

There are currently 315 million total streetlights in the world. This number will grow to 359 million by 2026. Old-technology streetlights are being replaced with LEDs at a rapid and growing pace, and these are being networked together with communications to transform the lighting of cities and municipalities worldwide. In most developed countries, LEDs are already an economically beneficial alternative to existing streetlights over the lifetime of the streetlight when energy savings are considered, despite their higher upfront cost.



But in the next few years, LED streetlights are expected to reach cost parity with legacy technologies, making their benefits to costs immediately positive and thus feasible in even less-developed countries—many of which are rapidly urbanising and so in need of improved urban infrastructure.

From 2016 to 2026, global investment in LED street lighting is expected to be USD \$57bn. But LEDs are not the only element in modern public outdoor lighting. Networked intelligent streetlights help cities further reduce costs with their dimming capabilities and reduced maintenance costs. This kind of smart street lighting is already taking off in major markets such as the US, UK, and China. In many developed countries, smart streetlights are serving as part of larger "smart city" concepts, where communications networks can be used to link items such as electricity and water meters, traffic lights, and parking meters. Smart streetlights, which can report operational faults or failures, also can improve safety by minimising downtime.

Given all that, LED and smart streetlights are projected to reach 89% and 42% of the total streetlight market, respectively, by 2026, for a total market opportunity of around \$70bn over the next decade.