Reference:

S. Doyle, *Authorisation and Restrictions –Update,* 6th ESA REACH Workshop, ESA ESTEC, Noordwijk, the Netherlands, 17th June 2025

Author affiliation:
Simone Doyle, Head of Risk Management I unit, European Chemicals Agency (ECHA)

Authorisation and Restrictions – Update

6th ESA REACH workshop (online)

17 June 2025

Simone DOYLE
Head of Risk Management I unit
European Chemicals Agency

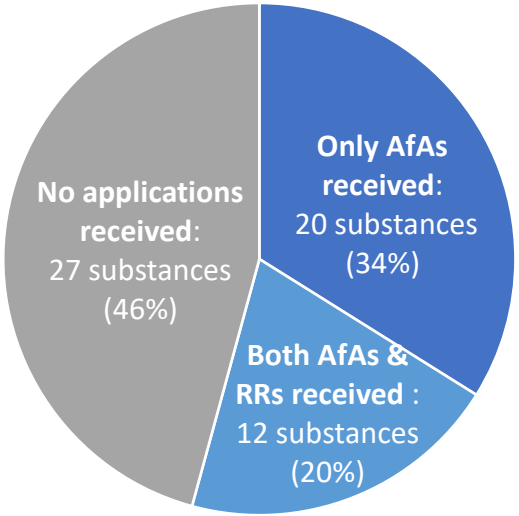
Content

- → REACH Authorisation process
- → Investigation report on aromatic brominated flame retardants
- → Restriction proposal on certain chromium(VI) compounds
- → Batteries and Packaging and Packaging Waste

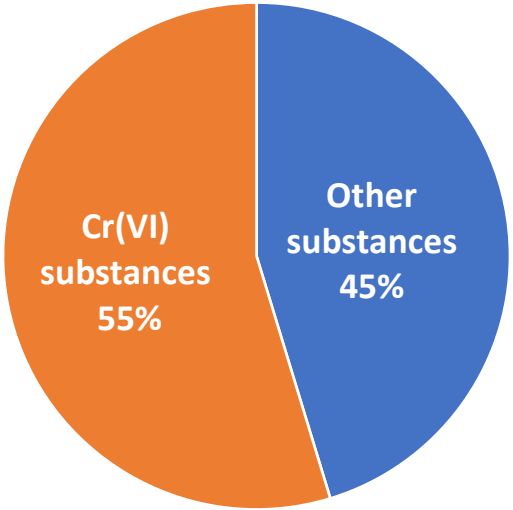
Latest news Authorisation
Focus on Cr(VI) substances

