



European
Semiconductor
Industry
Association

ESIA Input to targeted REACH revision Inception Impact Assessment (IIA) Online Consultation

Brussels, June 1, 2021

ESIA represents the European semiconductor sector where companies are operating and competing in Europe and globally. The landscape of the REACH regulation and the uncertainty it brings to their manufacturing process in Europe compared with other regions of semiconductor production is one critical area of consideration under a targeted revision of REACH. In terms of chemical usage, the industry is a downstream (end) user of some bulk chemicals and of critical specialty chemical materials, that are used predominantly at a very low volume in mixtures. These materials in many instances are of central importance for the innovation and manufacturing process and are required to be used due to their unique properties and critical functionality. These chemicals are used within highly sophisticated manufacturing closed systems where there is no worker exposure under normal manufacturing process conditions.

Semiconductors are a key enabler of low carbon and energy efficient innovative solutions that reduce our dependence on fossil fuels and minimize emissions. Semiconductor's help reduce society's environmental footprint, by optimising energy usage in transportation, manufacturing, services, and consumer products. Semiconductors facilitate the transition towards a decarbonised economy while simultaneously contributing to an innovative and sustainable society to realise the EU's Green Deal objectives. In March 2021, the European Commission President responding to European Council of Member states call for action proposed a 'Digital Compass' goal that by 2030, the production of semiconductors in Europe should be 20% of world production. The continued use of innovative materials by the European semiconductor industry will be essential to achieve this ambitious EU goal as the manufacture of semiconductors in Europe is not possible without them. A targeted revision of REACH should not negatively impact this goal. (this includes short chain PFASs that are under review)

The targeted REACH revision offers the opportunity to create a more coherent REACH framework balancing the objectives of the Sustainable Chemicals strategy and the EU strategic autonomy agenda. Use cases in which chemical substances are needed for strategic value chains and used safely in controlled environments should not be included within the authorisation requirements. Broad blanket uses of the restriction procedure should also take much more account of what industry uses are necessary and where they don't pose a risk to human health or the environment.

- ESIA welcomes the effort of the REACH Competent Authorities and the European Commission to work to improve and streamline the overall REACH authorisation process.

- ESIA believes that low volume uses should have a lower threshold of information due to the disproportionality of the cost of preparing an authorisation application. For sectors like the European semiconductor manufacturing industry where substances in specialty materials are typically used in low volume within manufacturing closed systems with no worker exposure under normal manufacturing process conditions, there can be very limited potential benefits for human health and the environment accruing from the sector's use in terms of having large levels of additional detail and documentation.
- ESIA would suggest that a simplified application for authorisation for a downstream user's low volume uses, (when used in tightly controlled conditions), could be applied for by the upstream applicant for authorisation.
- ESIA asks EU commission and authorities to consider that there are circumstances where the inevitable authorisation phase-out agenda is not necessarily the appropriate regulatory tool for all uses of a substance. There is a case for continued tightly controlled and safe uses, which represents an essential application envisioned by the EU Chemical's Strategy for Sustainability and when the substance is evidently critical to technologies which are important to keep within the European Union such as those identified as a Key Enabling Technologies and within the EU's Digital Compass goals.
- ESIA would suggest that EU authorities consider choosing a tailored use of a restriction tool rather than authorisation. We encourage the Commission to not switch to a grouping process that applies one treatment to a group of chemical substances, independent of their individual characteristics and use cases. The risks and their management for downstream industrial users does vary widely between use cases and subgroups of chemicals. To make authorisation requirements and restrictions as efficient as possible, future REACH must be able to take that into account.
- In certain cases, ESIA believes the appropriate regulatory management tool employed by the EU should be to use occupational exposure limit legislation or at times environmental protection legislation instead of authorization or restriction under REACH. REACH must recognise that there are other OSH regulatory tools that when operationalised are a more effective risk management tool to tackle occupational safety issues. If OSH legislation are not deemed adequate by authorities perhaps they should be revised and streamlined.
- ESIA would note that when substances are added to the SVHC candidate list this creates an enormous administrative burden on semiconductor companies irrespective of the actual level of potential risk that comes from the semiconductor use of the substance.
- ESIA also supports activities to remove substances listed on candidate list, where and when a designated substance is not considered as an SVHC anymore due to e.g. updated toxicological results.
- ESIA would encourage that sectors where the risk from the small use of manufacturing substances is clearly well managed to be highlighted and if necessary when no substitutes exist, for exemptions to be considered and granted. ESIA would recall being the first industry sector to work directly with ECHA authorities on developing downstream industry exposure scenario examples in 2010.

- ESIA acknowledges that requirements on SDS communication rely on the upstream supply chain and not on the downstream users and would welcome a clear and simplified communication flow especially for low volumes imported chemicals.

ESIA observes that the predominate analysis which the EU commission's REACH review and ECHA activities come from the perspective of; the chemical manufacturing industry, tier 1 chemical manufacturers/formulators, national authorities and NGO's. The perspective of European downstream user end industries far down the chain from the chemical manufacturing industry does not appear to receive proportionate consideration when chemicals are being chosen for regulatory actions. These ESIA comments come from a low volume user of innovative materials to manufacture semiconductors. The REACH review speaks of the innovation that has happend in the chemical industry attributable to REACH, which is most welcome. Currently the European semiconductor industry does not see a similar semiconductor innovation upside at operations in Europe that can be accredited due to REACH. The REACH landscape is largely bringing uncertainty for a sector like semiconductors and is a limiting factor for innovation in Europe, compared to other industry competitor regions.

ABOUT ESIA

The European Semiconductor Industry Association (ESIA) is the voice of the semiconductor industry in Europe. Its mission is to represent and promote the common interests of the Europe-based semiconductor industry towards the European institutions and stakeholders in order to ensure a sustainable business environment and foster its global competitiveness. As a provider of key enabling technologies, the industry creates innovative solutions for industrial development, contributing to economic growth and responding to major societal challenges. Being ranked as the most R&D-intensive sector by the European Commission, the European semiconductor ecosystem supports approx. 200.000 jobs directly and up to 1.000.000 induced jobs in systems, applications and services in Europe. Overall, micro- and nano-electronics enable the generation of at least 10% of GDP in Europe and the world.