

CASE STUDY
NATURAL CAPITAL
LED ROLL-OUT
PROGRAMME

With more than 800 000 m² of floor space in stores, PEP accounts for almost 50% of the group's store footprint. Electricity is the highest contributor to direct emissions in this business and the group.

Investment in a low-usage LED alternative

Most of the group's stores are located in shopping centres, where alternative power solutions are not yet an option. To minimise the use of electricity, the best solution currently is to change to LED lighting.

A three-year, LED roll-out project has been completed, with all lighting in PEP stores having been replaced with LED technology. This project decreased energy consumption, while it increased in-store light levels, adding to the shopping experience without compromising the aesthetic value of the store.

Implementation of the project was part of a planned roll-out, while all new and refurbished stores are now opened with LED lighting.

The LED lamp was specifically developed to fit PEP's requirements, producing more light output at 60% of power consumption. Furthermore, the direct-drive LED solution greatly reduces maintenance costs, as there are fewer components and points of failure. This avoids creating further waste, saves time and reduces labour expenses.

Inputs	Outputs
<ul style="list-style-type: none"> ▶ Operational efficiency ▶ Resource management ▶ Responsible sourcing 	<ul style="list-style-type: none"> ▶ Cost savings ▶ Energy saving ▶ Unchanged shopping environment and customer experience



Project statistics

- ▶ R30 million capex investment
- ▶ Three-year roll-out period
- ▶ Two-year return on investment period
- ▶ R5.74 million saving per year (based on an average R1.59/kW price at the time of calculation)
- ▶ R10.37 million saving per year on maintenance cost
- ▶ 311 912 LED lights installed during the project period
- ▶ Reduced baseline demand from 10 755 531 kW to 7 143 462 kW
- ▶ All old lights were discarded responsibly through a certified waste management process