Half of Annex XIV substances applied for…

Applications received for Annex XIV substances

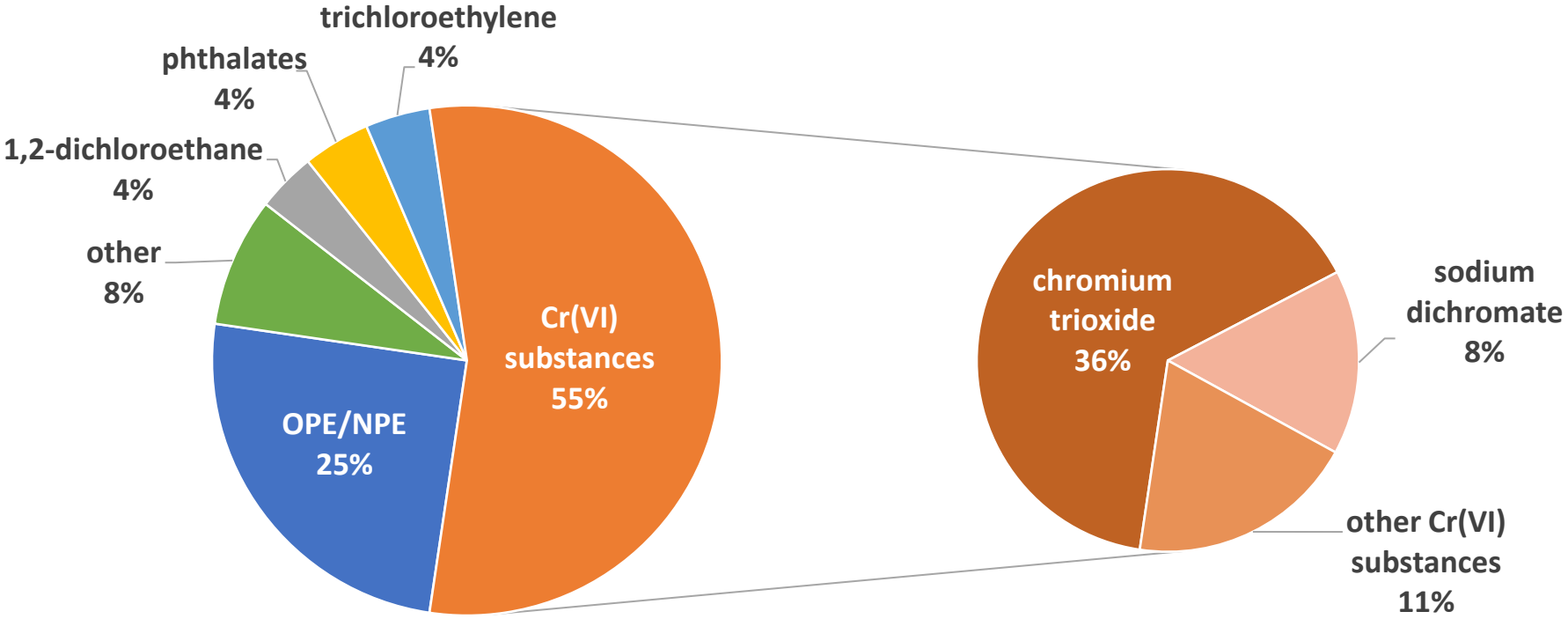


Uses applied for (585 uses)
AfAs & RRs

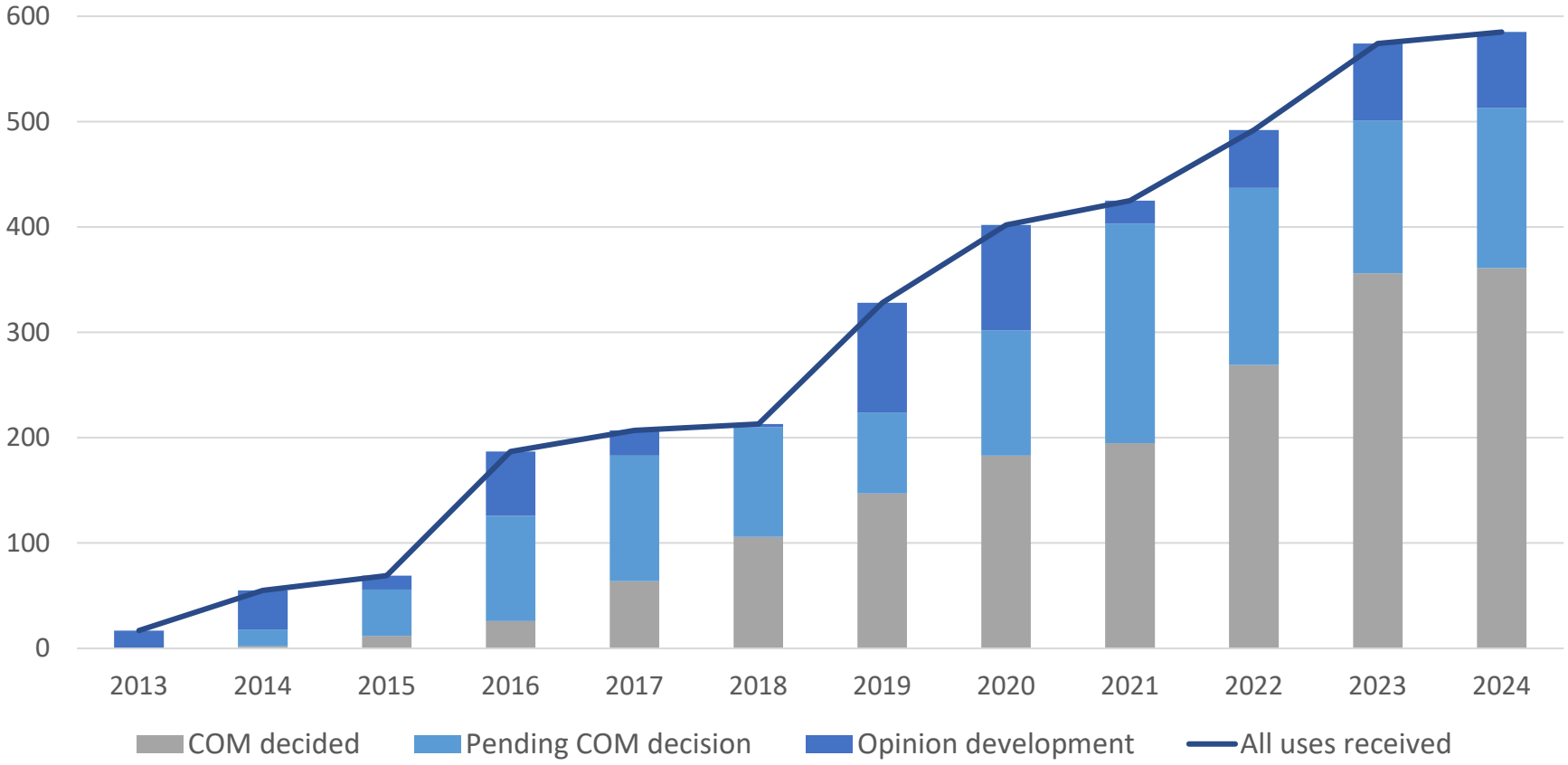


… Cr(VI) substances in majority

Distribution of uses applied for per Annex XIV substance



Status of applications in the process



Learnings (+)

→ A well-oiled opinion-making process…
- solid, consistent and transparent
- deliver within legal timeline
- quality / fit-for-purpose
- good understanding and level of acceptance by stakeholders

→ … which proved to be able to adapt to:
