

Orion do Brasil

Reinventing Lighting for Public Spaces.





LED

The Lighting Revolution

**An Achievement for
the 21st Century Climate,
Economy, and Society.**



The Lighting Revolution

Significant savings despite the growing energy demand.

THE THREE GLOBAL CHALLENGES.

By 2030, these global trends will generate an estimated 35% increase in the number of lighting fixtures worldwide.

Enormous energy savings can be achieved through **Accelerating the Renewal** of the installed base with the adoption of efficient and connected LED lighting technologies for cities and buildings.



The Lighting Revolution

From a Linear Economy to a Circular Economy.

In recent decades, a model for companies and society has prioritized paying the lowest initial cost. The linear economy extracts and consumes huge amounts of resources (energy, materials, food, and water).

With over 95% recycled material and RoHS certification, combined with a management system, LED lighting is more durable, non-polluting, and energy-saving.



The Lighting Revolution

Growing demand for lighting.

Due to population growth, urbanization, and the rise of the middle class, the total number of lighting fixtures worldwide is projected to increase by 35% by 2030!

This path should be accompanied by smarter, connected luminaires ready to maximize the benefits they can generate.



+35%

Global Trends

Increase in lighting fixtures.



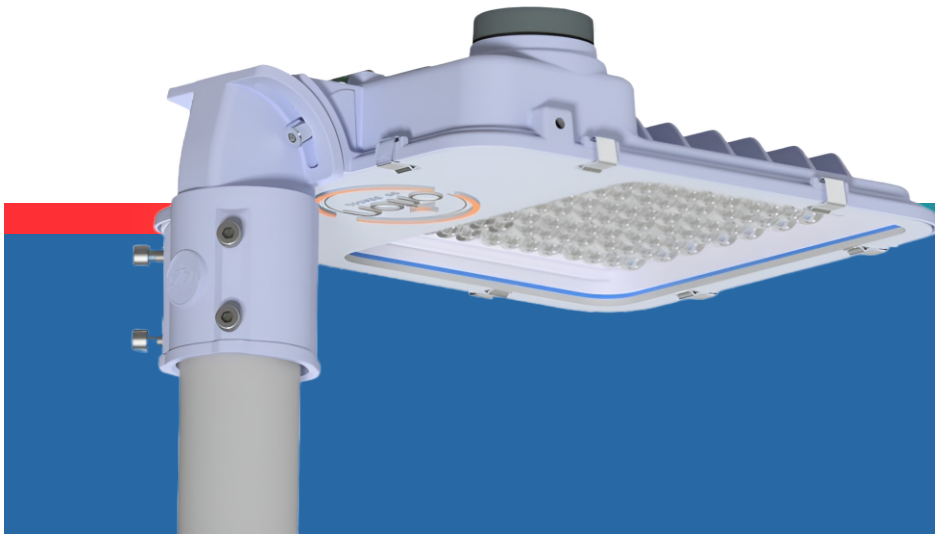
Value Proposition

Currently, lighting accounts for 19% of the electricity consumed worldwide!

LED technology is used in all lighting applications. It can be connected to Lighting Management Systems and adjusted to provide new experiences for users and citizens. This makes it an energy-efficient lighting technology and prepared to drive Sustainable Development.



19%



LED Lighting: A Viable Solution

The 4 Drivers of Change.

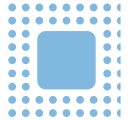


1 Rising Energy Prices.



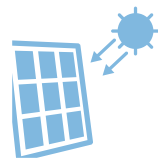
The subsequent increases put pressure on the finances of cities, businesses, and individuals. Investing in solar energy to increase production and LED technology to reduce energy consumption are vital for the success of future smart city management.

2 Energy Supply Security.



Energy generation is advancing at a rapid pace, and one of the biggest challenges now is storing that production for use at the right place and time, according to the needs and planning adopted by the municipality.

3 Climate Change.



Climate change can cause drastic changes in energy production in Brazil, which is still heavily reliant on hydroelectric plants. LED technology offers energy savings and maintenance cost reduction.

4 Economic Growth.



The economic and population growth of cities will increase the demand for energy. The optimization of Public Lighting and its management are crucial for municipalities to allocate their energy in the best possible way.

