



The
Geological
Society

I·M3
Institute of Materials,
Minerals & Mining



ROYAL SOCIETY
OF CHEMISTRY

Royal Academy
of Engineering

Rt Hon Steve Reed OBE MP
Department for Environment, Food and Rural Affairs
Fourth Floor
Seacole Building
2 Marsham Street
London
SW1P 4DF
United Kingdom

10 December 2024

Dear Secretary of State,

RE: Strategic approach for the use and management of materials in the UK

We are writing to you from The Geological Society, Institute of Materials, Minerals & Mining, Royal Academy of Engineering and Royal Society of Chemistry as the UK urgently needs a strategic, joined-up and cross-sector approach, led by central Government, for the use and management of materials in the UK.

The UK's population consumes 15.3 tonnes of materials per person per year, which is well above the global average. Not only does this mean we are contributing disproportionately to the problem of unsustainable materials use, but also

1. **The economic value that these materials have is lost from the UK economy** if they end up in landfill, incineration or are exported abroad, with some estimates suggesting that at present as little as 7.5% of materials are circled back into the UK economy.
2. Many of the **materials that are vital to meet the UK's net zero commitments** are also essential in a range of other sectors including healthcare, defence and electronics, and there is significant global demand for these materials. Some of these materials are designated as 'critical' because of their importance to our economy and supply chain risks. **Unresolved imbalances between supply and demand pose risks to UK economic growth and national energy security.**

Earlier this year, the UN's International Resource Panel made clear that unsustainable resource¹ use is the *main driver* of the triple planetary crisis of climate change, biodiversity loss and waste and pollution. Its Global Resources Outlook 2024 highlights the need for urgent global transformation towards the sustainable use of resources. Far from being separate from efforts to combat climate change, unsustainable material use contributes directly to greenhouse gas emissions, as well as degrading ecosystems through land use and chemical pollution which reduces their ability to store carbon. Unfortunately, progress on this front has been far slower than for UK decarbonisation.

Crucial steps will include developing robust data on the origin and use of materials and improved design practices and policy frameworks that reduce disposal and waste, and setting an overall goal of reducing UK resource consumption as per our commitment to Sustainable Development Goal 12. UK companies who lead in the development of more

¹ Here 'resource' includes fossil fuels, minerals, non-metallic minerals and agricultural crops and forestry.

sustainable products will be positioned as market leaders amid growing demand for eco-friendly and consumer-friendly goods.

The Geological Society, Institute of Materials, Minerals & Mining, Royal Academy of Engineering and Royal Society of Chemistry are making this joint statement because we urgently need government to take transformative action on the way the UK acquires, uses and manages materials. We welcome commitments made to move towards a zero-waste economy and to develop a new circular economy strategy, and would ask that you meet with our organisations discuss how this strategy can accomplish a transformative change in UK material sustainability.

We would be pleased to work with you and your department to assist in developing an evidence-led, new approach to materials. For further information or to arrange a meeting, please contact Emily Wood, Public Affairs Adviser at the Royal Society of Chemistry on woode@rsc.org or 020 7440 3325.

Yours sincerely



Simon Thompson
Chief Executive
Geological Society of London



Dr Colin Church FIMMM CEnv CRWM MCIWM
Chief Executive
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Dr Helen Pain MBE CSci CChem FRSC
Chief Executive
Royal Society of Chemistry



Professor Joan Cordiner FEng FRSE FICHEM
Chair of the National Engineering Policy Centre Working
Group on Materials and Net Zero
Royal Academy of Engineering

CC:

Rt Hon Peter Kyle MP, Secretary of State for Science Innovation and Technology

Rt Hon Jonathan Reynolds MP, Secretary of State for Business and Trade

Rt Hon Ed Miliband MP, Secretary of State for Energy and Net Zero

Sarah Jones MP, Minister for Industry

About the Geological Society

The Geological Society is the UK's national society for geoscience, providing support to around 12,000 members in the UK and overseas.

We aim to be an inclusive and thriving Earth science community advancing knowledge, addressing global challenges, and inspiring future generations.

Our policy work aims to raise awareness of geoscience considerations in UK policymaking for the benefit of science, profession and society.

<https://www.geolsoc.org.uk/>

About IOM3

The Institute of Materials, Minerals & Mining (IOM3) is a professional engineering, environmental and scientific institution, a registered charity and governed by a Royal Charter. IOM3 supports professionals in materials, minerals, mining and associated technical disciplines to be champions of the transition to a low-carbon, resilient & resource efficient society. With around 15,000 members, IOM3 brings together expertise across the full materials cycle.

<https://www.iom3.org/>

About the Royal Society of Chemistry

We work at the heart of the chemical sciences community to create a future that is more open, more green, and more equal. Together, we're helping chemistry to change the world.

We enable exciting progress that would be otherwise impossible. As an independent catalyst for change, we connect people and ideas through partnerships, conferences, events and networks that span the globe.

We care about protecting our natural environment, about tackling discrimination to build a truly inclusive world, and about making cutting-edge chemistry accessible wherever it's needed for the good of society.

It's all built upon and lifted up by our diverse global membership, with every one of those 60,000 members bringing a unique and valuable perspective. The chemical science community has the knowledge, skills and passion to make those a reality – together, we're changing the world.

www.rsc.org

About the Royal Academy of Engineering

The Royal Academy of Engineering is harnessing the power of engineering to build a sustainable society and an inclusive economy that works for everyone.

In collaboration with our Fellows and partners, we're growing talent and developing skills for the future, driving innovation and building global partnerships, and influencing policy and engaging the public.

Together we're working to tackle the greatest challenges of our age.