- 3 court cases
- emerging challenges, expectations from stakeholders and evolving needs of decision-makers

Learnings (–)

→ Challenges with substances with widespread uses
- high number of applications *vs.* capacity of the process

→ Concept of upstream applications
- different approaches taken by applicants
- challenges re. level of granularity required *vs.* supply chains communication's reality

Typical Cr(VI) uses:

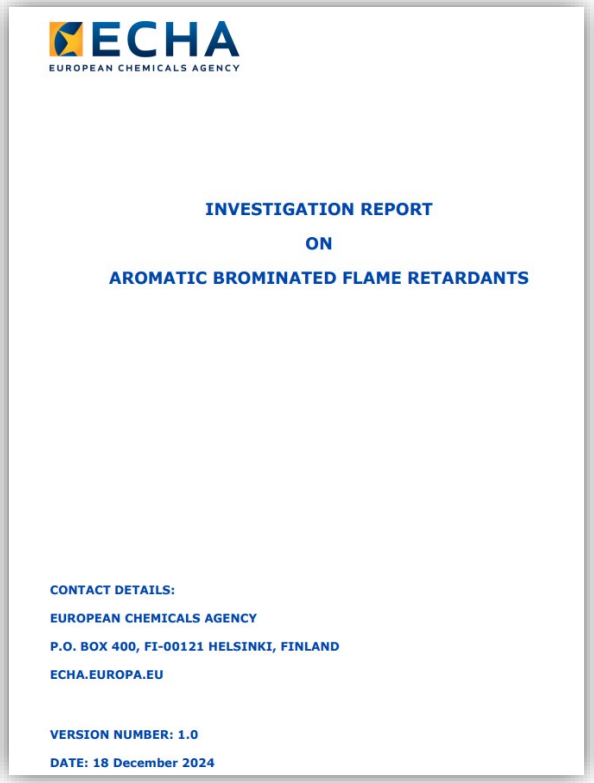
Formulation, Electroplating, Etching, Passivation, Chemical conversion coating, Anodising/Anodise sealing, Slurry coating, Stripping

