

CASE STUDY OF ENERGY SAVINGS IN LA BORDE BUS DEPOT SWITZERLAND

ABSTRACT

Lausanne has been committed to sustainable development and to ecology for many years. With the development of a new bus depot, the Lausanne Municipality searched for energy saving solutions the large 7,440 m² warehouse with illuminated areas of 20 hours a day, 365 days a year.

CLIENT PROFILE



With more than a century of experience, *t/* is now the leader in mobility for the 250,000 inhabitants of the Lausanne region. The public transport system serves a high-density conurbation with a population formed into 12 districts and covers a huge area including a hinterland that offers a wealth of economic, agricultural and leisure activities. The company, which has a workforce of some 1100 people, 550 of whom are drivers, is also one of the mainstays of the Vaud economy with turnover approaching 170 million Swiss Francs.

BUSINESS NEED

For twenty years, the Municipality of Lausanne has encouraged energy saving and the use of resources that create as little pollution as possible. So when

the need for a large bus depot was defined, the municipality immediately researched energy saving technology that was available. Inaugurated in 1982, the La Borde bus depot serves as a garage. It houses 70 vehicles in an area of 7,440 m². Each of its 639 light fittings has a 58 Watt fluorescent lamp (commonly called a neon lamp) that is illuminated 20 hours a day, 365 days a year.

SOLUTION

The Lighting Energy Controller from PowerSines was chosen by *t/* as the solution to reduce energy consumption of lighting for the large warehouse area where lighting was needed for long periods of time. The LEC offered considerable savings on electrical consumption, and also reduced maintenance costs by increasing lamp life, reducing the number of replacement bulbs.

RESULTS

The LEC achieved 26% reduction in electrical consumption with an annual savings of 21,715 Swiss Francs. The original investment of 17,045 Swiss Francs in LEC equipment achieved an ROI of less than one year.

Annual electricity consumption for lighting	CHF 63 080
Total annual savings	CHF 21 715
on electricity – 26%	CHF 16 401
on lamp replacement	CHF 5 314
Capital expenditure excluding VAT	CHF 17 045
Return on investment	Month 9.4