

Public Consultation for the Circular Economy Act

Feedback from the European Federation of Geologists (EFG)

November 2025

Introduction

The European Federation of Geologists (EFG) welcomes the European Commission's initiative to launch a public consultation for the upcoming Circular Economy Act. As the EU strives to double its circularity rate and enhance the competitiveness of its circular economy by 2030, the EFG underscores the pivotal role of geoscientific expertise in achieving these objectives.

The upcoming Circular Economy Act represents a critical opportunity for the European Union to accelerate the transition towards a fully circular economy. To achieve the objectives set by the EU Green Deal and the Critical Raw Materials Act (CRMA), the Circular Economy Act must enable the identification, valorisation, and safe use of secondary raw materials, including those contained in urban environments. Cities and their subsurface infrastructures represent significant untapped resources, yet effective recovery requires systematic geoscientific approaches.

Recommendations

1. Integration of Urban Geological Models

To effectively implement urban mining strategies, it is essential to treat cities as complex geological systems. The EFG advocates for the development and integration of urban geological models that map anthropogenic deposits, legacy waste, and secondary material concentrations. These models should be incorporated into Digital Product Passports and material tracking systems to facilitate efficient resource recovery and recycling.

2. Predictive Recovery Models

Secondary materials are heterogeneous and unevenly distributed, making recovery technically and economically challenging. The use of geoscientific methods—geostatistics, remote sensing, machine learning, and historical land-use analysis—can support predictive models that estimate resource location, quality, and accessibility. A harmonised European database of secondary resources would support investment, policy planning, and procurement based on recycled content.

3. Certification of Urban Deposits and Professional Standards

The absence of legal definitions for "urban deposits" and certified protocols hinders investment in urban mining projects. The EFG calls for the establishment of certification standards for urban deposits, similar to those in traditional mining (e.g., PERC, CRIRSCO standards in general). Furthermore, geoscience professionals, recognised by titles such as the European Geologist (EurGeol), should be embedded in regulation as Competent Persons for the quantitative estimation of urban resources and reserves.

4. Incorporation of Geoscientific Expertise in Urban Planning

Urban regeneration and demolition plans should integrate geoscientific audits to identify and assess secondary raw materials. Additionally, land reclamation initiatives should require subsurface resource screening to ensure the sustainable recovery of materials. Embedding certified geoscientific

professionals in urban planning processes will enhance the effectiveness of circular economy strategies at the local level.

5. Recognition of the role of circularity in the complete raw material sourcing frame

It is very important to understand that the circularity of the secondary raw materials is of high importance for the EU, and therefore the Circular Economy Act will play a key role to address the limitations that currently confine the potential of this effort. What is also critical, is to understand that the raw material needs in the EU but also globally are increasing and diversifying, hence primary sources of raw materials will always be required to cover the demand. A hybrid model, which will support and fully utilise the secondary minerals potential in EU, together with securing and promoting primary raw material identification and mining, will strengthen EU raw material supply, reduce sourcing dependencies and stabilise the development axis of the EU economy.

Conclusion

The EFG reaffirms its commitment to supporting the EU's transition to a circular economy. By integrating geoscientific expertise into urban mining strategies, raising public awareness, standardising recovery models, certifying urban deposits, and embedding geoscientific audits in urban planning. Europe can unlock the full potential of its urban environments as strategic resource hubs. The EFG stands ready to collaborate with policymakers, industry stakeholders, and local authorities to realise these objectives.

About EFG:



The European Federation of Geologists (EFG) is the largest and most influential network of geoscience professionals across the Council of Europe countries, with 28 national associations representing a direct membership of approximately 50,000 individuals. EFG collaborates extensively with leading geoscience organisations worldwide, including in Australia, the USA, Canada and South Africa, indirectly reaching over 150,000 experts.

About the EFG Panel of Experts on Minerals:

The EFG Panel of Experts on Minerals strengthens Europe's voice in responsible mineral resource management through expert collaboration and global standards.

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