ECHA investigation report on aromatic brominated flame retardants

Investigation report on flame retardants

- 22 December 2023 mandate from COM
- Focus on aromatic brominated flame retardants
- Aim is to support the Commission in deciding:
  - Whether to request ECHA to prepare a restriction dossier
  - Scope of the mandate
- Mandate asks for information on
  - Hazard (ABFRs and other flame retardants)
  - Uses (applications, materials, sectors)
  - Available alternatives
  - Emissions from different materials and articles (whole life-cycle)
  - Possibility to differentiate waste streams

- Investigation report published on **18 Dec 2024**
- Link to the report, Link to the mandate

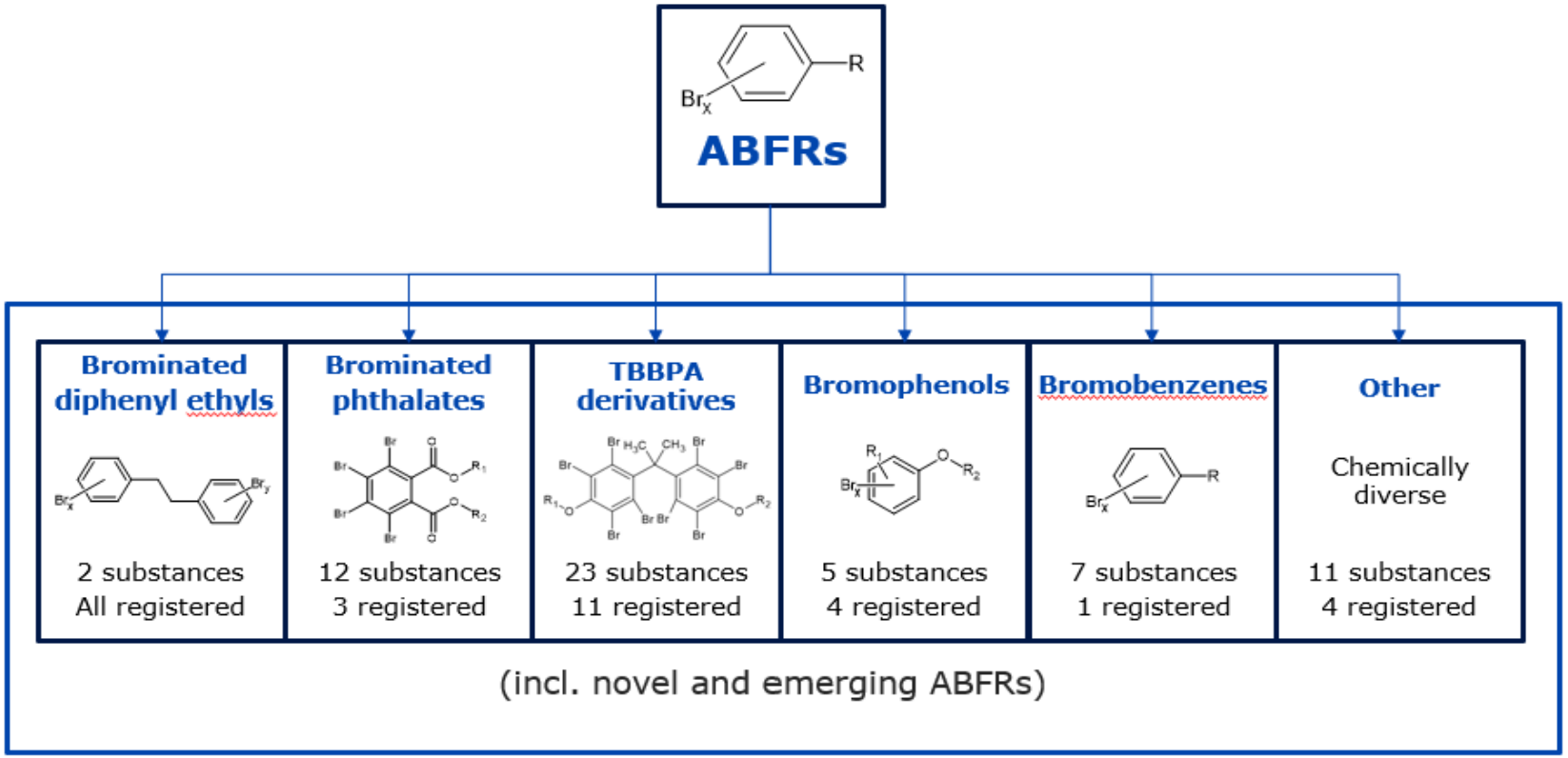

ECHA
EUROPEAN CHEMICALS AGENCY

INVESTIGATION REPORT
ON
AROMATIC BROMINATED FLAME RETARDANTS

CONTACT DETAILS:
EUROPEAN CHEMICALS AGENCY
P.O. BOX 400, FI-00121 HELSINKI, FINLAND
ECHA.EUROPA.EU

VERSION NUMBER: 1.0
DATE: 18 December 2024

ABFRs in the scope of the report



Types of ABFRs

- **Additive ABFRs**
  - Physically mixed into materials, not chemically bound
  - Able to migrate out
    - **Non-polymeric additive ABFRs:** likely
    - **Polymeric additive ABFRs:** less likely
- **Reactive ABFRs**
  - chemically bound to the polymeric matrix
  - do not leach out unless subject to degradation

Conclusions

- Higher burden to environment posed by non-polymeric ABFR additives
  - Non-polymeric additive ABFRs released more easily to the environment
  - Five of them are either formally confirmed or have been assessed in a substance evaluation process with a vPvB outcome
- The sectors contributing the most to the overall releases: electrical and electronic equipment (EEE), building and construction and textiles
- Releases from the waste stage are the key contributors
- Many potential alternatives to ABFRs identified (however many challenges – mainly in the EEE sector, aerospace and automotive)
- Some organophosphate flame retardants may be regrettable alternatives to ABFRs

