



Replicable Practices

Streetlight OesteLED IP, Oeste Region- Portugal

Project description

The OesteLED streetlighting ESCO project was implemented in 12 municipalities that constitute an Intermunicipal Community, a NUT III region in Portugal, with a population of approximately 365,000 inhabitants.

The main goal of the project was to improve efficiency in street lighting. It was one of the largest LED projects in the world, and the biggest in Portugal as well as a **pioneer** in the intermunicipal financing model, reducing electricity bills by more than €6,6 million at 2022 electricity costs.

The model

Supported by a financing model based on an ESCO energy contract, the project is a result of approximately $\leq 12,5$ M. investment over a 12-year contract.

The contract enables an annual $\notin 3,4$ M. in energy savings where 58,85 % is kept for the beneficiaries. The investment benefited from the large critical mass due to the large extent of the project which ensured high efficient requirements.

On the technical perspective, the technological risk was minimised by the compliance of streetlighting standards, with other national references as well as those recognised by the current streetlight management and maintenance municipal concession.

This scenario resulted in large energy savings and therefore more space and more capacity to distribute a higher percentage of savings as a benefit to municipalities.



" A complex and immense project due to its dimensions, but with great results and a huge contribution towards energy and carbon emission reductions. The significant cost reductions may release funds to reinvest in sustainable energy and combat climate change. It was a real privilege to participate in it and to be able to share the experience through Prospect+."

- Rogério Ivan, OesteLED IP Technical Director and Project Manager





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Impact

The replacement of around **68,500 light points with LED technology**, reduced electricity consumption by 26.4 GWh per year (around 7,500 homes), and avoided annual emissions of around **10,000 tonnes of CO2**.

The project was characterised by the replacement of 68,487 high pressure sodium luminaires with LED lighting technology with an overall estimated 84% reduction in the streetlight electricity consumption in the region.

Key success factors / replication potential

- 58,85 % of savings were achieved in municipalities becoming the biggest percentage of savings ever signed on an ESCO contract in Portugal. The average in Portugal has been around 30 %.
- This project represents a major stepping stone in the outlook of energy performance contracting in Portugal. It enabled, for the first time, a cooperation between several municipalities for a common investment in an ESCO model and established 12 independent concerted contracts for 12 local authorities. Around 10,000 tons of GHG emissions are saved each year.

About OesteSustentável - Regional Energy and Environmental Agency

Oeste Sustentavel has been playing an important role of establishing bridges between different actors and stakeholders, supporting institutions and their members, while identifying environmental issues, energy efficiency and renewable energy opportunities, as well as designing solutions and finding financial mechanisms for implementing them.

They implemented more than €31 million in sustainable energy projects through different financing models, attaining around €5 million per year in energy savings and an annual CO2 reduction of around 15,000 tonnes.

More info and contact



<u>http://www.oestesustentavel.pt/</u>

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PROSPECT+ fosters capacity building in regional and local authorities in order to finance and implement effective and efficient sustainable energy plans, including their proper monitoring and verification. <u>https://www.h2020prospect.eu/</u>



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