FUTURE DESIGNS

carbon careful™ Book

carbon careful™

WELCOME TO Future Designs

Future Designs is an international lighting manufacturer delivering world class luminaires across UK, Europe, USA and U.A.E. where our reputation to design develop manufacture and deliver products is second to none.

We constantly invest in reducing our impact on the environment by the efficient use of materials and components to ensure our carbon usage is continuously driven downwards.

We design, develop, engineer, and produce our products to fulfil one desire: **MAKING LIGHT WORK.**

We are a British manufacturer based in Kent and Soho.

Our U.A.E facility is based in Dubai.

Our projects span from 5k sq ft to 1m+ sq ft.

We have a local to global reach.

We are client focused.

SUSTAINABILITY

Concern for our planet commences long before our lights switch on.

We are committed and driven to constantly investigating means to reduce our carbon usage. We design and manufacture with at least second life usage at the forefront.

The carbon careful™ initiative is proof of our desire to reuse rather than recycle.

UK GBC Member

ReCOlight Reuse | Recycle.

carbon careful™

RESPONSIBILITY

At Future Designs we recognise that good energy performance is sound financial management.

With ever increasing energy prices, the introduction of carbon taxes and increased volatility in energy markets, the energy performance of a building is moving up the agenda of owners and occupiers alike.

We have always produced high efficiency, low energy luminaires but we are constantly striving to do even more. Giving you useful light in the right places for lower energy input is our aim and we do this with not just highly efficient luminaires, but efficient control systems, dimmers, presence and daylight detectors.

Reduced energy use means lower carbon emissions for the entire life of the product. We have also continually worked towards creating less waste and fewer emissions in our manufacturing process.

We produce Environmental Product Declarations (EPD) for all our luminaires in line with EN1508. Which gives building owners and users clear information on the environmental impact of the luminaire.

Citation ISO Certification ISO 9001: REGISTERED
Certificate No:32262021

Citation ISO Certification ISO 14001: REGISTERED
Certificate No:145682021

BCO

The Society of Light and Lighting

CIBSE

iwfm Institute of Workplace and Facilities Management

carbon careful™

Welcome to carbon careful™.

Over the last 13 years, Future Designs has pioneered the concept of reusing existing luminaire carcasses and has become the market leading expert in adapting existing fluorescent fixtures to accept LED technology and updating existing LEDs to newer more efficient versions.

LED technology has evolved to become the lighting medium of choice and Future Designs has been at the forefront of this technological breakthrough. We are renowned for our expertise in this area of lighting science and have proved to be pioneers in this field.

We reduce energy and carbon usage by reusing the original carcasses which in turn is saving hundreds of tons of mild steel, aluminium and plastics being manufactured.

carbon careful™

Reduce
Refurbish
Reuse
Restore


LED INSTALLATION


FLUORESCENT INSTALLATION

OUR VALUES

Future Designs is a business built on an obsession with light.

We are full of knowledge and passion and we understand the importance of light. We are innovative, energetic and enthusiastic as a team.

We are problem solvers and confident in our ability to meet any challenge presented to us.

We are involved at every step, to achieve a great outcome for all our projects; from the initial enquiry until the final flick of the switch.

We know the power of light

WE ARE 'IN THE KNOW'
We study our business, and our business is light. We are fastidious in researching our clients' needs so that our solutions are based in reality, using our knowledge and experience.

WE ARE RIGOROUS
We are extremely thorough. We take time and pay attention to detail. We ensure there is quality and accountability at every level. We believe that even tiny improvements make a big difference.

WE ARE ESSENTIAL
Our clients rely on us for a quality product. Our clients rely on us for our expertise. We make a difference.

WE ARE HUMAN
We are fun and easy to get along with. We build lasting relationships and work as a team with our clients and with each other. We understand our clients' challenges.

WE ARE ENERGETIC
We are enthusiastic and always commit to deliver beyond expectation. Our energy shines through every part of the operation.

WE ARE CREATIVE
We are a team of problem solvers. We are continually challenging ourselves to improve. We explore every option to bring something extra to everything we do.

DESIGN

Relux / Dialux
For professional light planning and scheme design.

SolidWorks
3D product design and engineering, bespoke product design and testing. Accurate drawings and models for concept and manufacture.