What’s next?

→ The EU Commission considering mandate to ECHA to prepare a restriction dossier considering the investigation report and the ECHA’s Regulatory strategy for flame retardants (entry 4.2 of pool 1 of the Restrictions Roadmap)

ECHA restriction proposal on Cr(VI) substances

Recap: Restriction proposal for Cr(VI) compounds

→ Number of Cr(VI) AfAs has far exceeded the predictions at the time of inclusion of the substances in Annex XIV

→ According to COM, the approach envisaged for regulating Cr(VI) substances (authorisation) is no longer appropriate to ensure:

Human health protection

Substitution

Proper functioning of internal market

Adequate use of resources

Mandate

→ Sept 2023: COM mandated ECHA to develop Annex XV proposal for CrO_3 and chromic acids

→ April 2024: based on initial findings of ECHA, COM amended mandate to:

- include all Cr(VI) substances on Annex XIV except lead chromates and
- include barium chromate (potential regrettable substitute)

→ 11 April 2025: ECHA submitted Annex XV report

ECHA proposal to address risk by banning use of Cr(VI) substances **unless:**

1. they fall within a 'closed list' of six use categories, and
2. they comply with specific scientific limit values for worker exposure (LV) and emissions to environment (ELV)

Excluded from scope

- ✓ Cr(VI) exposure situations not in REACH scope (e.g. welding)
- ✓ Uses exempt from authorisation requirements (e.g. intermediate uses)

Substances	EC	AXIV entry
Chromium trioxide	215-607-8	16
Acids generated from chromium trioxide and their oligomers	231-801-5 236-881-5	17
Sodium dichromate	234-190-3	18
Potassium dichromate	231-906-6	19
Ammonium dichromate	232-143-1	20
Potassium chromate	232-140-5	21
Sodium chromate	231-889-5	22
Dichromium tris(chromate)	246-356-2	28
Strontium chromate	232-142-6	29
Potassium hydroxyoctaoxodizincatedichromate(1-)	234-329-8	30
Pentazinc chromate octahydroxide	256-418-0	31
Barium chromate	233-660-5	na

