

Including lead metal in REACH Annex XIV would impede the delivery of EU policy objectives for a strategically autonomous, sustainable and carbon-neutral future. It is not a proportionate measure given the effective regulatory framework already in place.

The inclusion of lead metal in the REACH authorisation process would damage growth, reduce competitiveness and hinder the transition to a low carbon economy.

Instead of including lead metal in REACH Annex XIV, we propose that the EU:

1. **Recognises the social and economic benefits of a strategically autonomous and key raw material** that is essential for many value chains including battery production and associated industries that support low carbon objectives and electrification across the EU. The carrier metal properties of lead are a key enabler of the circular economy by allowing recovery of a wide range of critical and essential raw materials, including those that are key to e-mobility, digitalisation and the energy transition
2. **Works with Industry to identify more effective and proportionate measures** to address any uses of lead metal which the EU believes present a residual risk not already addressed through the already existing comprehensive and effective framework of lead-specific EU legislation that has delivered significant reductions in lead exposures.
3. **Considers targeted REACH Restrictions** if specific activities or products are identified where there remains an unacceptable risk arising from exposure to lead, not already addressed through existing measures, and that are identified as contributing most to environmental and/or human exposures.
4. **Understands the complexity of many lead-using value chains** across the EU, which would result in thousands of Applications for Authorisation, including from many SMEs, if lead metal were included in REACH Annex XIV. This would require significant resources from both Regulators and Industry and would not be a proportionate method of reducing risks to human health and the environment.

Economic recovery, policy objectives, societal needs: [Lead Matters](#)

Lead plays an essential role in the EU's ability to deliver policy objectives, including Europe's Industrial Strategy, the European Green Deal, and the

EU's Circular Economy Action Plan. We believe that long-term uncertainty caused by inclusion of this metal in REACH Annex XIV would impede the EU's vision for a prosperous, modern, competitive, climate-neutral economy.

The EU lead battery industry is by far the largest-volume user of lead in Europe. Lead battery production in the EU currently represents an estimated 90% of the EU use of lead metal, and approximately €2 billion worth of lead from recycled sources is used per year for EU lead battery production alone.



Beyond lead batteries, a broad range of products and processes rely on lead – industry sectors where lead usage is low but value is high. These industries and products are significant contributors to employment creation, industrial growth and innovation, economic recovery, and to healthier lives. From use in aerospace to healthcare, from recovering valuable metals from European waste streams to high-speed machining and renewable energy technologies, these sectors support essential societal needs, the economy, and the delivery of EU policy objectives.

For all these industries lead matters. Alternative options have been explored for decades, only to find that lead is irreplaceable. **REACH Annex XIV listing would not accelerate substitution in the broad range of applications and industries where no suitable alternatives exist**, industries where the risks are already known and well-managed. The complexity of these value chains, the number of users, and the broad range of applications will result in an **unprecedented number of Applications for Authorisation**. An Industry survey carried out in H1 2022 indicated the potential for between 1,200 and 8,000 AfA – a much higher number than were submitted for Cr (VI) compounds.

Strategic autonomy and circularity

The EU is a world leader in the circular economy of metals, with state-of-the-art recycling facilities able to recover over 20 metals from scrap, industrial residues, and increasingly complex e-waste.

Lead plays a crucial role in metals recycling in Europe. It's an efficient and effective enabler for the recycling of a broad range of non-ferrous metals, from gallium used in mobile phones and solar panels, precious metals including silver and gold, to platinum used in catalytic converters.

Lead itself is also **an exemplar of strategic autonomy in action**. The EU already has highly effective collection infrastructure and associated high recycling rates for lead-containing products. This **closed loop economy provides the raw materials needed locally to make new products, and it limits the potential for environmental exposure** by keeping lead in the value chain and out of Europe's waste stream, indefinitely.

Lead and lead batteries can be recycled infinitely with no loss of quality or performance. The EU's lead battery value chain operates in a closed loop. It's a **multi-billion-Euro industry**, recycling almost all its lead batteries at the end-of-life, conserving natural resources and minimising waste by returning the lead to the product cycle an infinite number of times. **The average lead battery made in the EU today contains more than 80% recycled materials, and more than 80% of the lead in European lead batteries is produced from recycled sources.**

Europe's economically self-sustaining, closed-loop lead battery value chain makes lead batteries one of the most cost-effective solutions for renewable energy storage and meeting the EU's commitments under the Paris Agreement and the Fit for 55 package. Lead batteries already help relieve raw material supply pressure affecting other battery technologies. This role will become ever more important with the rapid growth in demand for batteries for mobility and energy storage needed to support the clean energy transition.



Proportionality and effectiveness

The EU already has a **comprehensive framework of lead-specific legislation designed to manage risk** (see Annex 1). Industrial manufacture, use and recycling of lead metal takes place safely, under highly-regulated conditions intended to reduce exposure, protect workers, and control emissions to the environment, in facilities operating to **stringent regulatory requirements and industry best practice**.

We question whether REACH Authorisation will do anything other than add regulatory burden while reducing the productivity and competitiveness of successful EU value chains, potentially opening the door to non-EU competitors. If the aim is to phase out or substitute lead this would have a catastrophic effect on the EU lead battery industry and those industries that use lead safely and within existing stringent restrictions.

Key aspects of the EU's regulatory framework designed to minimise and reduce lead exposures are already being reviewed to *ensure a high level of protection of human health and the environment*. The EU's **binding occupational exposure limits are being revised** by the European Commission to further protect all workers potentially exposed to lead and lead compounds at work, not just those *using* lead and in scope of REACH, and **additional REACH restrictions** (e.g. lead in ammunition and fishing tackle) to reduce the most significant sources of environmental emissions are in the regulatory pipeline.

