

Signify

From lighting to LEDs



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Quotes attributable to Harry Verhaar, Head of Global Public and Government Affairs, Signify.

Shift to low carbon technology

Back in 2006, Signify (formerly Philips Lighting) issued a global call to phase out traditional, incandescent light bulbs. At the time, Signify was the market leader in this product sector. The decision was a bold one for two reasons. Firstly, this was the product the company was founded on, and at the time it still made up two-thirds of its sales volume. Secondly, light-emitting diode (LED) lighting was not yet available as a commercially ready alternative. Today, Signify leads the market in LEDs, a low-energy innovation that now predominates in the lighting sector. The role of glass production as a key component in the manufacture of lighting products – a major barrier to entry for small market innovators – has diminished, and the industry is now considerably more dynamic and competitive as a result.

“Back in 2006, it was thought that making a global switch from incandescent light bulbs was unachievable. Today, LEDs dominate the global market.”

Rationale: market leadership and sector-wide transition

In 2006, Signify’s own calculations revealed that lighting was responsible for one-fifth of global electricity consumption. Conscious that this was incompatible with a climate-secure future, the company set itself the challenge of developing more energy-efficient lighting solutions while advocating for a global market transition to more climate-friendly solutions. In doing so, it aimed to retain its leadership in the market, while at the same time helping its sector as a whole transition towards net zero.

“Everybody knew that this transition was good for the world, but it was also part of our survival. We recognised that our survival as a technology company was very much dependent on the speed with which we address the climate challenge.”

Business model innovation

The decision to phase out incandescent light bulbs pushed Signify to reprioritise and ramp up its research and development work. This enabled it to rapidly transform its nascent LED technology into a market-ready and ultimately market-shifting product. Over time, Signify’s net zero strategy has also led the company to move into new business areas, such as digital solutions linked to the Internet of Things and leasing light-as-a-service (rather than selling the hardware).

“Suddenly now we are working with the likes of Google and Amazon and other IT companies because of lighting’s emerging role as a backbone of the Internet of Things.”

“The world needs to be carbon neutral, but instead of stepping on the brakes, we saw this as an opportunity to innovate.”

Challenges: prompting action, internally and externally

Signify faced two major challenges with its bold market transition strategy. The first was internal. Senior management did not question the climate-based arguments for a phase-out, but actioning the move required a firm transition strategy. This prompted the development of a robust restructuring plan, based on extensive use of scenario planning and life-cycle analysis tools. This plan included a major reprioritisation in Signify’s innovation strategy as well as the use of sales revenues from its heritage products to finance next-generation alternatives.

The second challenge consisted of overcoming hurdles to the industry-wide uptake of LEDs. This involved not only proving the technical viability, cost savings and environmental advantages of LEDs to industry peers, but also engaging policymakers on regulatory reforms that would speed up the transition. The sharing of Signify’s transition scenarios provided impetus on both fronts, both by highlighting the need to act and by illustrating the options for doing so.

For policymakers in particular, data from Signify’s sector transition analyses also made a compelling case around the climate gains of a market transition. Key to persuading policymakers, however, was widening the argument beyond the confines of climate alone. Drawing on empirical evidence, Signify was able to show that the use of LEDs for street lighting improved illumination levels and gave city residents a greater sense of safety. In 2007 and 2008 respectively, US and European policymakers announced a phase-out of incandescent light bulbs, thus galvanising other lighting companies and countries into action.

“The fact that we set transition scenarios was a key factor.”

“The best way to serve anyone’s self-interests is to invest in the common interests, and that means acting on climate change.”

“The transition to highly energy-efficient lighting is now well underway and it has happened through a combination of business innovation and government ambition.”

“The energy bill and climate commitments are important, but safer streets and less crime – that’s what city authorities are primarily interested in.”

Transition to net zero: circular procurement

Positive demand signals are essential to accelerate the low carbon transition of specific markets. Climate-influenced procurement criteria provide just such a signal. Products that meet minimum climate performance thresholds, such as contributing to emission reductions, or that promote material reuse, would ideally be prioritised over others. The EU’s Taxonomy scheme is a strong example of just such a system.

Source: Signify

