

# CASE STUDY

## Network Rail and South West Trains

Clapham Junction is the latest in a series of projects that has seen Network Rail and South West Trains work in partnership with Open Technology to introduce intelligent lighting controls across its infrastructure. For the first time, Europe's busiest train station will be able to automatically dim the lights down to a minimum value when the station is not in operation or switch the lights off when the station is completely closed. On average, this would amount to savings of 35% of usual lighting use.

Following an initial installation at Woking Station in 2010, LiGO has now been introduced at 25 stations and train maintenance depots across the Wessex Route. Installing lighting control is one part of the South West Trains, Network Rail Alliance's climate change and energy reduction strategy that is estimated to achieve total annual savings of 7-12 million pounds and a payback period of approximately six years.

Delivery of a safe environment is of paramount importance in the transport sector, and the challenge is to achieve maximum savings for operators, alongside comfort and safety for staff and passengers. Open Technology's LiGO control system is able to provide the exact light levels required across the station, matching lighting use to train timetable, passenger presence, daylight levels and other varying uses. The system is able to ensure maximum savings throughout the year as well as reduce light pollution in the surrounding area.

*"An automatic control keeps it simple for us. It enables us to save as much energy as possible, by dimming down and turning off automatically when not in use. It also tracks usage, which helps us to spot any areas for improvement and understand how our buildings are being used."*

Amy Dickinson, Environment Manager,  
South West Trains, Network Rail Alliance

### Annual Savings (per station)

**Up to 60%**  
ENERGY SAVINGS

**18 tonnes**  
CO<sub>2</sub>e

## Functionality



### Dimming

Light levels can be controlled according to changing uses of the building, for example lowering output when the building is being cleaned in the evenings. This drives further savings whilst ensuring the building is still functional.



### Daylight Balancing

External light not only allows you to create a more natural, enjoyable environment, it's also free. Automatic switching or dimming ensures light levels respond to maximise and compliment the available daylight.



### Emergency Lighting

LiGO's simple built-in 'Test Scheduler' enables functional and duration tests to be set up then executed automatically. Results can be stored in the system or automatically sent via email.

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