participating in the PERTEs. In principle, this register is public. Ministries are required to provide the Treasury with complete information regarding the companies which, after evaluation, have been considered suitable to participate in their PERTEs within three days of approving the company. However, no companies are listed in the register to date, although this is the most basic requirement for a minimum level of public scrutiny. **The only information available comes from press reports on projects formulated by large companies, which have assembled consortia to apply for PERTE grants,** for example Volkswagen and Seat, which are leading the Future: Fast Forward project involving 60 other companies[16], or Iberdrola and Repsol, which have created the SHYNE (Spanish Hydrogen Network) consortium containing 33 entities[17].

Figure 1:
Strategic projects for economic recovery and transformation (PERTEs) approved as of 14th June 2022

Companies listed in the national Register of entities participating in PERTEs (Treasury)

NOT PUBLISHED

NGEU funding amount received by each company

NOT PUBLISHED

Total approved: 32,293 millions of €

Source: Government of Spain.
https://planderecuperacion.gob.es/como-acceder-a-los-fondos/pertes

How much money for each PERTE?

7

Why have a PERTE for the electric vehicle?

The first PERTE approved by the Council of Ministers was the PERTE for the development of the smart electric vehicle on the 13th July 2021: an investment of more than €24,000 million euros from 2021 to 2023, comprising a public sector contribution of €4,300 million and a private investment of €19,700 million, aiming to strengthen "the value chains of the Spanish automotive industry, a strategic sector for Spain" and to "turn Spain into the European electromobility hub"[18].

In the context of rising global greenhouse gas (GHG) emissions and the exhaustion of easily accessible oil reserves, the transport sector finds itself in need of reform. To tackle this situation, aggravated by supply chain disruptions and increased prices for raw materials during the pandemic, both governments and automotive industry companies have set out objectives for promoting electric vehicles over vehicles which use internal combustion engines[19].

In this context it is worth noting that, according to 2020 production statistics published by the International Organisation of Motor Vehicle Manufacturers (OICA after the French acronym)[20], the Spanish State was the seventh largest car manufacturer in the world and the second largest in Europe after Germany. At the same time, in February 2022 the automotive sector in Spain constituted the fourth largest sector in the country in terms of foreign trade, representing 12.2% of total exports[21]. However, between January and August 2016, the Spanish automotive sector was the second largest in terms of foreign trade, accounting for 17.9% of total exports[22]. As Moral[23], asserts, since 2016 the value of exports shows a slight fall partly due to the stagnation of European target markets but fundamentally due to the mix of products offered, with diesel vehicles representing a substantial portion of the total and only a marginal offering of alternative technologies[24] (7% of the total value of passenger car exports in 2020). What is more, one of the consequences of the pandemic was a collapse in vehicle exports in the Spanish State.

Therefore, **the multimillion-euro subsidies injected into the automotive industry should not only be understood as an industrial modernisation measure necessary for reducing CO2 emissions and implementing the promised green transition but also as a large-scale bailout of Spanish and European vehicle manufacturers.** For example, the Volkswagen Group and SEAT submitted a proposal formulated by the consultants PwC to implement to the PERTE for electric vehicles. At the time of writing, this project, named Future: Fast Forward, was still pending approval.

Even if this is a bailout, could the electric vehicle be a green, clean solution?

Electric transport is just part of the solution. **The drive towards electric vehicles is not as clean as it looks** (neither environmentally nor socially speaking) **and is even less so if it is based on the continued promotion of private electric vehicles without rethinking our current transport model.**

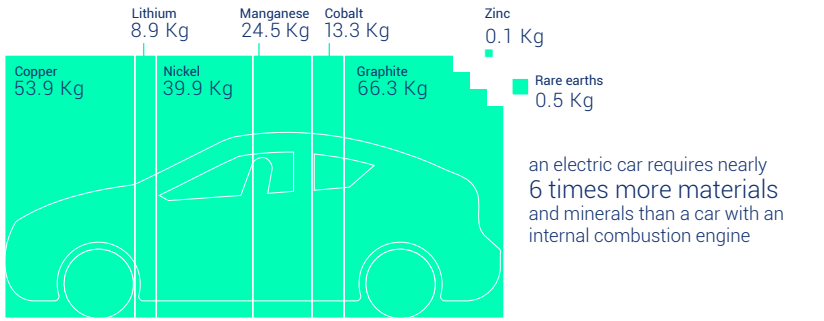
Even if the use of electric cars instead of internal combustion engines is preferable in terms of CO2 emissions, **the electric car is not green and does not produce zero pollution[25], but continues to be very dependent on fossil fuels and non-renewable resources[26].**

