



**SEGUNDO EJERCICIO DEL PROCESO SELECTIVO PARA EL INGRESO EN LA
ESCALA DE TÉCNICOS FACULTATIVOS SUPERIORES DE ORGANISMOS
AUTÓNOMOS DEL MINISTERIO DE MEDIO AMBIENTE**

PARTE B - IDIOMA INGLÉS

Critical raw materials for Europe

Lithium and cobalt (used in rechargeable batteries) or indium (used in touch screens) are 'critical raw materials' (CRMs) for the EU. The 30 existing CRMs combine two characteristics: they are strategically important for European industry and the economy, and there are high risks associated with securing their supply. While the challenges related to ensuring the availability of CRMs have been on the EU agenda for many years, and the current Commission had made it one of its priorities in 2019 already, it was the sudden disruption of global supply chains by the coronavirus crisis that delivered a resonating wake-up call. With almost half of the world under lockdown, many international logistics networks ground to a halt. This has brought to public attention the issue of the European economy's heavy dependency on global suppliers and made securing a sustainable supply of CRMs more important than ever.

Why are CRMs critical?

Firstly, these materials are widely used in key industries as well as in important and future-oriented value chains, which are essential for ensuring long-term competitiveness and jobs in Europe. In particular, they are fundamental to further progress in strategic sectors such as digital technologies, renewable energy, electric mobility, defence and aerospace.

Secondly, the EU is highly dependent on importing these materials from third countries, where they are often highly concentrated geographically. For example, 2020 figures showed that the EU depends on China for 44% of its supply of all CRMs, while in the case of rare earth elements – used in high-tech products, such as electric vehicles and wind





turbines – this figure jumps to 98%. Only three CRMs are more than 50% sourced from the EU. The risks are compounded by the fact that some of the CRM sources are located in politically and/or economically unstable parts of the world. For instance, the Democratic Republic of Congo, one of the world's poorest and perpetually conflict-torn countries, is the source of 68% of the EU's cobalt. Sometimes, even if there is a source in the EU, the processing takes place abroad. Building CRM value chains is complex and may take a long time – creating such a chain for rare earth elements, for example, may take up to 15 years. Furthermore, to a large extent, there are currently no viable substitutes for these materials.

CRMs are becoming a fundamental prerequisite to achieving the main goals of the EU. An increasingly challenging geopolitical environment is rightly being addressed by a strategic shift in EU policy towards autonomy. However, the EU will not become a stronger geopolitical player on the global stage without safe and sufficient access to CRMs. This is because they are needed to produce high-tech and high value-added products and develop key technologies fundamental to achieving economic, digital, and defence sovereignty in Europe.

This strategic drive for the EU, often labelled as increasing 'resilience', does not mean protectionism but rather, as Internal Market Commissioner Thierry Breton put it: 'having choice, alternatives, competition. Avoiding unwanted dependencies, both economically and geopolitically'. In the context of CRMs, this means 'open strategic autonomy'. On the one hand, the EU needs to strengthen its domestic supply through both the development of mining for primary CRMs and enhanced circularity to obtain secondary CRMs. There is a large potential here: Europe has substantial and diversified CRM reserves to be explored and currently recovers less than 1 % of CRMs from waste electrical and electronic equipment. On the other hand, given the vast scale of its demand for CRMs, the EU must forge sustainable strategic partnerships with resource-rich third countries and integrate those which are interested more tightly into European value chains.

