Joint effort to standardize recycled plastic in vacuum cleaners

Leading manufacturers of household appliances and plastic recyclers cooperate to increase the use of recycled plastics in electronic appliances. The joint development of a generic recycled plastic grade for the bottom plate of vacuum cleaners marks a crucial step to large scale use of recycled plastics.

On 12 October 2020 Philips, Electrolux, BSH, Arcelik, Veolia, Coolrec and Comet Traitements signed the Cooperation Agreement, which is the start signal of the project to develop a standard for recycled plastic.

Colorful mix of plastics

Currently, recycled plastics are already applied in household appliances, e.g. in bottom plates of vacuum cleaners. However, many different types of plastic compounds are used. Due to the small volumes this inhibits effective and cost-efficient recycling and is thus problematic for the supply of recycled plastics.

Whole value chain benefits

Standardisation can reduce the large variation in plastics, of which the whole value chain will benefit. Recycling will improve when leading manufacturers agree on a grade of recycled plastics to be used for a specific component. Simultaneously, it becomes easier for them to source the recycled plastics.

The development of a standard for vacuum cleaner bottom plates sets a great example of working together to improve sustainable use of plastics in appliances and stimulate the uptake of recycled plastics.

Next generation vacuum cleaners

Now that the agreement is signed, manufacturers and recyclers will start discussions on the requirements for a common grade. Hopefully this is the start of a new generation of vacuum cleaners, all made from recycled plastic with the same properties supplied by different recyclers.

This standardisation project is part of RE-CET, a project group in which brand owners and recyclers work together in pilot projects to increase the use of recycled plastics in electronic devices. The RE-CET project is currently funded by Rijkswaterstaat, part of the Dutch Government. RE-CET is a project powered by CIRCO.