As automotive manufacturers look to improve fuel economy and battery range for electrification, material lightweighting without compromising mechanical integrity is vital. Metals, although lightweight, can come with indirect processing and manufacturing costs and may become even more expensive with the uncertainty surrounding global metal supply. Sheet molded composites (SMCs) are a viable alternative to metals in certain applications, while still achieving the desired physical properties.

3M has recently introduced a new product, 3M™ Glass Bubbles S32HS to help OEMs achieve up to a 40 percent weight reduction of composite parts, at a density below 1.0 g/cc, while still enabling a class A paintable finish. This innovation makes SMCs an attractive option in automotive design for OEMs.