



What are the drivers?

The drivers to develop a new UK chemicals framework that is fit for the future of the UK and international trade ambitions are **improvements for citizens and wildlife, and related to 'net zero' for the purposes of business and trade.** In detail they are as follows:

Enabling sustainable innovation

- **Enabling sustainable innovation**, through responsible innovations that improve our quality of life. When chemicals are used responsibly and at safe concentrations in products, they bring many benefits to our lives and significant economic returns.
- **Enabling sustainable innovation** for those that are skilled in the chemical sciences at all levels. They need to work in new strategic directions that support an industrial strategy and new growth in the UK chemicals sector.
- **Enabling sustainable innovation** **CO2 ID**, so we improve air, land and water quality for increased wellbeing for humans and wildlife. This needs to be achieved through well managed chemical manufacture and use, and innovation to find sustainable and less hazardous alternative chemicals.

Enabling sustainable innovation

95% of all manufactured goods rely on a chemical process and there are an estimated 40,000 to 60,000 industrial chemicals in commerce globally (ICCA-UNEP, 2019). Our 2020 research report with Cambridge Econometrics on the chemistry-using workforce found that chemistry knowledge, through 275,000 chemistry-using professionals in the UK, impacts the generation of an average of £83bn annually for the UK economy.

Science-led chemicals regulation to protect health and environment

- **Science-led chemicals regulation** through science-led regulation. Citizens should feel confident that chemicals are important and well regulated in the same way as they do with foods and medicines.
- **Science-led chemicals regulation** to develop chemicals policy that is robust and evidence-based, using data that is generated to high standards. This must be interpreted by the best scientists and policymakers for effective and impactful regulation through high profile science diplomacy.
- **Science-led chemicals regulation** by regulating chemicals manufacture, import and use effectively in a post-Brexit UK. This will be delivered by creating trusted relationships and partnerships for new international trade deals, including with the EU, built on effective collaborations for regulatory cooperation.

From EU REACH analysis in 2018, 'chemicals with properties hazardous for human health still represented 74% of the total chemical production in Europe, a percentage overall unchanged since 2004'; 'a growing number of hazardous chemicals are found in human blood and body tissues and ecosystems'; '3.5 million sites around Europe [which would have included UK data] are contaminated by hazardous substances' (European Commission Study, 2017).

Citizens' role in open and transparent policymaking

- **Public engagement** enabling them to understand and have confidence in the way its government takes decisions relating to chemicals manufacture and use in products
- **Public participation**, in open and transparent chemicals policy and regulation development.

P **Public attitudes to chemistry**

“People don’t necessarily feel strongly negative about chemicals – at the surface they are mostly neutral. However, they recognise that they are not very knowledgeable about how chemicals are used, in industry or food production for example, and this can make them feel uneasy. These feelings are deeply embedded and strongly felt, and based on a rational assessment of risk and their need to rely on regulators and industry to act in the long-term public interest.”

[Public attitudes to chemistry](#), Royal Society of Chemistry (2015)

The UK's place in global circular economy supply chains

- **Facilitate knowledge sharing** in sharing our scientific and policy knowledge and experience with others in an open and transparent way for the benefit of citizens' health, environmental quality, and in facilitating trusted trading partnerships with the world.
- **Facilitate knowledge sharing** in implementing successful economically viable circular economy models in the areas of plastics, electronic waste and food wastes. This will require the UK to act in close partnership with other countries.

What should be in scope?

A chemical framework should include the following areas that aim to develop 'trust in chemicals' between the government, industry, citizens and international trading partners to support economic prosperity and our wellbeing and quality of life. Chemicals are so important to our daily lives that we call on UK government to give this area focused attention and equal importance to medicines and foods.

Build trust through agency and science

- **Establish a new UK Chemicals Agency** for all things 'chemical' (ie – not food or medicines, and where 'chemicals' includes pesticides and biocides to ensure consistent regulation). It must be authoritative, as independent of government as possible (akin to the Foods Standards Agency (FSA)) and adequately resourced to identify, prioritise, manage and regulate chemical issues of national concern.

Building on the current strong regulatory framework, this new UK agency must be adequately resourced to lead and act as the primary national point of cooperation and collaboration with other chemicals agencies in the world (eg the European Chemicals Agency (ECHA) and the US EPA's Office of Chemical Safety and Pollution Prevention (OSCP)).

- **Establish a new UK Institute for Chemicals and the Environment** to lead on all areas of new science for assessing exposures, hazards and risks of chemicals to humans and wildlife. It should be a central institute independent of government, sited in academia, that can liaise with other scientific bodies such as the EC Joint Research Centre (JRC) and help to manage the provision of independent scientific advice in the UK by connecting to the world's best scientists and scientific networks, keeping abreast of all latest developments and leading in priority science areas.

- **Establish a new UK National Institute for Chemicals and the Environment**

- **Provide a new UK National Institute for Chemicals and the Environment** into government for chemicals of national and global concern.

- **Establish a new UK National Institute for Chemicals and the Environment** drawing on the world's best scientific evidence;

- **Coordinate a new UK National Institute for Chemicals and the Environment** on chemicals in the environment with trusted global partners.

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- [National Model Design](#), which has already begun in the UK with DEFRA, BEIS and the Office for National

- **M**onitoring and evaluation for citizens and the environment to assure that improvements in environmental quality and human health are realised and demonstrable.

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or visit <https://www.rsc.org/new-perspectives/sustainability/sustainable-chemicals-strategy/>

