

# Design for sustainability (DfS) scorecard



With our DfS scorecard, we drive sustainability improvement during the product development process through multiple product sustainability criteria divided into seven impact areas.

## MAS-100 Atmos® Microbial Compressed Gas Sampler



Redesigned compressed gas monitoring solution focusing on ease of use and data integrity optimization

### Impact areas

### Results

|                                                                                                                       |                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <b>MATERIALS</b>                     | 29% product mass reduction and 35% raw materials carbon footprint reduction due to the replacement of Aluminum with High Impact Polystyrene (HIPS) for the housing and of the NiMh battery with a Li-ion battery                                                |
|  <b>SUPPLIERS &amp; MANUFACTURING</b> | No change compared to baseline product in consideration of our DfS criteria                                                                                                                                                                                     |
|  <b>PACKAGING</b>                     | 60% packaging weight reduction due to the replacement of a rigid plastic case by a corrugated box                                                                                                                                                               |
|  <b>ENERGY &amp; EMISSIONS</b>        | 45% lighter system including packaging leading to lower emissions associated with transportation<br>1.5W power increase due to more powerful hardware and touchscreen to improve the product functionalities and comply with the latest data safety regulations |
|  <b>WATER</b>                        | No change compared to baseline product in consideration of our DfS criteria                                                                                                                                                                                     |
|  <b>USABILITY &amp; INNOVATION</b>  | Improved ergonomics due to the reduced weight and simplified use thanks to the new touchscreen<br>Added user and data management features to preserve customer data safety and integrity (21 CFR Part 11 compliant)                                             |
|  <b>CIRCULAR ECONOMY</b>            | New generation hardware can accommodate future software updates and added functionalities<br>Degradation of the recyclability of the product housing due to the replacement of Aluminum with HIPS                                                               |

Baseline product: MAS-100 CG Ex® system