



BIORECOVER

Awareness Campaign

Launch



[Click on the video to discover the Biorecover Project](#)

Starting from June 2020, the BIORECOVER project aims to raise awareness on the extraction of Critical Raw Materials (CRMs). BIORECOVER's main objective is based on the research and development of a new sustainable and safe process, essentially based on biotechnology, for selective extraction of a wide range of CRMs. In order to raise awareness on CRMs, the H2020 funded project BIORECOVER has created a communication campaign in June 2020. This campaign aims to inform and raise awareness among the European public on the challenges linked to the 27 CRMs-as identified by the European Commission-, on the different forms which CRM take in our daily life, on their importance for the sustainability of our economy and on their potential risks in terms of supplies.

The BIORECOVER project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement N.821096.

Periodic Table of the Elements

1 H Hydrogen 1.008																	18 He Helium 4.003
3 Li Lithium 6.941	4 Be Beryllium 9.012											5 B Boron 10.811	6 C Carbon 12.011	7 N Nitrogen 14.007	8 O Oxygen 15.999	9 F Fluorine 18.998	10 Ne Neon 20.180
11 Na Sodium 22.990	12 Mg Magnesium 24.305											13 Al Aluminum 26.982	14 Si Silicon 28.086	15 P Phosphorus 30.974	16 S Sulfur 32.066	17 Cl Chlorine 35.453	18 Ar Argon 39.948
19 K Potassium 39.098	20 Ca Calcium 40.078	21 Sc Scandium 44.956	22 Ti Titanium 47.867	23 V Vanadium 50.942	24 Cr Chromium 51.996	25 Mn Manganese 54.938	26 Fe Iron 55.845	27 Co Cobalt 58.933	28 Ni Nickel 58.693	29 Cu Copper 63.546	30 Zn Zinc 65.38	31 Ga Gallium 69.723	32 Ge Germanium 72.631	33 As Arsenic 74.921	34 Se Selenium 78.971	35 Br Bromine 79.904	36 Kr Krypton 84.796
37 Rb Rubidium 84.468	38 Sr Strontium 87.62	39 Y Yttrium 88.906	40 Zr Zirconium 91.224	41 Nb Niobium 92.906	42 Mo Molybdenum 95.95	43 Tc Technetium 98.907	44 Ru Ruthenium 101.07	45 Rh Rhodium 102.906	46 Pd Palladium 106.42	47 Ag Silver 107.868	48 Cd Cadmium 112.414	49 In Indium 114.818	50 Sn Tin 118.711	51 Sb Antimony 121.760	52 Te Tellurium 127.6	53 I Iodine 126.904	54 Xe Xenon 131.29
55 Cs Cesium 132.905	56 Ba Barium 137.328	57-71 Lanthanides	72 Hf Hafnium 178.49	73 Ta Tantalum 180.948	74 W Tungsten 183.84	75 Re Rhenium 186.207	76 Os Osmium 190.23	77 Ir Iridium 192.222	78 Pt Platinum 195.085	79 Au Gold 196.967	80 Hg Mercury 200.592	81 Tl Thallium 204.383	82 Pb Lead 207.2	83 Bi Bismuth 208.980	84 Po Polonium (209)	85 At Astatine 209	86 Rn Radon 222.018
87 Fr Francium 223.020	88 Ra Radium 226.025	89-103 Actinides	104 Rf Rutherfordium (261)	105 Db Dubnium (262)	106 Sg Seaborgium (266)	107 Bh Bohrium (264)	108 Hs Hassium (285)	109 Mt Meitnerium (268)	110 Ds Darmstadtium (281)	111 Rg Roentgenium (272)	112 Cn Copernicium (277)	113 Uut Ununtrium unknown	114 Fl Flerovium (289)	115 Uup Ununpentium unknown	116 Lv Livermorium (293)	117 Uus Ununseptium unknown	118 Uuo Ununoctium unknown
57 La Lanthanum 138.905	58 Ce Cerium 140.116	59 Pr Praseodymium 140.908	60 Nd Neodymium 144.242	61 Pm Promethium 144.913	62 Sm Samarium 150.36	63 Eu Europium 151.964	64 Gd Gadolinium 157.25	65 Tb Terbium 158.925	66 Dy Dysprosium 162.500	67 Ho Holmium 164.930	68 Er Erbium 167.259	69 Tm Thulium 168.934	70 Yb Ytterbium 173.055	71 Lu Lutetium 174.967			
89 Ac Actinium 227.028	90 Th Thorium 232.038	91 Pa Protactinium 231.036	92 U Uranium 238.029	93 Np Neptunium 237.048	94 Pu Plutonium 244.064	95 Am Americium 243.061	96 Cm Curium 247.070	97 Bk Berkelium 247.070	98 Cf Californium 251.080	99 Es Einsteinium (254)	100 Fm Fermium 257.095	101 Md Mendelevium 258.1	102 No Nobelium 259.101	103 Lr Lawrencium (262)			

