



Case study

Signify brightens Bratislava with LED lights

Bratislava, Slovakia



Modernizing the public lighting in the Slovak Republic capital is one of the largest projects in Central and Eastern Europe, one that will replace approximately 60% of the existing luminaires in Bratislava. Advanced Philips LED technology from Signify promises to significantly reduce the city's carbon footprint and electricity consumption.

Bratislava is a shining example of how energy efficiency and reduced CO₂ emissions can be achieved without compromising technical performance. The city will be able to measure electricity savings as soon as the luminaires are in operation.

Customer challenge

City officials were looking for a new public lighting solution that would not only fit into the overall design of the city, but could also meet sustainability goals, reduce environmental impact, and contribute to the comfort and safety of citizens. They specified these goals in the tendering process, in which 70% of the selection criteria were focused on energy efficiency¹ and other technical requirements.² Bratislava's approach can serve as an inspiration for other cities in the CEE region on how to define specifications for tenders that are future-oriented and that look beyond costs. The solution presented by the Signify team best met the technical requirements, compliance with the technical standard STN EN13201 for road lighting, energy efficiency targets, and the city's budget.

1 – Selection criteria: Energy efficiency consisted of 30% PDI – power density indicator and 30% AECI – annual energy consumption indicator

2 – Selection criteria technical requirements represented 10% and accounted for lm/W, TI, Gx, Dx, SDCM, LXXB50

The solution

Lighting experts from Signify have designed and will deliver nearly 30,000 [Philips UniStreet gen2](#) LED luminaires to the Slovak capital, replacing the current conventional lighting.

LED lighting can improve road safety. For example, it can improve the ability of motorists to recognize people, making it easier to avoid accidents at pedestrian crossings. LED light sources also have a longer lifespan than conventional alternatives.



The Philips luminaires are equipped with Zhaga sockets, an indispensable element for lighting control and communication between the environment, drivers and LED modules, making them ready for future expansion and connectivity with lighting management and other IoT systems. This will help the city of Bratislava to be more energy efficient and allow for the next phase of modernization: networking the luminaires, further integrating them with lighting management systems, and managing lighting intensity levels and system incidents. In these ways, Bratislava can achieve its vision of becoming a smart city and contributing to a circular economy.

The new advanced LED street lighting technology from Signify will significantly reduce the carbon footprint of the city by 672 tons of CO₂ per year³, provide substantial cost savings for the city, and cut annual electricity consumption by an estimated 4.8 GWh⁴. Energy efficiency is particularly important given the increasing and unstable electricity prices in the European market. Street lighting is a key public service for citizens, as it improves safety for both pedestrians and vehicles.

3 – Data source: Ember – Yearly Electricity Data (2023); Ember – European Electricity Review (2022); Energy Institute – Statistical, Review of World Energy (2023); <https://ember-climate.org/>

4 – Calculated savings refer to the part of public lighting modernization which has been delivered to city of Bratislava by Signify





“Modernization of public lighting is a crucial part of Bratislava’s sustainable development plan. LEDification is a major step towards energy efficiency and cost savings. The next step is connecting the luminaires to the IoT and proceeding with smart city deployment. With this new lighting, we are ready for the future.”

Juraj Nyulassy
CEO and Chairman of the Board of
Technical Networks Bratislava





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