Value Proposition

LED Lighting Systems and Technologies.

You can make significant progress with:

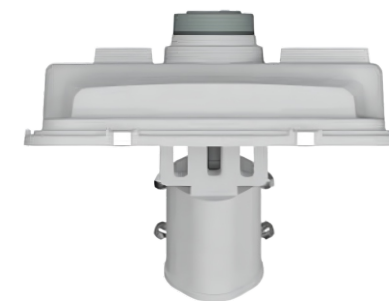
- Energy Savings
- Reduction of Carbon Emissions
- Cost Reduction by choosing **LED Technology.**





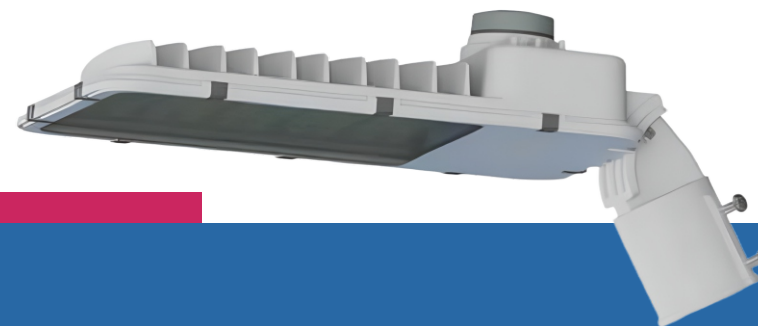
+ Durability.

+ Saving.



Intensity Control, Focus, and Color.

LED Lighting, combined with Intelligent Controls, Networks, Devices, and Applications, enables new levels of energy efficiency, amazing lighting experiences, and extraordinary business outcomes.



LED Lighting: A Viable Solution

Transitioning from Analog to Digital.



Moving from lamp replacements, luminaires, and ballasts to Lighting Financing and Leasing as a service.

“Lighting as Services”

This will not only bring direct economic benefits to the Lighting Infrastructure but also align its administration with the transition to a Circular Society.





Restricting the supply of less efficient products.

This involves eliminating outdated technologies and establishing minimum efficiency and quality requirements.

- Incandescent bulbs:
 - Halogen lamps:
 - High-pressure mercury lamps:
- Electromagnetic ballasts for fluorescent lamps.

Stimulating the demand for more efficient systems and products.

National policies and legislations promote this change.

- Green Public Procurement:
- Lighting System Legislation:
- Financing Mechanisms:
- Energy Performance Targets for all buildings and neighborhoods, combined with the renovation of existing targets.

Business Facilitators

Potential investment models.

CAPITAL NEEDS STUDY

COSIP - Account linked to the operation costs of Public Lighting.
(Check financial resources available in COSIP).



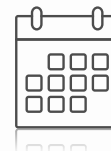
FINANCIAL VIABILITY

Assess Monthly/Annual liquidity behavior in COSIP.



IF CAPITAL IS NEEDED

How to modify COSIP?
Check the latest COSIP update.
If there is a need for modification by decree, based on consumer consumption in kWh.



TECHNICAL VIABILITY

Hire an Electrical Engineering Company for technical/financial feasibility projects through invitation letters.
Composition of the Public Lighting Park, a study will demonstrate current consumption and potential savings.



Business Facilitators

Decree Model (see annex).

Business Facilitators

Technical Feasibility Models.

4. QUANTITIES, POWER IN WATTS, AND SPECIFICATIONS:

Regarding the quantities to be replaced

4.1 - LUMINAIRES

Number of fixtures	Power of existing bulbs to be removed.	Power of LED luminaires to be installed.
600	100W	55W a 89W
1000	250W	90W a 140W
600	400W	140W a 250W

Financial Viability with Energy Savings.

Value of savings = Immediate impact after replacing conventional luminaires with LED Technology.

Savings \$ vs Payment Capacity.