Different degrees of hydration of the substances as well as salts with a different stoichiometry are included in the scope

Uses

6 use categories (UC)

1. Formulation of mixtures
2. Electroplating on plastic substrate
3. Electroplating on metal substrate
4. Use of primers and other slurry coatings
5. Other surface treatments (ETP and others)
6. Uses as functional additive/process aid (closed list of uses)

Sectors

Multiple sectors

- Transportation & defence
- General engineering
- Industrial applications
- Household equipment
- Packaging
- Steel
- Etc.

2 calls for evidence (CfE)

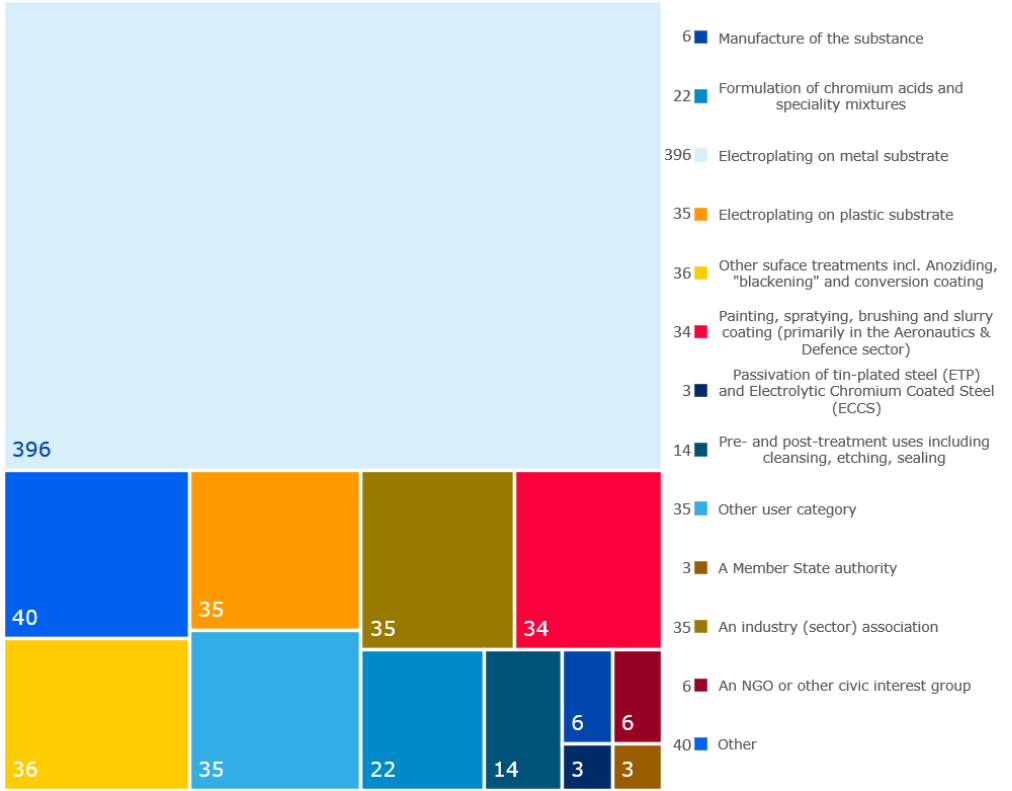
- → Companies provided company-specific info:

  exposure, emissions, current RMMs, best response to LVs/ELVs, costs of reducing exposure to Cr(VI), alternatives