AUTOCAD, REVIT & BIM
AutoCAD for layout designs. We are BIM ready, with models available for architectural & Revit models.

Photopia
An advanced lighting design and simulation package giving fast and accurate photometric analysis. Photopia allows you to produce virtual luminaires without timely physical prototypes enabling a number of design variations to be tested without the need for tooling.

Environmental Product Declaration (EPD)
We have EPD documents for our luminaires demonstrating the environmental impact of products. In line with our carbon careful™ initiative we look to minimise our impact on the environment.

Continual Personal Development (CPD)
Future Designs are accredited to host a range of CPD courses on Lighting & Wellness. Contact us at light@futuredesigns.co.uk or 01732 867420.

3D Printing
Rapid prototyping and design development.

carbon careful™

FUTURE DESIGNS

Welcome to carbon careful™

- Over the last 13 years, Future Designs has pioneered the concept of reusing existing luminaires carcasses and have become the market leading expert in adapting existing fluorescent fixtures to accept LED technology or updating existing LEDs to newer more efficient versions.
- In the urgency to replace florescent with the more carbon efficient LED, there have been countless instances where entire old-style fluorescent luminaires have been replaced by completely new LED products prior to their end of life, rather than reusing the carcasses.
- In so doing, not only do we reduce the energy and carbon usage by circa 50% and potentially more but we are reusing the original carcasses which in turn is saving hundreds of tons of mild steel and aluminium being produced.
- The following pages show a few examples of how our expertise in these two areas is creating a huge carbon saving and in turn assisting our clients in their social responsibility to Reduce, Refurbish, Reuse and Restore.
- The climate crisis is now firmly at the forefront of consumers' minds, with recent COP26 events and IPCC reports laying bare the changes required to curb emissions.
- Net-zero targets are fast approaching, too, with all sectors of the UK economy set to be decarbonised by 2050.
- We are assisting our clients in their social responsibility to Reduce, Refurbish, Reuse and Restore.

carbon careful™

FUTURE DESIGNS

Reduce
Refurbish
Reuse
Restore

reduce

verb

to become or to make something become smaller in size, amount, degree, importance, etc.:

The plane reduced speed as it approached the airport.

refurbish

verb

to make a building look new again by doing work such as painting, repairing, and cleaning:

The developers refurbished the house inside and out.

49.7%
power saving

49.7%
reduction in carbon

140%
increase in lamp life

Comparable lumen output

Reduce
Refurbish
Reuse
Restore

Shell plc Waterloo

SCOPE: Standing 107m (351ft) tall
26 Storeys
5288 luminaires
SECTOR: Energy and Petrochemical
REQUIREMENT: LED refurbishment

WHAT WAS ACHIEVED:

Originally, we designed this bespoke luminaire to be integrated and form part of a chilled beam system using fluorescent lamps. Ten years on, we removed the fluorescent luminaire in its entirety and refurbished it to provide a fully compliant LED luminaire.

Provides a significant power, financial and carbon reduction.

Photometrically tested to ensure correct light levels and control.

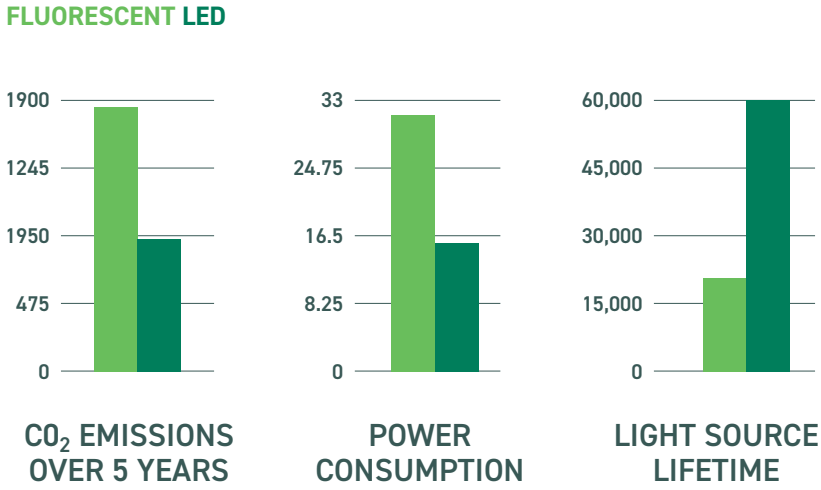
Provides a cost effective lighting scheme with minimal disturbance to the workforce.