Firstly, the "new fuel" is electricity and "most electricity is still generated using fossil fuels[27], which means there is only a relative reduction in CO2 emissions"[28]. Furthermore, the manufacture of electric cars is mostly powered by fossil fuels and, overall, consumes more energy than producing an internal combustion car of the same type. This means, according to Prieto (2019), that "at the time of leaving the factory, an electric car has already consumed fuel equivalent to 55,600km compared to an internal combustion car if we take into account the extra energy required for its manufacture"[29].

Secondly, the production of electric vehicles generally requires more minerals than their fossil fuel-based counterparts[30]. Specifically, an electric car requires nearly six times more materials and minerals than a car with an internal combustion engine: elements like lithium, nickel, cobalt, manganese and graphite are crucial for the performance, longevity and energy density of the battery (or batteries, since the useful life of a battery tends to be shorter than the life of the vehicle[31]); rare earth elements like neodymium are essential for permanent magnets which are vital for electric vehicle motors; in addition, recharging points need copper, iron or stainless steel[32] and power networks require a large quantity of copper and aluminium, with copper being the cornerstone of all electric technologies[33].

Figure 2:

MINERALS REQUIRED FOR THE MANUFACTURE OF AN ELECTRIC CAR



8

Are there limits to the extraction of the raw materials required for the green digital transition?

Yes, there are. In other words, the government is spending public money to promote the development and transformation of sectors which impact other territories and communities and conflict with the biophysical limits of the planet in the name of the "green digital transition". Therefore, it is important to highlight the material implications of the green transitions funded by NGEU funds beyond the transport sector and beyond the borders of Europe.

Not only electric transport, but also policies for the digitalisation of the economy and the energy transition, (for example, the construction of photovoltaic solar energy installations and wind farms) **will require an enormous quantity of minerals and raw materials extracted from territories outside the European Union.**

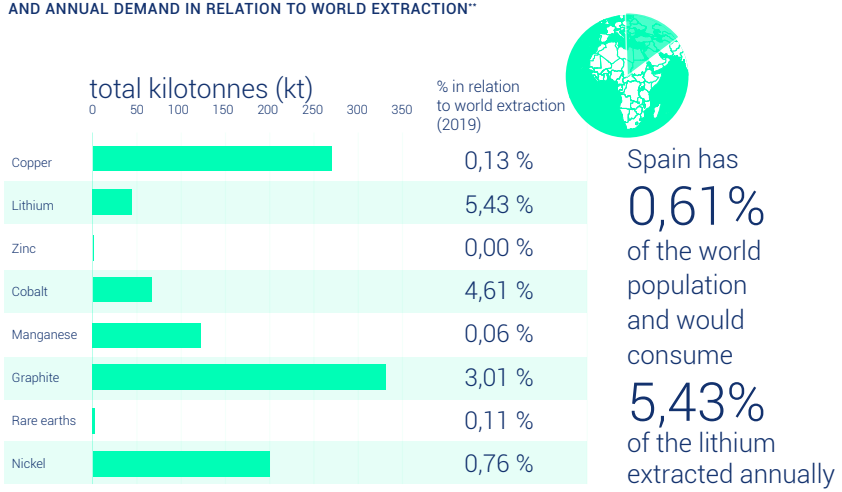
Most of the minerals required for the green digital transition only exist in low concentrations in ores, meaning more energy is required to extract the commercially valuable parts and to move and treat the remainder (known as gangue)[34]. This increases the emissions[35] associated with the process.

Some of these materials are considered to be critical raw materials – that is, resources which are at risk of running out in the near future[36]. For example, lithium, cobalt, graphite, rare earth elements and bauxite (used to manufacture aluminium) have been designated as critical raw materials by the European Union[37], which had already identified 14 critical raw materials as "those which display a particularly high risk of supply shortage in the next 10 years and which are particularly important for the value chain" in a 2011 communication[38] This list was updated in 2014, 2017 and 2020, and there are now a total of 30 materials designated as critical or fundamental raw materials for the EU.

