



BIORECOVER – PRESS RELEASE

LAUNCH OF THE BIORECOVER EU PROJECT AWARENESS CAMPAIGN

Objective :

TO EDUCATE, INFORM AND RAISE AWARENESS TO THE EUROPEAN PUBLIC ON THE CHALLENGES LINKED TO CRMs IN OUR DAILY LIFE;

July 2020. A European consortium has decided to raise awareness on the different forms which **Critical Raw Materials** (CRMs) take in our daily life, on their importance for the sustainability of our economy and on their potential risks in terms of supplies.

According to the **European Commission**, Critical Raw Materials (CRMs) have a necessary use and are subject to supply restrictions. It is a variable notion over time that is expressed in two ways: the **availability of the substance** and its **economic importance**. Most of the time, it translates into a price signal that encourages economic actors to take steps to mitigate its effects, either by increasing availability (new resources) or by reducing needs (changes in technological studies).

The BIORECOVER project aims the development of an innovative sustainable strategy for selective biorecover of critical raw materials from Primary and Secondary sources.

The CRMs involved can be regrouped in three categories:

- **Rare Earth Elements (REE)** : Despite their name, they are very abundant in our lands and can be retrieved in everyday items such as TV and Smartphones. Light Bulbs, speakers, washing machines, air conditioners are other examples of where you can find REE. Rare Earth Elements are vital for the creation of electronic goods. Those minerals are being used in the conception of magnets, compressors and motors, which is why you can find them everywhere in your house.
- **Magnesium (Mg)** : Their components are mostly used in incendiaries and as switch in thermites. Magnesium can generate a bright light which is why it is used in the creation of fireworks or sparklers. On a more daily use, you can retrieve Mg components in your car seats, laptops, cameras, etc. Regarding transportation, it is also present in the aviation sector – through engine parts, luggage frame, rockets, missiles – and ships, as components to prevent corrosion of iron and steel in pipes.

- **The Platinum Group Metals (PGM)** : They are used in a wide range of industrial, medical and electronic applications. It can also be found in jewelry because it is corrosion resistant. Components can be converted into glass, under a high melting point temperature. In electrical fields, PGMs are used for their conductive properties. PGMs are used in the medical field thanks to their catalytic properties.

The EU is highly dependent on raw materials that are essential for its **growth** and **competitiveness**. Unexploited raw materials offer great potential but, the development of innovative extraction techniques is essential:

- The expansion of renewable energy technologies such as electric car batteries and solar panels can be deeply impacted by a lack of REE.
- As CRMs are mainly produced in China and because the demand is growing, geopolitical issues could appear if China decides to lower its volume of exports.
- Business opportunities have appeared those past few years despite Europe's dependence on foreign imports for CRMs and uncertainty towards supply, price volatility and market changes.
- Europe's environmental impacts caused by its reliance on foreign imports and mining, can be decreased through the recycling of waste for a more sustainable use of CRMs.
- European countries have to find replacements and establish new, innovative, clean, and sustainable technologies in order to extract and transform CRMs.

To this end, BIORECOVER will be based on the integration of three main stages to reach the expected recovery rates (90%), selectivity (95%) and purity (99%) through pre-treatments, treatments and post-treatments.

Further information

CETIM - FUNDACION CENTRO TECNOLOGICO DE INVESTIGACION MULTISECTORIAL <https://biorecover.eu/>

Cristina and Lucía | Technical and Management - cmartinez@cetim.es & lvazquez@cetim.es



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