



Business

Financing your project

Compare options

Lighting

Case study: Lighting

Find out how CMR determined that they would be better off by about \$11,500 over 8 years if they invested in an energy-efficient system, using on-bill financing to finance a lighting upgrade.

Situation

Office tenant CMR runs a whole floor tenancy in a relatively modern office building. Their current lighting installation comprises 190 fairly standard dual 36W T8 fluorescent tube fittings, with older style magnetic type control gear (i.e. ballasts). These fittings each consume approximately 88W, of which 72W is consumed by the lamps and an additional 16W is consumed by the ballasts. These lamps are coming to the end of their lifespan, and can be replaced with similar T8 fluorescent technology in combination with upgrading the ballasts to more efficient electronic versions.

Alternatively, a more energy-efficient option would be to replace the fittings with 210 single tube 28W T5 lights and fittings. This would replace both the tube and the ballast of the older fittings. A few additional fittings are also required where light output is not adequate. The T5 tubes also have a slightly improved lifespan when compared to the standard T8 fluorescent tubes.

How does the energy-efficient (EE) system compare to the standard system?

Equipment type	Standard	EE

Cost to install (\$)	\$7,600	\$25,200
Operation and maintenance costs (\$ p.a.)	\$988	\$546
Electricity use (kWh p.a.)	41,800	14,700
Equipment life (years)	6	8
Electricity cost reduction in first year from the system(\$)		\$5,420
Simple payback period for the system (years)		4.7
Simple payback period for the system, with marginal capital ¹ (years)		3.3

Item	NPV
Standard system	-\$46,235
EE system	-\$34,728

Difference	\$11,507
------------	----------

Finance option selected: On-bill financing

CMR decides to seek on-bill financing for its lighting upgrade. The provider of this finance will manage the planning and installation of the equipment, which suits CMR's needs. In addition, this option results in the highest expected NPV.

¹This is the payback period for the energy-efficient (EE) option using the difference in capital outlay between the standard and EE equipment, rather than the full capital outlay for the EE equipment.

Was this page helpful?

Yes

No

Share this



Page last updated: 27 February 2015

Downloads

Download the case study and a cash flow model.

Case study
(PDF
171KB)

Cash flow
model
(XLSX)

665KB)

Checklist

Check if on-bill financing is the right option for your business.

**Download
the
checklist
(PDF 2MB)**

Contact us

Phone 1300 361
967

**Email
Energy
Saver**