FLO Group and Versalis to present R-Hybrid at Plast: the first vending cup made from recycled polystyrene

- **Virgin PS is used for the outer functional barrier, and Versalis Revive® PS made with mechanically recycled polystyrene (rPS) is used for the inner layer**

- **FLO Group takes another step to reduce the use of virgin feedstock by replacing it with post-consumer r-PS while maintaining product quality**

Fontanellato (Parma, Italy) – San Donato Milanese (Mi, Italy), 04 September 2023 - The Flo Group, a long-established brand specialising in the production of tableware and food packaging, and Versalis (Eni) present R-Hybrid: the first vending cup made from post-consumer recycled polystyrene. This is a significant step in food packaging innovation towards a more virtuous recycling system involving the efficient reuse of resources – R-Hybrid is itself also recyclable.

The project was carried out with SCS (Styrenics Circular Solution), a European association comprising the entire styrenics polymer supply chain, from raw material manufacturers to post-consumer recycling companies, and in close cooperation with the Fraunhofer Institute, Europe's leading applied research centre. A supply chain consortium was established as a result of this partnership that has developed a protocol for the use of recycled PS in food packaging with a functional barrier. This has enabled the validation of the entire process, from the production of the recycled materials to the appraisal of technical characteristics of the multilayer and the challenge test of the finished product.

"There are plastics and there are plastics; those used for packaging are generally among the most valuable in terms of both quality and performance. The R-Hybrid project is strategic because it finally opens the door to the reuse of polystyrene in food containers and ensures that it retains its original value," said Erika Simonazzi, Marketing Manager of the Flo Group. "There are also numerous advantages offered by the new R-Hybrid cups as an even more sustainable solution than the traditional Hybrid, of which they are the natural technological evolution. The new R-Hybrid combines the benefits of a reduced carbon footprint and the effective reuse of post-consumer plastic that is put back into circulation through the creation of new cups."

"The strategy of the Versalis styrenics business is based on the use of increasingly sustainable polymers obtained also from secondary raw material derived from recycled plastic. In particular, the Versalis Revive® range consists of polymers
containing mechanically recycled plastics from household differentiated collection”, said Claudio Bilotti, Head of Styrene and Polystyrene Marketing at Versalis (Eni). “Our goal is to produce and market increasingly sustainable products. Recycled products have a reduced CO2 impact* and allow the use of a valuable feedstock such as post-consumer plastics, as well as of local resources. They also represent an important market opportunity for Versalis in food packaging.”

With the production of R-Hybrid, the Flo Group and Versalis have taken an important step towards reducing the waste of virgin feedstock, without affecting the quality of the final product.

R-Hybrid is a thermoformed product with an ABA multilayer, sandwich-type structure, where the inner layer contains r-PS from the Versalis-Revive PS series, developed by Eni’s chemical company, and the outer layer contains virgin PS, which acts as a safe functional barrier. The R-Hybrid cup, which will enter the market at the end of the year, replacing the Hybrid cup, the innovative beaker with which FLO Group revolutionised the vending market to such an extent that a total saving of more than 2,600 tonnes of CO2** was achieved in 2022 thanks to its widespread use.

R-Hybrid will be presented at Plast, the International Exhibition for the Plastics and Rubber Industry, at Fiera Milano-Rho from 5 to 8 September 2023 (Versalis stand B51-C52, Hall 9).

* Appraised through a Cradle to Gate LCA (Life Cycle Assessment) in line with the ISO 14040:2006 and 14044:2006 standards.
**Carbon Footprint assessed by DNV Business Assurance with reference to the entire supply chain and applied to the Hybrid cup sales volumes in 2022. Values of 2022 compared to the traditional vending cup with 100% virgin PS.