



# QUEENSLAND POLICE FINDING THE MOST INNOVATIVE SOLUTIONS IN LIGHTING CONTROL

## CASE STUDY



NORMAN DISNEY & YOUNG



## QUEENSLAND POLICE SERVICE

**46 CHARLOTTE  
STREET, BRISBANE**  
QUEENSLAND

When NDY were looking for an innovative and flexible solution for a client with every specific design brief for their tenancy fit-out, ECS utilised its Managed Lighting System (MLS) to create an energy efficient and aesthetically pleasing lighting fit-out that provided maximum flexibility for future changes.

Environmentally, the ECS MLS removes superfluous human interaction with the lighting system by being occupancy driven. Selected open plan workstations have been configured to inhibit turn OFF signals during nominated hours.

Interview rooms have been provided with four preset "scenes" to facilitate different interview requirements.

Conference rooms incorporated full scene setting features. The scene setting capability is an integrated feature of the ECS MLS system.

### KEY OUTCOMES

ENERGY SAVINGS  
**61% OR \$31,804 PER ANNUM**

GREENHOUSE SAVINGS  
**41 TONNES PER ANNUM**

REDUCED MAINTENANCE COSTS

POSITIVE CASH FLOW FROM DAY ONE

### KEY SOLUTIONS

INTELLIGENT OCCUPANCY BASED LIGHTING CONTROL SYSTEM:

- OCCUPANCY BASED SWITCHING
- DAYLIGHT LINKING
- DIMMING & SCENE SETTING



1



2



3

## Lessons & Outcomes



4

As a result, the QLD tenancy will save over \$31,804 per year on its electricity bills and reduce annual CO<sub>2</sub> emissions by 41 tonnes. That's a total of 61% overall savings.

Front Image | 46 Charlotte Street, Brisbane - QLD Police  
1 | Using the HP2000 Hand Held Controller  
2 | 46 Charlotte Street, Brisbane - QLD Police  
3 | Integral motion/light sensor  
4 | MLS Detector



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### Efficient Lighting & Controls

The project involved installing lighting controls that delivered major savings on electricity bills while also reducing greenhouse gas emissions.

Lighting that previously ran for very long hours will now be switched off automatically in any vacant area, any time of the day using the ECS Managed Lighting System.

The networked system is programmed to react to ambient light, periods of occupation, and movement. There are no light switches and detectors can be manually adjusted with a hand-held controller.

In short the ECS MLS has provided the Queensland Police Service Building with:

- Flexible and user updateable control of lighting zones
- Dimming to a pre-selected level through 'scene select' switch plates
- Manual on/off control through 'scene select' switch plates
- Automatic on/off control through occupancy detectors
- Automatic compensation for daylight or lumen depreciation (due to ageing lamps) through dimming
- Time clock interfaces to allow lighting to be held on in selected areas during standard operating hours
- Load shedding facilities