- → ~ 30% of companies using Cr(VI) substances in EU

- → CfE used as main data source

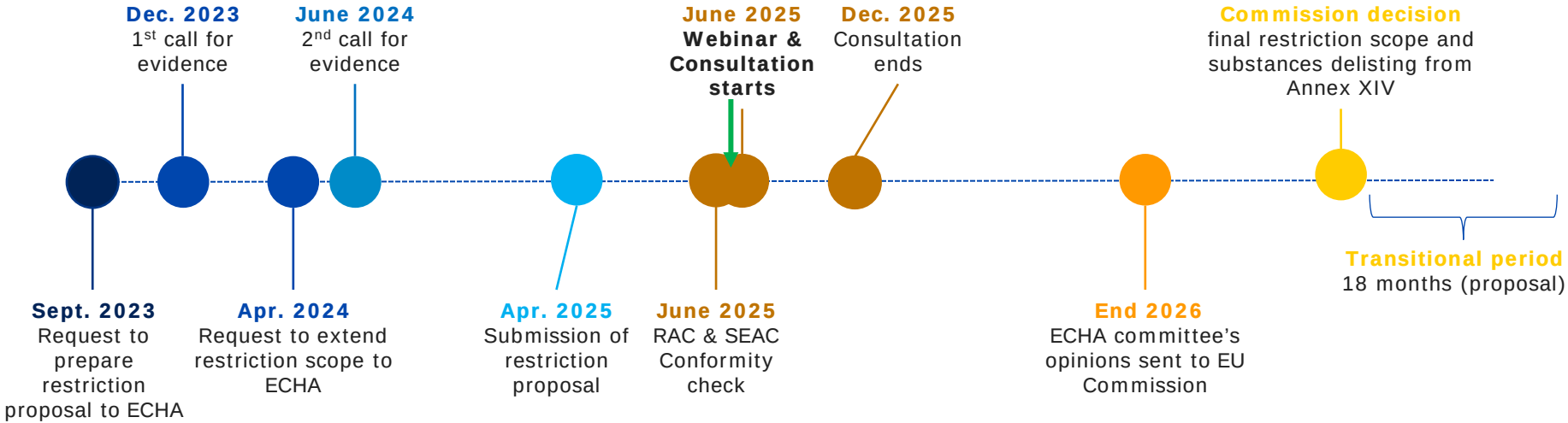
  other sources used for specific questions and as supportive or complementary information source



Overall timelines

Today

#EUHaveYourSay
echa.europa.eu/consultations

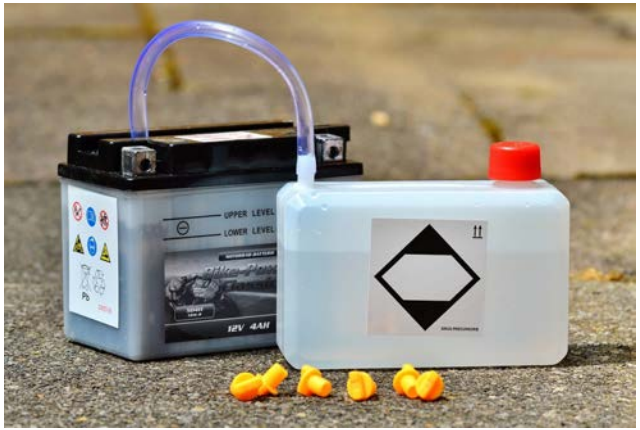


ECHA’s tasks under Batteries Regulation

ECHA's role under the Battery Regulation

The Batteries Regulation (EU) 2023/1542 attributes three main responsibilities to ECHA:

1. Support the EU Commission to prepare a Report on **Substances of Concern** in Batteries (defined in Art. 6(5)) with indication on further risk management
2. Prepare restriction dossiers on identified substances when risk is considered unacceptable (it can be done also by individual Member States)
3. Provide an opinion to Commission (via RAC and SEAC committees) on efficacy to reduce risks and socio-economic impacts of restriction proposals



©Pixabay/kaboompics

Study report on Substances of concern (SoC)

- → Commission's deadline end of 2027
- → ECHA's deadline : end of 2026
- → Study outsourced to a contractor
- → Two phases study
  1. Phase 1 (by June 2025)
     - **Mapping** of substances and processes
     - **Investigation** on use in batteries of Hg, Cr (VI), Cd, Pb (already restricted for some batteries). Considerations for further restrictions.
  2. Phase 2 (by December 2026)
     - List of **substances of concern** and **prioritisation** delivered to the Commission