BIORECOVER
Raw Materials. Sustainable. Safe.

What are CRMs ?

CRMs represent 27 elements of the periodic table of elements, that are used widely in our daily lives, but which resources are limited. The European Commission names a raw material as “critical” when the offer is limited in Europe in comparison to the demand. CRMs are mainly used in energy transition and digital technologies.

The BIORECOVER project aims to create a new way of extracting and recycling CRMs, in three categories:

1. Rare Earths Elements (REE) coming from Bauxite Residue (BR)
2. Magnesium (Mg) contained in Mg wastes

3. Platinum Group Metals (PGM) included in PGM low grade ores and by-products

For raising awareness on CRMs, the BIORECOVER project will demonstrate the usefulness of CRMs through:

- Posters presenting the different categories on which the project works
- Posters introducing the different 27 CRMs

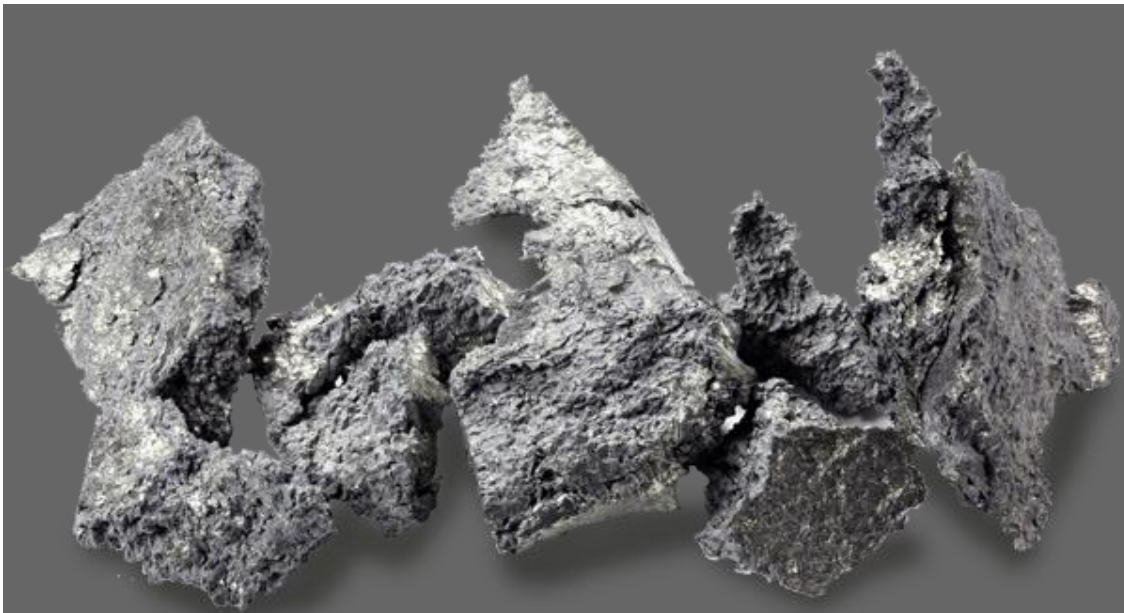
Posters showing the importance of CRMs in our daily lives.

[Learn more](#)



REE, Magnesium & PGM

This campaign will let you know their use and importance for our daily lives and for the European economy.



CRMs in daily life

BIORECOVER will show you how present CRMs are in our daily lives, from aviation to medicine, but also smartphones, cars, inflatables, ...

The Partners

The BIORECOVER project is led by CETIM Technological Centre (Spain) and involves a multidisciplinary consortium that encompasses the whole value

chain and key international cooperation through the participation of UWITS and CeBER from South Africa.

[Discover our Partners](#)



CETIM Technological Centre - Contact Information

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