In addition, it is important to highlight that the sustained increase in demand in conjunction with increasingly difficult access to critical raw materials[39] could lead to a new economic supercycle or boom, as happened at the beginning of the 2000s. Competition for access to critical raw materials is already leading to sustained price increases, which in turn make green technology more expensive. It is important to clarify here that the raw materials designated as critical change with time and by designating body. For example, as can be seen in the European Union definition, these changes are connected to what governments and institutions perceive to be strategic priorities for industry and the economy in terms of GDP.

The following graph shows the total demand for minerals (in total kilotons) with respect to Spain's Integrated National Energy and Climate Plan for 2021-2030[40] (PNIEC) and it's objective of having the presence of 5 million electric vehicles by 2030 in the Spanish state, as well as the annual demand (in percentages) of those minerals in relation to world extraction of 2019.

Figure 3:
TOTAL DEMAND FOR MINERALS IN THE SPANISH STATE*
AND ANNUAL DEMAND IN RELATION TO WORLD EXTRACTION**



Source: Own elaboration based on data from the International Energy Agency (IEA) and the United States Geological Survey (USGS).

*This graph represents, first of all, the total demand for minerals (in total kilotons) with respect to the PNIEC objective of having the presence of 5 million electric vehicles (including cars, vans, motorcycles and buses) by 2030 in the Spanish State. Some clarifications are worth mentioning: 1) The projection is based on the assumption that presence means *new manufacturing* -without taking into account possible vehicles already in operation; 2) The calculations have been made based on the kg of materials needed to manufacture an electric car– according to lthe estimations of the International Energy Agency – but do not include the kg of materials needed for motorcycles, vans or buses.

** Next to the first graph representing the total demand in kilotonnes, there are the percentages of world extraction in 2019, on a scale that includes up to 6%. It is also necessary to point out that the projections have been made considering primary extraction -in accordance with current policy trends in the Spanish state- without taking into account other options like secondary extraction and recycling of those materials through the promotion of urban mining (something that hasn't been developed enough in the Spanish Integrated National Plan for Energy and Climate).

If we look at the projections for annual demand, we can see how the percentage of extraction stands out compared to the world extraction of 2019 for lithium, cobalt and graphite. This means that with respect to the global extraction of lithium in 2019, 5.43% of the extraction of that mineral would be necessary each year, only to meet the Spanish State demand with respect to the PNIEC objective of 5 million electric vehicles by 2030. The same would happen with copper (4.61%) and graphite (3.01%).

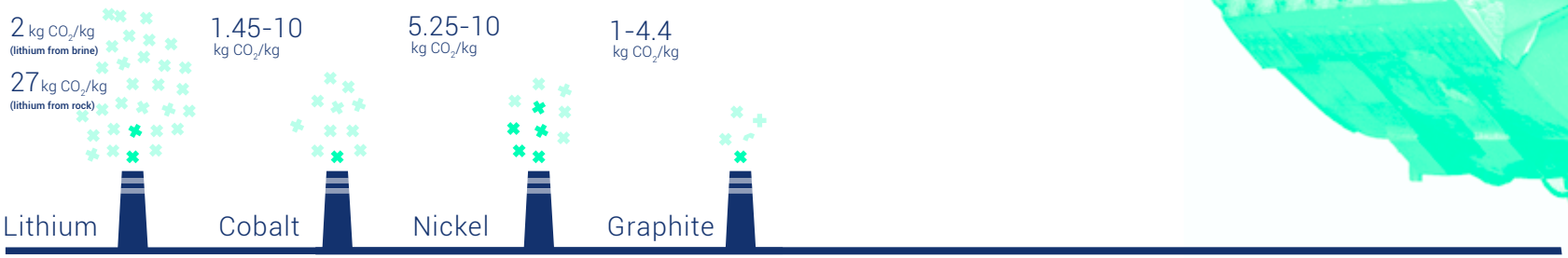
What impacts would the extraction required to achieve the European green transition have?

Extraction has severe socio-environmental and climate consequences, especially for the land and communities where the minerals are extracted. Neither the NGEU funds nor the European Green Deal strategy which underpins them recognise these external impacts in other countries: no indicators have been established for measuring global impacts and there are no control or reparation mechanisms for communities affected by the Spanish government or the European Union[41].

To begin with, mining for the green transition has climate impacts. The 2017 United Nations International Resource Panel (IRP) declared that, on a global level, mining is responsible for 20% of climate change-related impacts. The *International Energy Agency* estimates an increase in the extraction of critical minerals over the next two decades for minerals like lithium, graphite, cobalt, nickel and rare earth elements. These increases are expected to be by factors of 42, 25, 21, 19 and 7 respectively. By combining this with the estimated emissions for the production of each material we can form a complete picture of what the projected increase in primary extraction means in terms of emissions.

