

A woman with blonde hair, wearing a bright yellow coat and blue jeans, stands next to a dark-colored car with its trunk open. She is holding a colorful shopping bag with the word 'MÄSCHEN' on it. The background shows a parking garage with other cars and overhead lighting.

**PHILIPS**



Industry Lighting

APCOA parking  
garage in Munich

Case Study

# Quick installation, long-term savings

How APCOA is focusing on efficiency and sustainability with modern LED lighting.



Energy savings of  
**57%**



### The project

For operators of underground parking facilities and parking garages, lighting used to be extremely expensive. There was simply no way to put a gloss on the figures. APCOA PARKING Group, the leader in parking facility management in Europe, was no exception. Ultimately, operators need to be able to guarantee safety at all times and ensure that all areas of the parking garage are well lit for easier navigation.

Dr. Marko Huber, Head of Technical Asset Management at APCOA, therefore began the search for an innovative lighting solution that could deliver high energy efficiency while keeping investment costs to a minimum. He was looking for a modern LED product that could be installed quickly and easily by his own team. Was this even possible?

### The solution

The answer: MASTER LEDtube. We designed these LED tubes specifically as an alternative to conventional T8 fluorescent tubes. They can be exchanged seamlessly without any major preparatory work. Their flexibility and performance were put to the test in the APCOA parking garage at the Riem Arcaden shopping mall in Munich. In this underground parking garage measuring 75,000 square meters and with 2,708 parking spaces, a total of 3,900 T8 fluorescent lamps needed to be replaced.

APCOA tried out a lot of different solutions, and this one emerged as the clear winner. Not just because the LED technology could deliver significant reductions in CO<sub>2</sub> emissions and energy savings of 57%, but also because the payback time would be less than a year in this case. Additional savings could also be made by having them installed by their own team.

The initial experiences have been extremely positive. The lamps were replaced in just four weeks. The changeover process went smoothly. The LED tubes are working perfectly and provide uniform, glare-free light distribution in the parking garage. With no flickering or humming, and with uniform light color and illuminance throughout their long service life of 50,000 hours.

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**The switch to LED technology has been a resounding success.** By 2020, we will be saving more than 21 million kWh of electricity and 12,000 metric tons of CO<sub>2</sub> in Germany.“

**Dr. Marko Huber,**  
Head of Technical Asset Management, APCOA



"A sustainable approach to the environment and its natural resources is very important to us," says Dr. Huber. "But at the same time we have to remain cost-effective. That is why we chose the MASTER LEDtube. This is a groundbreaking solution that meets all of our requirements."

And the parking garage customers? They feel safer and find it easier to navigate their way to the shopping mall and back to their car. And at the end of the day, that is what every modern parking garage operator wants.