Business Facilitators

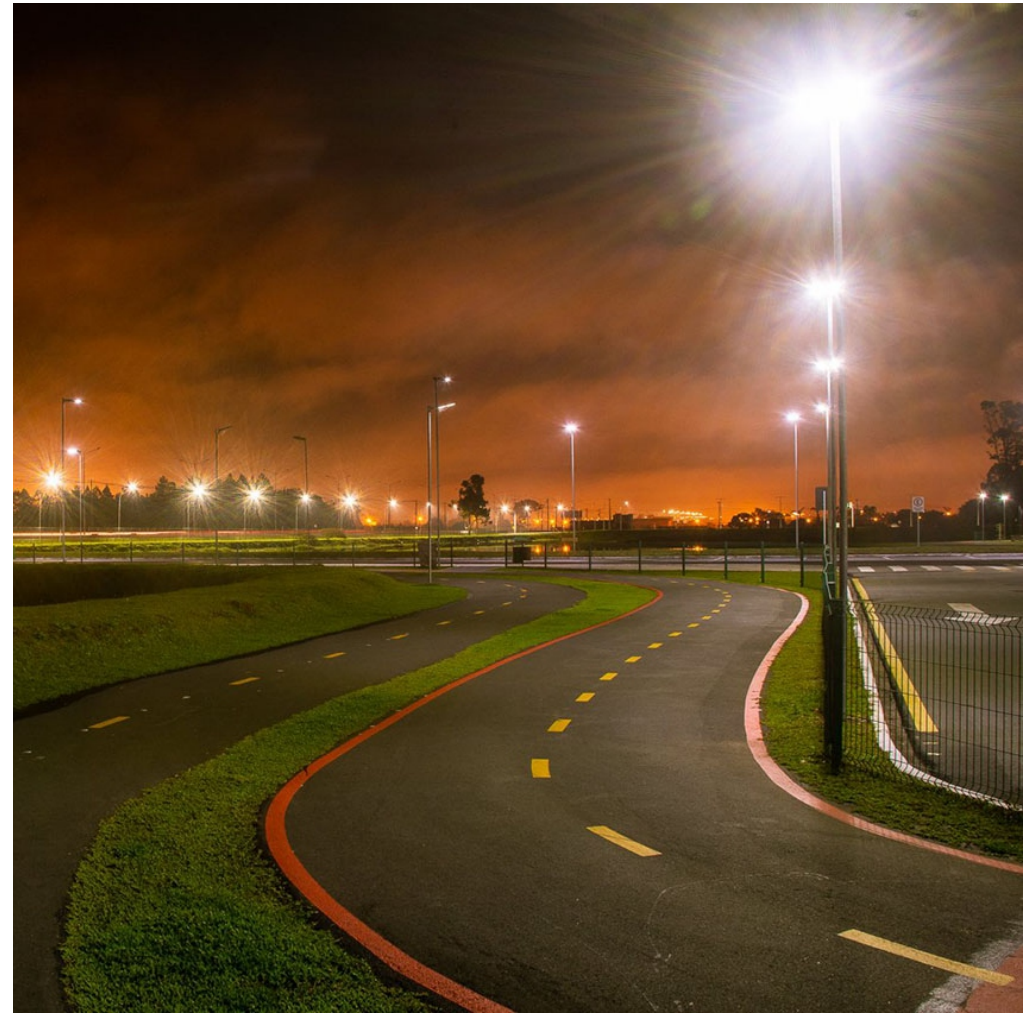
Potential investment models.



LED Lighting

Immediate Benefits.

To fully unlock this potential, it is necessary to accelerate the renovation of urban infrastructure and buildings. Cities, states, and regions can and should take the lead through partnerships with high-tech companies.