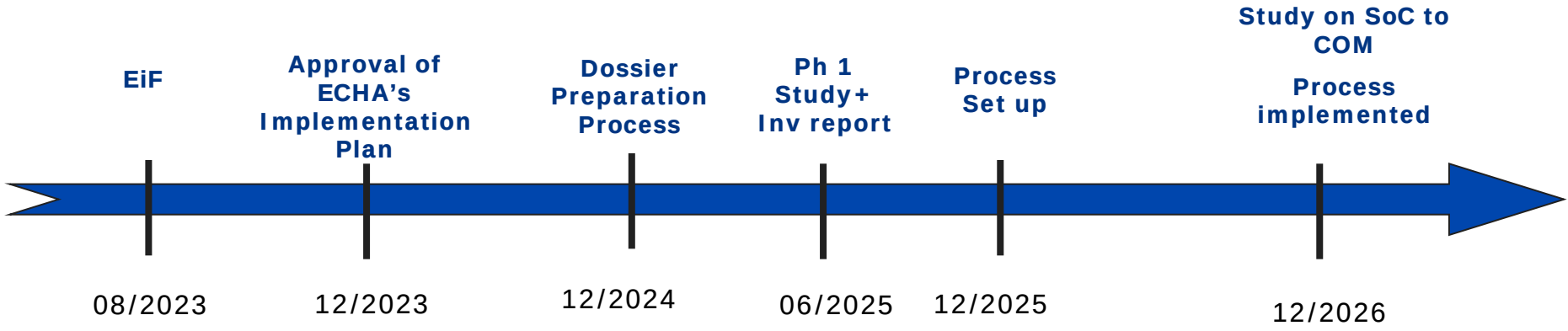
Restriction of substances – process implementation

→ Restriction process under Batteries Regulation integrated into REACH restrictions (goal: end of 2026)

→ Process implementation

- ECHA's team set up and capacity building
- RAC-SEAC set up and training
- Restriction templates and internal procedures
- IT tools, website and info sharing
- Communication and external support

Overall Timeline



ECHA’s tasks under Packaging and Packaging Waste Regulation

Packaging and Packaging Waste Regulation

- → PPWR entered into force on 11 February 2025
- → Packaging design
- → Packaging waste management
- → All packaging reusable or recyclable by 2030

Substances of concern (SoC) in packaging - Article 5

→ Presence and concentration of substances of concern is minimised

→ A report on substances of concern in packaging by Dec 2026
- impact chemical safety
- negatively affect the re-use and recycling

→ Follow-up measures may include:
- REACH restrictions
- restrictions under the design for recycling criteria

→ Member States to supply information on substances negatively affecting the re-use and recycling by Dec 2025

Definition of SoC – Article 2(27) of ESPR

A substance that:

a) has been identified as a Substance of Very High Concern (SVHC) (Article 57 of REACH) and added to the Candidate List
b) is classified (harmonised classification for chronic effects) according to CLP
c) is a Persistent Organic Pollutant (POPs Regulation); or
d) negatively affects the reuse and recycling of materials in the product in which it is present

ECHA's role under PPWR

→ Main initial task for ECHA:
- Prepare a study report on substances of concern in packaging
- to be completed by September 2026 (timelines in the mandate received from the European Commission)

→ "Operational" phase: REACH restrictions for substances in packaging
- standard REACH Restriction procedure (Article 68(1) and (2))
- One restriction every 2 years (i.e. 0.5 per year)
- 2027 foreseeable start

Stakeholder input invited

- → Information on substances in batteries and packaging is crucial to correctly execute our processes
- → Provide information by participating to our Calls for Evidence
- → ECHA protects business information (claimed as confidential) and publishes only non-confidential information online for transparency

Thank you

simone.doyle@echa.europa.eu

echa.europa.eu/subscribe

Connect with us

echa.europa.eu/podcasts

European Chemicals Agency

@one_healthenv_eu

@EU_ECHA

@EUECHA

EUchemicals