

Why is Astee concerned about plastic pollution?

Members of Astee, water and waste professionals, are experienced observers of urban metabolism: they observe the presence of plastic at all levels and are aware of the major role played by urban sanitation systems in the transfer of plastics to aquatic environments. Thus, plastic is both an indicator of waste management disorders and becomes an indicator of water quality due to all the additives associated with it.

This omnipresence is concerning and calls for an informed response based on scientific and technical data that Astee is able to provide through its multidisciplinary approach.

With the observations, tests, experiments, and expertise of its members, Astee assumes a role of alertness towards other actors in the chain: upstream industrial actors and downstream actors responsible for health and environmental impacts.

Sharing these observations makes ASTEE an impartial key player for advancing knowledge and combating plastic pollution in France.

Upcoming regulation that should integrate 3 major axes:

Reduce: Astee supports the reduction of plastic production and consumption, whether virgin or recycled, as a portion escapes collection, a portion degrades during use, and ultimately disperses in the environment (mainly in water and soil matrices).

Demanding plastic product manufacturing: Plastics composed of polymers and additives have impacts related to the ingestion of plastics by living organisms and degradation into particles, with threshold effects and cocktail effects currently being investigated by scientists.

This finding inspires two parallel responses: (i) activating the precautionary principle and moving towards a list of authorized products rather than a list of prohibited products in plastic manufacturing, and (ii) continuing to acquire knowledge to identify the materials and additives to authorize.

Reducing the number of authorized molecules will de facto facilitate plastic recyclability.

Monitoring, surveillance: Astee confirms the need to develop harmonized expertise in quantifying different plastics, with the assumed ultimate goal of being able to trace back to their uses and thus enlighten decision-makers on action levers.

This expertise is important to develop in order to support the effectiveness of future regulation.

Astee contributes and continues to prepare itself to contribute

Reduce: The Waste and Cleanliness Commission of Astee works on awareness and prevention issues (ecodesign, behavioral sciences), but these topics need further structuring outside of conferences and official events. In its operation, Astee is taking action to reduce its use of plastics (events, brochure packaging).

Supporting manufacturing requirements and choices of plastic-consuming industries by sharing scientific knowledge on different plastics and their impacts on water and soil, as well as their recyclability.

Assisting in the development of methods through consultation between scientists and practitioners. Astee is the ideal platform to host working groups that still need to be created to develop the following methods:

- Effective monitoring methods to improve knowledge
 - on plastic flows to identify action levers (solid waste leakage rates, waste transported by the sanitation system);
 - on impacts on aquatic environments and soils.
- A consensus-based method for comparing alternatives to plastic, taking into account cumulative impacts on water, energy, and greenhouse gas emissions, from production to recycling and final degradation, including usage.