Figure 4:
AVERAGE EMISSIONS FROM EXTRACTION TO REFINEMENT BY MATERIAL

Source: Created by the authors using data from Follow-up feasibility study on sustainable batteries under FWC ENER/C3/2015-619-Lot11



In addition, the extraction and supply of minerals for green technologies requires fossil fuels. The fuels mainly used come from petroleum products (fuel oil, diesel, petrol) and the processes involved are not electrifiable in the short term, nor will the transition happen fast enough on a global scale to use so-called green diesel or green hydrogen. Therefore, this material dependency is a new layer of complexity overlaid on the existing issues and requires fossil fuels to service it.

Furthermore, mining is one of the sectors most responsible for social and environmental conflict. According to Global Witness' 2019 report, *Defending Tomorrow*[42], which detailed 212 people murdered in 2019 whilst defending land or the environment, mining was the most lethal sector with 50 people murdered. Large-scale agriculture, mining and logging continue to cause the majority of attacks on people defending the environment world-wide.

Along the same lines, the EJAtlas[43] (an EJOLT academic project) compiles 710 cases of socio-environmental conflict under the heading of "mineral ores and building materials extraction", and in half of these the group involved in the conflict was an indigenous community. According to the *Undermining Rights: Indigenous Lands and Mining in the Amazon* report[44], "the activities of extracting and processing raw materials" are not exactly "key activities supporting human rights", but the complete opposite: they violate human rights and have severe impacts on land, biodiversity and water sources.

In the green transition plans and proposals put forward by the Spanish government and its ministries such as MITECO there is a marked absence of recognition and reparation for the social and environmental impacts of these past and present realities. Responsible mining proposals have been shown to be insufficient and have not halted the severe problems caused by mining in terms of socio-environmental conflicts or human rights violations, which are suffered in particular by women.

9

Are the Government's proposals to end external dependence on critical raw materials sufficient?

It is vital to end the current extractivist model which is based on global supply chains which begin in extraction zones in the Global South and end in shops and retail platforms in the Global North. From a socio-environmental standpoint these global supply chains (understood as the combination of activities required to sell a product from the acquisition of raw materials through to processing, transport and sale to the final consumer) are marked by unequal relationships where workers and territories in the Global South take on most of the negative socio-environmental impacts. From an ecosocial transition perspective, **it is necessary to put forward proposals for secondary extraction, such as urban mining, whereby materials are extracted from landfill and not from natural environments.**

With the NGEU funds, the Government starts promoting the circular economy, but the measures are insufficient. One of the objectives of the PERTE for circular economy (with a planned budget of €492 million) is to create an entire value chain for recycling renewable energy equipment. However, the *circular economy* concept has its limitations. A significant problem with critical raw materials is how dispersed they are, with relatively little technical and economic capacity available to concentrate them. Recovering and recycling materials incorporated in products in minute quantities (micrograms or nanograms) is practically impossible[45]. Although resources are being invested in research into the recovery of small components and urban mining, and materials can be recycled through improved product design focussing on the entire product life-cycle, it will never be possible to recover all the raw materials used. There will always be losses, and it makes more sense to talk of the "spiral economy"[46].

Furthermore, in the face of interruptions to supply chains, increasing prices and demand for raw materials and decreasing access to them, MITECO's Draft Roadmap for the Sustainable Management of Mineral Raw Materials proposes the development of domestic mining based on the circular economy idea, arguing that this would fulfil more development objectives and comply with CO2 emissions reduction standards. However, this proposal would perpetuate primary extraction.

Therefore national mining will not be a solution, as will recycling and urban mining be insufficient to meet the projected increased demand for critical raw materials for the green transition envisaged by the EU and the Spanish State. **Therefore, a truly effective measure to combat the scarcity of critical raw materials and reduce dependencies on other countries would be a reduction in production and consumption.** How? Through reuse, repair and the abandonment of planned obsolescence, for example through as-a-service business models which favour sharing the use of products or by promoting the use and consumption of local resources[47], (amongst other examples).

