

Lighting-as-a-Service Hints at Major Industry Shifts

Taylor Embury — January 31, 2014

In November, Philips signed a [10-year performance lighting contract](#) with the Washington Metropolitan Area Transit Authority (WMATA) to provide lighting-as-a-service in 25 WMATA parking garages. Over 13,000 lighting fixtures are being upgraded to a custom-designed LED lighting solution at no upfront cost to WMATA. The cost of the project will be paid for through the estimated \$2 million in energy and maintenance savings the project will yield per year. Energy usage is expected to be cut by 68%, or 15 million kWh, per year. Philips will also monitor and maintain the system during the life of the contract, allowing WMATA to redirect approximately \$600,000 annually in labor and material resources. As part of the 10-year maintenance contract, Philips will also reclaim and recycle any parts of its system that must be replaced.

The implications of this business model are significant. WMATA gets a top-of-the-line lighting system essentially free. In fact, if Philips charges anything less than \$2 million per year (or whatever the annual savings are), WMATA is making money on the project. Throw in the maintenance contract and how could a potential customer say no? The only potential downside would be if Philips welves on its customer service agreement and fails to perform adequate maintenance. This would be a problem for Philips as well, as it would mean that the firm underestimated the resources needed to fulfill the maintenance contract and is missing its cost goals.

Reuse, Recycle, Re-Profit

According to Philips, lighting-as-a-service (or [Pay per Lux](#)) is their model moving forward, and that could be extremely disruptive. While the fine details of the agreement have not been made public, it's likely that WMATA agreed to pay Philips a percentage of the actual energy savings per year (compared to WMATA's energy usage in a base year) as opposed to a flat rate. This incentivizes Philips to maximize the efficiency of the system, which benefits everyone. In that way, WMATA is truly paying for performance.

Echoing the theme of [my last blog](#) on cradle-to-cradle circular economies, Philips could also capture cost savings by recycling the lighting components, thereby turning a waste stream into a supply line. Even if the upfront savings are small, they would provide an incentive for Philips to streamline the recycling process by designing products for disassembly, using fewer raw materials, and expanding relationships with [recycling facilities](#), perhaps even acquiring them. Then, if lighting-as-a-service starts to gain traction and the amount of material being recycled gains critical mass, the savings could become very real.

An efficient recycling process could lead to other opportunities. For example, Philips could provide upgrades to WMATA's system, increasing energy savings and customer satisfaction, more frequently and at lower cost without creating any waste. If no material is being wasted, suddenly planned obsolescence doesn't sound so bad.

I suspect any company that offers a technology that can pay for itself with annual savings is taking a long look at this business model. If not, they should be. The residential solar industry is already capitalizing on a [similar leasing model](#). If leasing and maintenance contracts become the norm in these industries where savings pay for the product, and customers begin paying for light as opposed to a lighting fixture, it could mean that hardware companies like Philips and Samsung will have to differentiate themselves more on customer service than on their physical products.