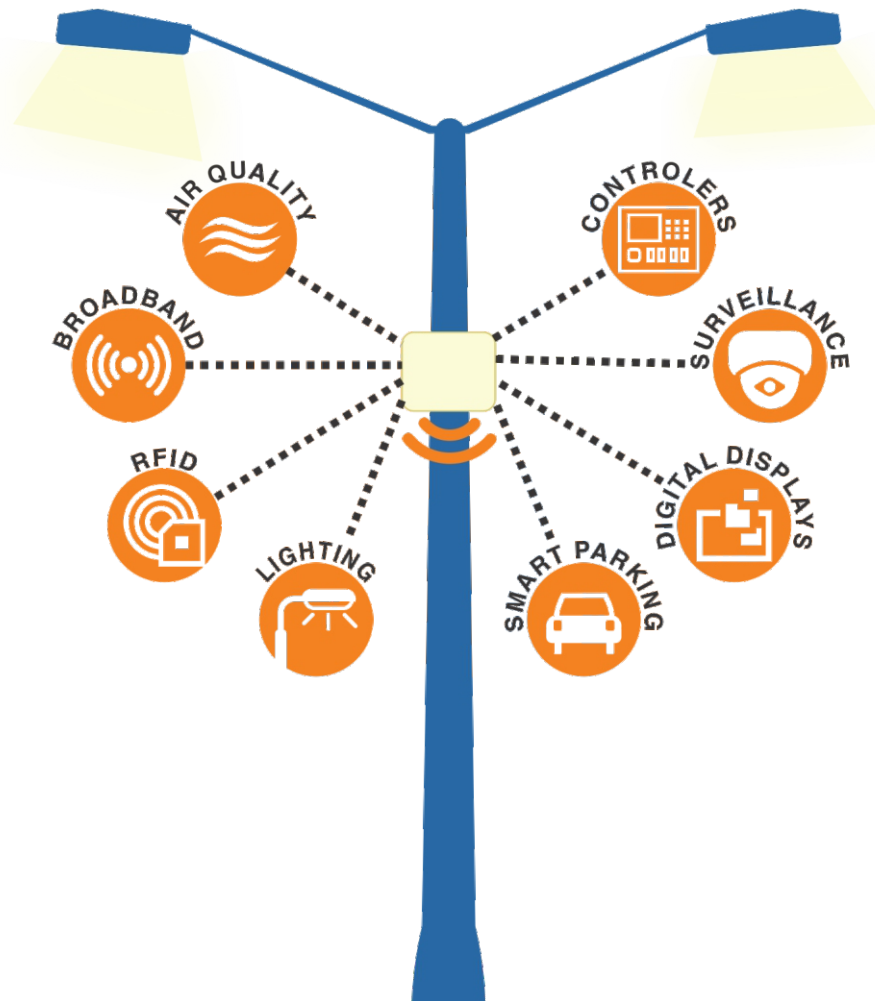


Connected LED Lighting Systems and Solutions, along with Energy Efficiency, are ready to be adopted, and Orion hopes to work with you to make this a reality!



Gateway to smarter cities

Smart Lighting.



LED Luminaire and 5G Connection.

Wi-Fi hotspot.

Security cameras and monitoring.

Air quality sensor and temperature.

Data collection and reporting:

- Traffic data;
- Vehicle and pedestrian flow;
- Parking spaces / blue zone;
- Traffic lights control / Traffic engineering;

Lighting control:

ON-OFF / Dimming / Warning modulation;
Change of focus and color temperature.

Orion do Brasil.

Our mission is to illuminate the path to the future.

Founded in 2006, Orion do Brasil is considered a national leader in the production and design of high-performance luminaires. With a proven presence in more than 70 municipalities, our products have already illuminated an impressive 5,250 kilometers of roadways across the country.

