

# 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.

## Milli-Q® IQ 7010 Ultrapure and Pure Water Purification System



Ultimate ultrapure and pure water solution - less electricity, more compact and mercury-free UV lamps

### Impact areas

### Results



#### MATERIALS

12% system size reduction but 6% weight increase due to more efficient but heavier power supply



#### SUPPLIERS & MANUFACTURING

No change compared to baseline product in consideration of our DfS criteria



#### PACKAGING

For purification cartridges' packaging, 30% weight and 31% volume reduction compared to initial design due to new protective insert design and twin box concept. System's corrugated box with sustainable forestry certification. Protective inserts made of 100% bio-based polyethylene (PE) foam from sugar cane waste for the system and made of PE foam with a minimum of 50% recycled content for the Q-POD® and E-POD® water remote dispensers.



#### ENERGY & EMISSIONS

22% reduction of system electricity consumption thanks to optimization of components and processes as well as an embedded improved "Lab Close" mode



#### WATER

7% water reduction during system use thanks to new periodic EDI rinsing  
Reduction of water consumption during system quality control thanks to the implementation of a new impermeability test by air instead of by water



#### USABILITY & INNOVATION

Innovative UV oxidation lamps with mercury-free xenon excimer technology, and bactericidal lamps with mercury-free UVC LED technology.  
Easy and quick cartridge replacement thanks to unique patented twist and lock technology



#### CIRCULAR ECONOMY

The system is designed to be easily maintainable and have a lower replacement frequency of purification consumables. Implementation of a drain cap enables to purge about 48% of the water from the purification cartridges, representing about 25% of the cartridges' total weight prior to disposal.

Baseline product: ZRXQ010T0 – Milli-Q® Integral 10