LED INSTALLATION

FLUORESCENT INSTALLATION

Reusing the luminaire housing saved 38.4 tonnes of steel being produced. This equates to 71 tonnes of carbon, the equivalent to toasting 9,266,941 slices of bread.

Switching to LED substantially reduces energy consumption. A reduction of 50% in energy use results in a saving of 936 tonnes of carbon over a 5 year period.



64% power saving

64% reduction in carbon

200% increase in lamp life

Comparable lumen output

Reduce
Refurbish
Reuse
Restore

Regent House Islington

SCOPE: 2519 luminaires
SECTOR: Banking
REQUIREMENT: LED refurbishment

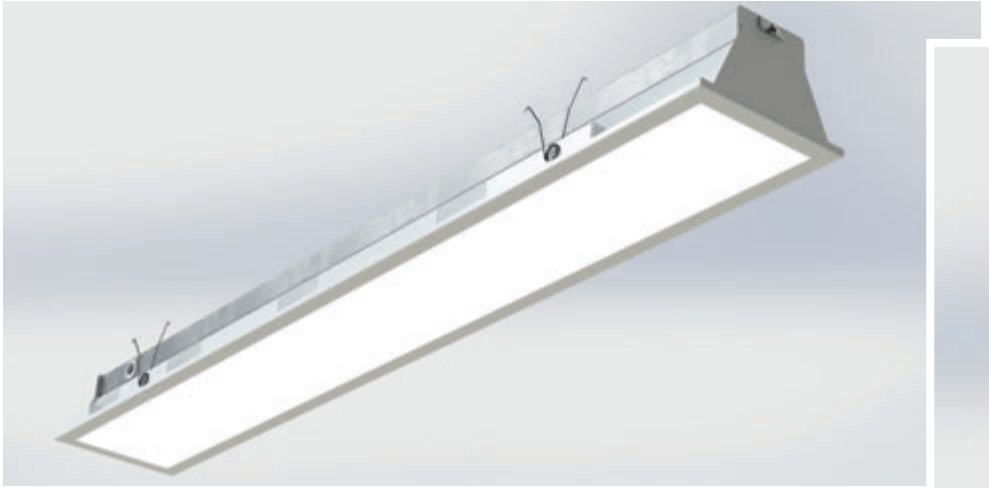
WHAT WAS ACHIEVED:

Full refurbishment of another manufacturer's ageing T8 fluorescent luminaire to current LED technology.

Photometrically tested to ensure correct light levels, distribution and control.

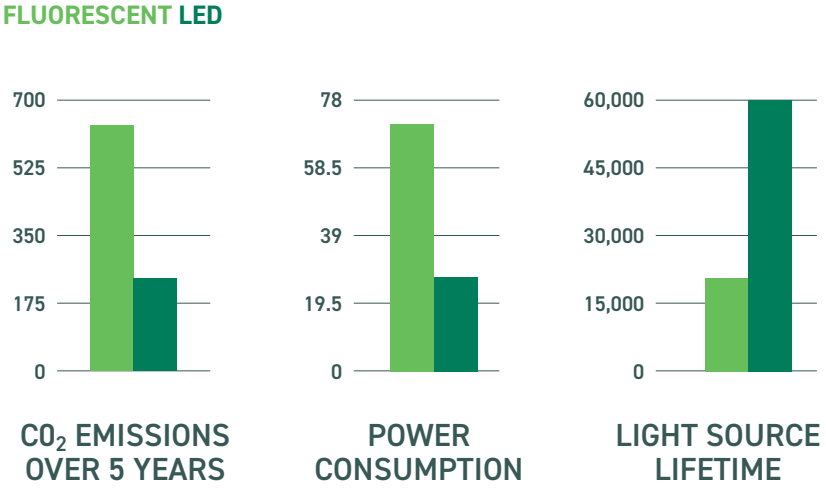
Enhanced and improved illuminance levels while saving energy simultaneously.

