

**PHILIPS**

Circular economy

# PowerBalance gen2: example of circular design

Philips Lighting

The PowerBalance gen2 luminaire is made of advanced LED technology that is energy efficient and significantly reduces operational costs.

PowerBalance gen2 is one of our most energy-efficient LED luminaires. It reduces energy costs by a minimum of 50% compared to a traditional fluorescent tube. Its architecture enables a range of highly versatile modular and semi-modular luminaires that can be easily mounted in ceilings.

The design of this product is suitable for a performance contract proposition: Light as a Service. Light as a Service is a lighting contract in which Philips maintains the lighting in the office for the customer, ensures that it is upgraded to the latest technology available in the market and takes the ownership of the materials until its end-of-life. Light as a Service employs circular economy principles of service.

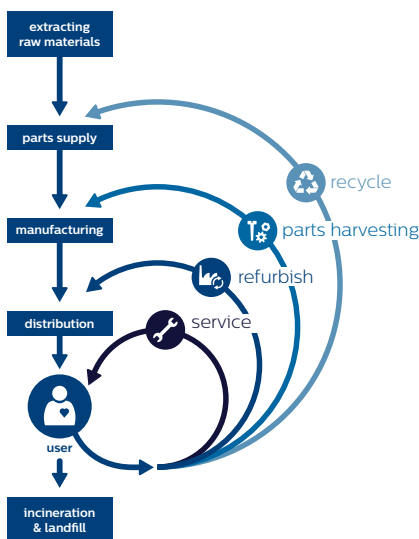
The PowerBalance gen2 can be easily dismantled for maintenance, service and upgrades due to its innovative and modular design. Its components can be replaced to make the product ready for its second life in the market. Through this approach we enable energy savings, make effective use of our materials and avoid costs needed to manufacture an entirely new product; all benefiting the circular economy and the planet.



***“In order to serve current and future markets, our design challenge was to design for maximum efficiency and modularity, minimum use of different materials and easy (dis)assembly.”***

Gerrit Hillen, Product Architect PowerBalance gen2

## The circular economy



## The return loops



### service

The system can be used for more than 10 years as it provides opportunities to easily change and upgrade the light engines and modules by certified service providers.



### refurbish

This product is designed in a modular way, offers easy access to components, uses few screws, and can be quickly disassembled in less than 30 seconds.



### parts harvesting

Due to modular design this product can be easily disassembled to allow for parts harvesting.



### recycle

The PowerBalance gen2 was designed using a limited number of different materials and can be easily separated into the original materials, enabling better material recovery.

