Global Smart Street Lighting & Smart Cities: Market Forecast (2020 – 2029)

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The term “smart cities” has created plenty of buzz, but perhaps even more questions. Cities are looking at smart infrastructure to reduce costs, improve sustainability, and provide better services to residents. Cities recognize the possibility for smart city investments to open up new opportunities beyond the simple business case and for early investments to reap long-term knock-on benefits. But for the smart cities market to grow, the initial communications and software backbone must be put in place. This is now happening on a large scale through the deployment of smart streetlights, which will enable cities to phase-in additional smart city investments. This study analyzes this foundational market and forecasts the market for energy efficient street lighting, streetlight networking, and additional smart city applications attached to streetlights through 2029.

Globally, there are 326 million streetlights – growing to over 361 million by 2029 – 73% of which will have LED luminaires by the end of the decade. Costs for LEDs have now mostly bottomed out, and the business case is clear. LEDs will be the dominant technology for street lighting going forward, and savings from LEDs will help drive additional applications. LEDs are further supplemented by streetlight controls, or “smart streetlights.” These networked streetlights accentuate all of the savings benefits of LEDs, while also improving public safety and putting in place the communications and software infrastructure that can be utilized for further smart city applications. Smart street lighting has grown at a robust CAGR of 52% since 2012 and will maintain steady growth through the 2020s.

Cities and utilities with smart streetlights are now exploring ways to both improve urban efficiency (through smart parking, environmental sensors, waste management, and other applications) and increase revenue (through licensing agreements with telecommunications operators, monetizing...
urban data collection, and other initiatives). Smart city platforms based on smart street lighting are viewed as the most economical way to transition to this market.

As the foundational layer of smart cities, there are vendors from diverse market segments engaging in smart street lighting, ranging from telecommunications operators and smart grid vendors to lighting manufacturers and smart city-focused vendors. Increasingly, infrastructure investment funds, ESCOs, and urban management companies are playing a growing role in financing and carrying out smart street lighting projects. This trend will only be exacerbated by municipal budget shortages caused by Covid-related economic challenges. There are dozens of vendors with a sizable role in the market and an increase in mergers and acquisitions is expected soon.

But for now, these vendors are rapidly developing projects in all regions of the world, headlined by large-scale tenders in Latin America, the Middle East, and South Asia, in addition to the developed markets of North America, Europe, and Oceania. Overall, LED and smart streetlights are projected to reach 73% and 23% of the total streetlight market, respectively, by 2029. This will total a $28.1 billion market opportunity over the next decade.

Key questions answered in this study:

- What is the market share of the leading smart streetlight vendors?
- How has Covid-19 affected the smart cities market?
- How large will SaaS revenues be and how has TALQ2 enabled new players?
- Which streetlight management companies are financing smart cities projects?
- How large will the market for LED and smart streetlights be across 125 countries?
- What hurdles to smart street lighting have been overcome and which ones remain?

*Global Smart Street Lighting & Smart Cities: Market Forecast (2020 – 2029)* comes with the following research deliverables:

- 123-page PDF copy of the study;
- Excel dataset covering 125 individual countries (the total number of streetlights, LED streetlights, smart streetlights with units and value, both annual and cumulative); and
- Executive summary slides.

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