Provides a cost effective lighting scheme with minimal disturbance to the workforce.



Reusing the luminaire housing saved 17.1 tonnes of steel being produced. This equates to 32 tonnes of carbon, the equivalent to making 180,025,005 photocopies.

Switching to LED substantially reduces energy consumption. A reduction of 64% in energy use results in a saving of 403 tonnes of carbon over a 5 year period.



39% power saving

39% reduction in carbon

200% increase in lamp life

Comparable lumen output

Reduce
Refurbish
Reuse
Restore

51 Lime Street

SCOPE: Standing 127m (ft) tall
30 Storeys
370,000 sq. ft office space
First Building rated BREEAM Excellent
1383 luminaires
SECTOR: Re-insurance
REQUIREMENT: LED refurbishment

WHAT WAS ACHIEVED:

Refurbishment of an original Future Designs luminaire to incorporate both up and down light utilising LED technology.

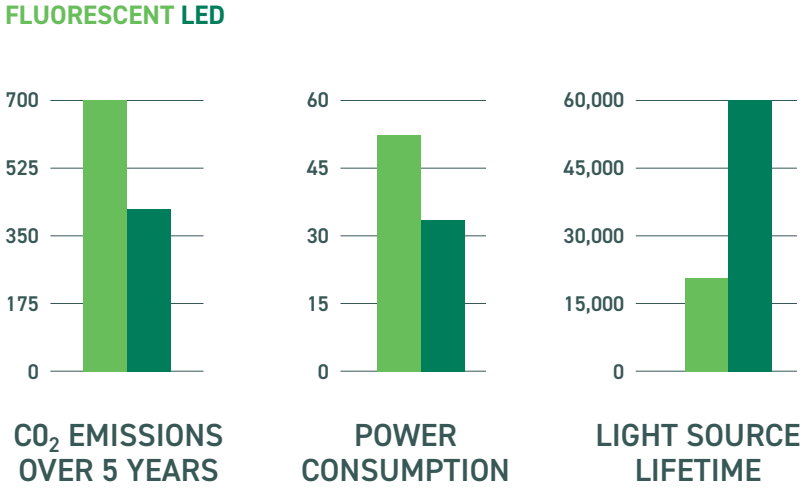
A sustainable upgrade plan.

Designed using optics to give the appearance of a fluorescent with the benefit of LED & developed photometrically to ensure correct light levels.

The end user provides a cost effective lighting scheme with minimal disturbance to the workforce.

Reusing the luminaire housing saved 19.4 tonnes of steel being produced. This equates to 36 tonnes of carbon, the equivalent to running an average car for 172,615 km.

Switching to LED substantially reduces energy consumption. A reduction of 39% in energy use results in a saving of 275 tonnes of carbon over a 5 year period.



51% power saving

51% reduction in carbon

500% increase in lamp life

Comparable lumen output

Reduce Refurbish Reuse Restore

Original fluorescent luminaire

Refurbished LED luminaire

10 Upper Bank Street

SCOPE: Standing 151m (495ft) tall
32 Storeys
1,028,000 sq. ft office space
First Building rated BREEAM Excellent
22151 luminaires

SECTOR: Law

REQUIREMENT: LED refurbishment

WHAT WAS ACHIEVED:

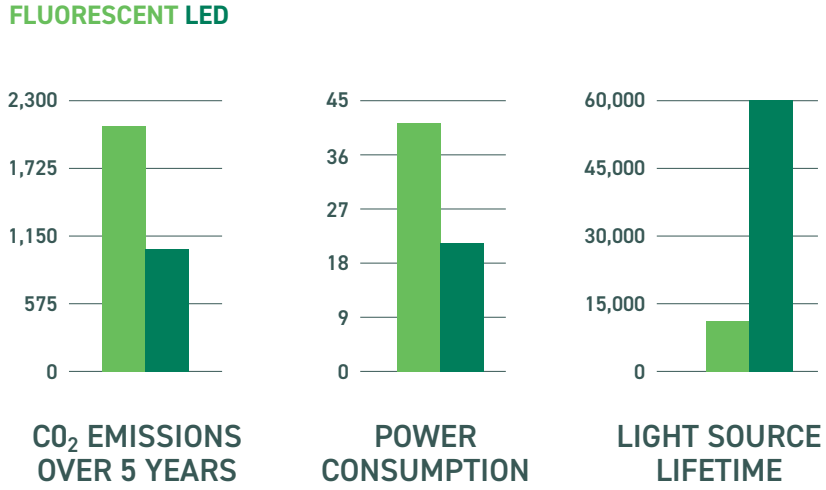
Refurbishment of an original Future Designs luminaire incorporating a dark light reflector, which we were asked to retain by the client, and converted to LED. A sustainable upgrade plan.