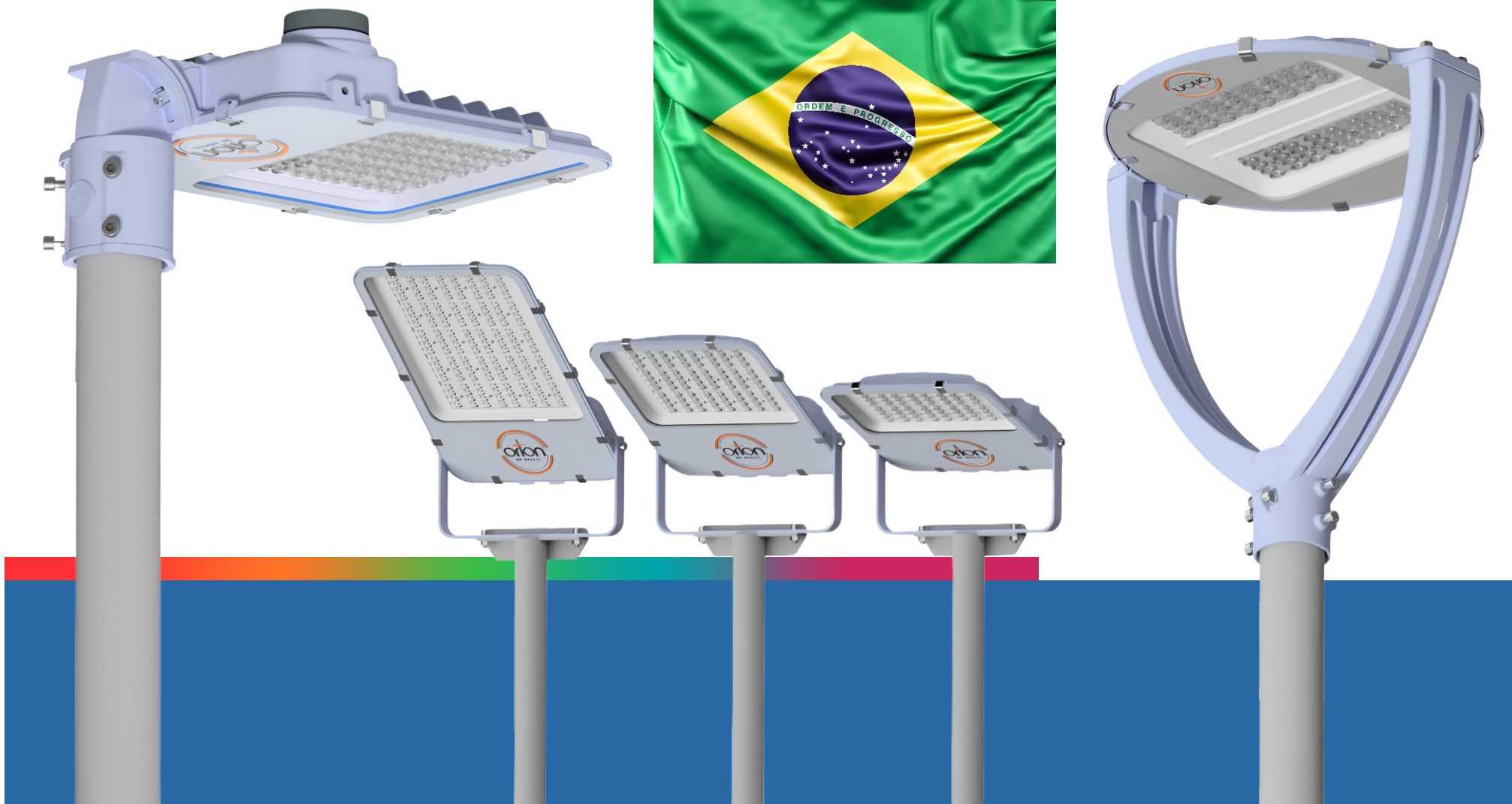
Our secret? Constant innovation! Through LED technology and intelligent systems, we provide efficient and uniform lighting, reducing costs and increasing safety on your roadways.

Our partnership is enduring, and our mission is clear: to illuminate the path to the future. Trust in Orion do Brasil and transform your city into a safer and brighter place. Your journey towards luminous safety starts here!



Orion do Brasil LED Luminaires

Developed and Manufactured in Brazil.



Orion do Brasil LED Luminaires

Our Certifications.

Our products have all the certifications from Brazilian regulatory bodies and are in line with ILAC - International Laboratory Accreditation Cooperation.



EXCELÊNCIA EM LED
EFICIÊNCIA ENERGÉTICA VOLTADA A ILUMINAÇÃO PÚBLICA



Orion do Brasil

Supporting the initiatives of the UN's 2030 Agenda.

The Sustainable Development Goals (SDGs) are a global call to action to end poverty, protect the environment and climate, and ensure that people everywhere can enjoy peace and prosperity as outlined in the UN's 2030 Agenda, of which Brazil is a member and signatory.

Considering that economic development can and should be compatible with social and environmental development in a sustainable context, Orion do Brasil supports the initiative and adopts practices and proposals that align with the SDGs, with 11 out of the 17 objectives already well underway.



Efficient and cost-effective public lighting

**Illuminate your night and protect
the planet with our
LED solutions.**



Thank you very much!



LED Lighting

Orion do Brasil.

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