As part of the existing and extensive framework, a broad range of **product and end-of-life restrictions** already strictly regulates the use of lead. Present restrictions on lead metal include use in childcare articles and items which could be mouthed by children, toys, drinking water and food contact materials, jewellery, cosmetics, electronic and electrical equipment, household appliances, clothing, textiles and footwear, lead in copper, aluminium and steel alloys, passenger vehicles, and lead shot over wetlands, together with a general restriction under Annex XVII Entry 30 on the supply of lead metal as a substance or in a mixture to the general public. Moreover, the recent Commission Battery Regulation proposal also includes a provision for restricting substances where there is a risk identified during a battery life cycle. These restrictions **already encourage substitution, especially where technical and socio-economically viable alternatives exist**.

Lead emissions resulting from industrial uses in the EU are demonstrably decreasing. Recent E-PRTR data indicates, for example, that across the EU-27 there was an 88% reduction in emissions of lead to air and an 80% reduction in emissions to water between 2007-2020. **The majority of lead emissions in the EU now result from activities which are NOT in scope of REACH Authorisation for lead metal**, e.g. from thermal power stations, pig iron and steel production, and waste management. Inclusion of lead metal in REACH Annex XIV would not address emissions from those sources: and as such would not be focused on activities where the most significant reductions in lead exposure could be achieved.

For more information: <https://ila-lead.org> / T: +44 207 833 8090 / E: reach@ila-lead.org

Annex 1: Key EU legislation – existing, under review and planned

- Council Directive 2004/37/EC on the **protection of workers** from the risks related to exposure to carcinogens, mutagens or reprotoxic substances at work, as implemented by Directive (EU) 2022/431 incorporating the binding occupational and biological limit values for lead and its ionic compounds previously adopted under Directive 98/24/EC – *binding limit values under review*
- Council Directive 92/85/EEC (as amended): **protection of pregnant and breastfeeding workers**
- Council Directive 94/33/EC (as amended): **protection of young people at work**
- The **Industrial Emissions Directive** 2010/75/EC (as amended) replacing Directive 96/61/EC on Integrated Pollution Prevention and Control
- Council Directive 2008/50/EC (as amended) on **ambient air quality** and cleaner air for Europe
- Council Directive 2000/60/EC (as amended) establishing a framework for Community action in the field of **water policy** (Water Framework Directive)
- Council Directive 98/83/EC (as amended) on the **quality of water intended for human consumption**
- Council Directive 2006/118/EC (as amended) on the **protection of groundwater** against pollution and deterioration
- Council Directive 86/278/EEC (as amended) on the **protection of the environment, and in particular soil**, when sewage sludge is used in agriculture (**Sewage Sludge Directive**)
- Council Directive 2000/53/EC (as amended) on **end-of-life vehicles**
 - *exemptions and Directive under review*
- Council Directive 2008/103/EC amending Directive 2006/66/EC on **batteries and accumulators** and waste batteries and accumulators
 - *Batteries Regulation proposal under scrutiny*
- Council Regulation 1013/2006 (as amended) on **shipments of waste**
 - *under review*
- Directive 2008/98/EC (as amended) on **hazardous waste**
- Directive 2011/65/EU (as amended) on the restriction of the use of certain hazardous substances in **electrical and electronic equipment**
- Directive 2012/19/EU on **waste electrical and electronic equipment**
- Regulation (EC) 1223/2009 (as amended) on **cosmetics**
- Directive 2009/48/EC (as amended) on the **safety of toys**
- Directive 2003/17/EC amending Directive 98/70/EC relating to the **quality of petrol and diesel fuels**
- Directive 69/493/EEC (as amended) on **crystal glass**
- Directive 2005/31/EC amending Directive 84/500/EEC in regards **ceramic articles intended to come into contact with foodstuffs**
- Commission Regulation (EC) 1881/2006 (as amended) setting **maximum levels** for certain contaminants in **foodstuffs**
- Regulation (EC) No 1334/2008 on **flavourings for use in foodstuffs**
- Directive 2009/32/EC on **extraction solvents in foodstuffs**
- Regulation No 1881/2006 (as amended) as regards **food contamination** (maximum levels)
- Commission Directive 2002/32/EC (as amended) on **undesirable substances in animal feed**
- Regulation (EU) 1275/2013 amending Annex I to Directive 2002/32/EC as regards maximum levels in **animal feed**
- Directive 2001/95/EC (as amended) on **general product safety**
- Directive 94/62/EC (as amended) on **packaging and packaging waste**
- Regulation No 1272/2008 on the **classification, labelling and packaging** of substances and mixtures (as amended), including harmonised classification (Annex VI)
- Regulation (EC) 1907/2006 (**REACH**) (as amended):
 - Inclusion in the Candidate List of substances of very high concern (Article 59)
 - Existing **REACH Restrictions** already in effect: Entry 30; Entry 63
 - Additional **REACH Restrictions in progress**
 - Commission Regulation (EU) 2021/57 as regards **lead in gunshot in or around wetlands**
 - *in force; measures effective from 15 February 2023*
 - Restriction on the placing on the market and use of **lead in projectiles** (for firearms and airguns), **and in fishing sinkers and lures for outdoor activities**
 - *proposal under review by ECHA Committees*
 - Restriction on the use of **lead compounds to stabilise PVC** and on the placing on the market of PVC articles stabilised with lead compounds
 - *Commission legislative proposal awaited*