So, **what are we proposing?**

1. **We believe the Spanish government should undertake a transparency exercise regarding the companies to receive NGEU funding. It is essential that this is systematically published and that the names of the companies and the amounts of public subsidy they are to receive are easily accessible.** In the case of the PERTEs, the Treasury should expedite the publication of the beneficiary companies in the State Register of companies with interests in the Strategic Projects for Economic Recovery and Transformation (PERTEs), as mandated by the Ministerial Decree of the 7th of March 2022.

2. **The government should establish and publish technical guidelines and mandatory indicators for the beneficiaries of the funds** (both private companies and public institutions) to be applied in the design, implementation and justification of projects, with the objective of recognising environmental impacts within the "do no significant harm" framework, gender issues and human rights violations all along the global supply chain from its very beginning. In the case of mining for the green transition, this should include all references to the emissions caused by the extraction of resources.

3. **We demand that Royal Decree-Law 36/2020 is debated in the Congress of Deputies and that the citizen amendments made through the OpenGenerationEU[48] platform are taken into account,** which include (among other amendments) a refusal to allow the substantial reduction of the time allowed for environmental impact assessments for projects financed with NGEU funds.

4. **We demand a detailed justification from the government on how responsibilities to other countries will be handled within the green digital transition investments made through NGEU** and how the mining sector's historic reality can be reversed to turn it into a guarantor, defender and promotor of human rights. This should detail both the legal/administrative and economic/financial mechanisms to be used to achieve this aim.

5. **Proposals to combat critical raw material scarcity and reduce dependencies on other countries[49]:**

   - **Public administrations should promote urban mining, material recycling and secondary extraction** at the expense of primary extraction.
   - **Public administrations should support research and development into full life cycle product design** as well as reuse and repair business models, favouring the shared use of products and promoting the consumption and use of local resources.
   - **The Spanish government and the European Commission should initiate public policies which lead to scenarios of reduced demand in the short term and a just distribution** of critical raw materials at a global scale.

Bibliography

1 For more information, see the bailouts and mechanisms applied by the Spanish government, Official Credit Institute [Instituto Oficial de Crédito, ICO], and State Industrial Ownership Corporation [Sociedad Estatal de Participaciones Industriales, SEPI] and the European Central Bank (ECB) at: https://odg.cat/es/campana/rescates-covid19/

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3 Spanish government (18th February 2021). Commission Notice on technical guidance on the application of "do no significant harm" under the Recovery and Resilience Facility regulation. Available at: https://www.boe.es/buscar/doc.php?id=DOUE-Z-2021-70014

4 Spanish government. Recovery, Transformation and Resilience Plan. Available at: https://planderecuperacion.gob.es/

5 For more information, consult the II Recovery Plan Status Report of April 2022. Available at: https://planderecuperacion.gob.es/sites/default/files/2022-04/28042022_Informe_de_Ejecucion_del_Plan_de_Recuperacion.pdf
The details of the PERTEs can be consulted at: https://planderecuperacion.gob.es/como-acceder-a-los-fondos/pertes

6 €14,485 million from the other NGEU mechanism, REACT EU, should be added to this. The Autonomous Communities can use REACT EU funds for direct subsidies to businesses, structural health and education reforms and, since February 2022, to help refugees from Ukraine. For more information consult the Second Recovery Plan Status Report [Informe de Situación del Plan de Recuperación], published April 2022. Available at: https://planderecuperacion.gob.es/sites/default/files/2022-04/28042022_Informe_de_Ejecucion_del_Plan_de_Recuperacion.pdf

7 This is led by the Ministry of Economy and Finance (the Treasury) and the Ministry of the Ecological Transition and the Demographic Challenge.

8 The governance of the NGEU funds is regulated by Royal Decree-Law 36/2020 of the 30th December 2020, which at the time of writing had still not been debated and passed by the Congress of Deputies. For more information on the citizen initiative on this and the citizen amendments proposed, see: https://opengenerationeu.net/

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12 *La Vanguardia* (30th December 2020). "El Estado acude a deuda pública para pagar a los bancos por el almacén Castor". Available at: https://www.lavanguardia.com/vida/20201230/6156846/acude-deuda-publica-pagar-bancos-almacen-castor.html

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35 It is worth saying that the intensity of the emissions from the production of minerals can vary considerably from company to company and region to region depending on production processes, energy sources, electricity mixes and the speed of decarbonisation (IEA, 2021).

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For more information, see: https://alternativaseconomicas.coop/articulo/entrevista/hay-que-frenar-el-aumento-desbocado-del-consumo

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