

NXT™ SERIES: ROADWAY CASE STUDY

MACEIÓ, ALAGOAS, BRAZIL



62%
ENERGY
SAVINGS

Maceió (Brazil) is the capital and largest city in the coastal state of Alagoas. By working with Prefeitura de Maceió over the past 3 years, we have completed our installation of more than 841 luminaires from our award-winning NXT series along a 20 km stretch of the coastal Avenue Dr. Antônio Gouveia. The total installation also included improved lighting levels for parking areas and pathways along the beachside for increased security. This conversion is also noteworthy as it is recognized by Brazil authorities as one of the best street lighting projects to illuminate the coastal regions of Brazil. The new NXT-S and NXT-M luminaires provide uniform light with no up-light. In addition to improved illumination, the installation yielded energy savings of 62% versus the original high pressure sodium luminaires.

LOCATION:

Maceió, Alagoas, Brazil

CLIENT:

Prefeitura de Maceió

PROJECT SCOPE:

841 NXT series luminaires series along a 20 km of coastal roadways, parking areas and pathways.

PRODUCT:

NXT series luminaires (NXT-S and NXT-M)

NXT™ SERIES VS. HIGH PRESSURE SODIUM

MACEIÓ, ALAGOAS, BRAZIL



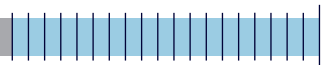
1.8* Years Asset Payback

Total Lifecycle Cost Savings (20 Years) **\$34,451,709**



Energy Savings (1 Year) **\$2,187,643**
(625 MWh)

Energy Savings (20 Years) **\$26,251,709**
(12.505 MWh)



Maintenance Savings (1 Year) **\$430,000**
Maintenance Savings (20 Years) **\$8,600,000**



Greenhouse Gas Reduction (20 Years)
1,023 Tonnes*



NXT-S Luminaire

* Asset Payback is based on capital payback of replacing 150W, 250W and 400W high pressure sodium luminaires. Year 1 estimates are based on the full conversion. Re-lamp cost of \$100 per luminaire. Re-lamp schedule is 4 years. Energy cost \$0.275 per kWh. Annual energy cost increase rate (multiplier) is 2%. Length of study (20 years). Daily on-time (12 hrs/day).

* Assumes that the tonnes of CO2 produced per MWh of energy is Equivalent in Brazil to the US.