Designed using optics to give the appearance of a fluorescent with the benefit of LED and developed photometrically to ensure correct light levels.

The end user provides a cost effective lighting scheme with minimal disturbance to the workforce.

Reusing the luminaire housing saved 56 tonnes of steel being produced. This equates to 103 tonnes of carbon, the equivalent to driving around the world 12.4 times.

Switching to LED substantially reduces energy consumption. A reduction of 51% in energy use results in a saving of 1058 tonnes of carbon over a 5 year period.



33% power saving

33% reduction in carbon

200% increase in lamp life

Comparable lumen output

Reduce
Refurbish
Reuse
Restore

7 More London

SCOPE: 500,000 sq. ft
1750 suspended luminaires
SECTOR: Finance
REQUIREMENT: LED refurbishment

WHAT WAS ACHIEVED:

The first London building to be awarded BREEAM Outstanding rating illuminated via BASTIL, Future Designs Suspended original luminaire. We returned four years after the original build to design and develop the means of adapting this to LED technology whilst maintaining the classic form and original design intent, whilst markedly improving the carbon footprint of this iconic workplace.

Designed for sustainability.

Luminaire photometrically tested.

BREEAM Outstanding.

2012 British Council for Offices Award
(National Innovation Award).

2012 Lighting Design Award
(Low Carbon category).

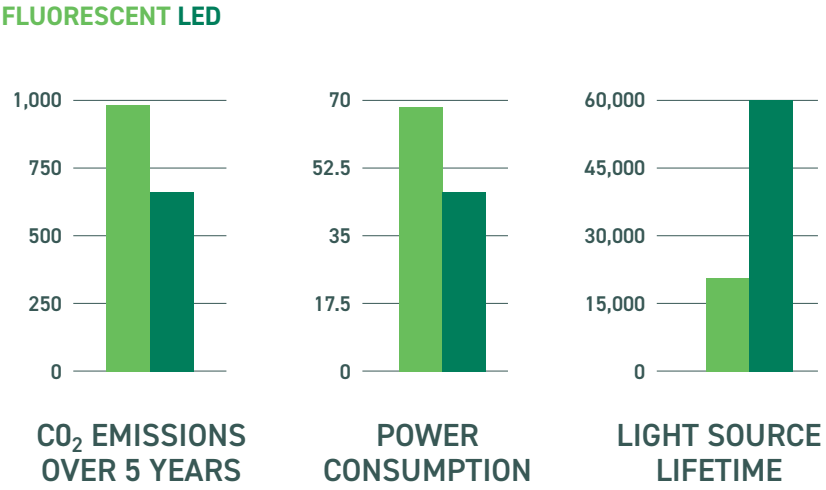
2012 LABC Building Excellence Award
(Best Large Commercial Building London Region).

1750 suspended luminaires.


West

Reusing the luminaire housing saved 5.3 tonnes of steel being produced. This equates to 9.8 tonnes of carbon, the equivalent to making 1,116,092 cups of tea.

Switching to LED substantially reduces energy consumption. A reduction of 34% in energy use results in a saving of 329 tonnes of carbon over a 5 year period.



53% power saving

53% reduction in carbon

200% increase in lamp life

Comparable lumen output

Reduce
Refurbish
Reuse
Restore

One Basinghall Avenue

SCOPE: 19,000m²
3323 luminaire to upgrade (Modular & Downlights)
SECTOR: Banking
REQUIREMENT: LED refurbishment

WHAT WAS ACHIEVED:

Created a refreshed scheme demonstrating the re-use of existing luminaires which utilises existing housing using LED boards.

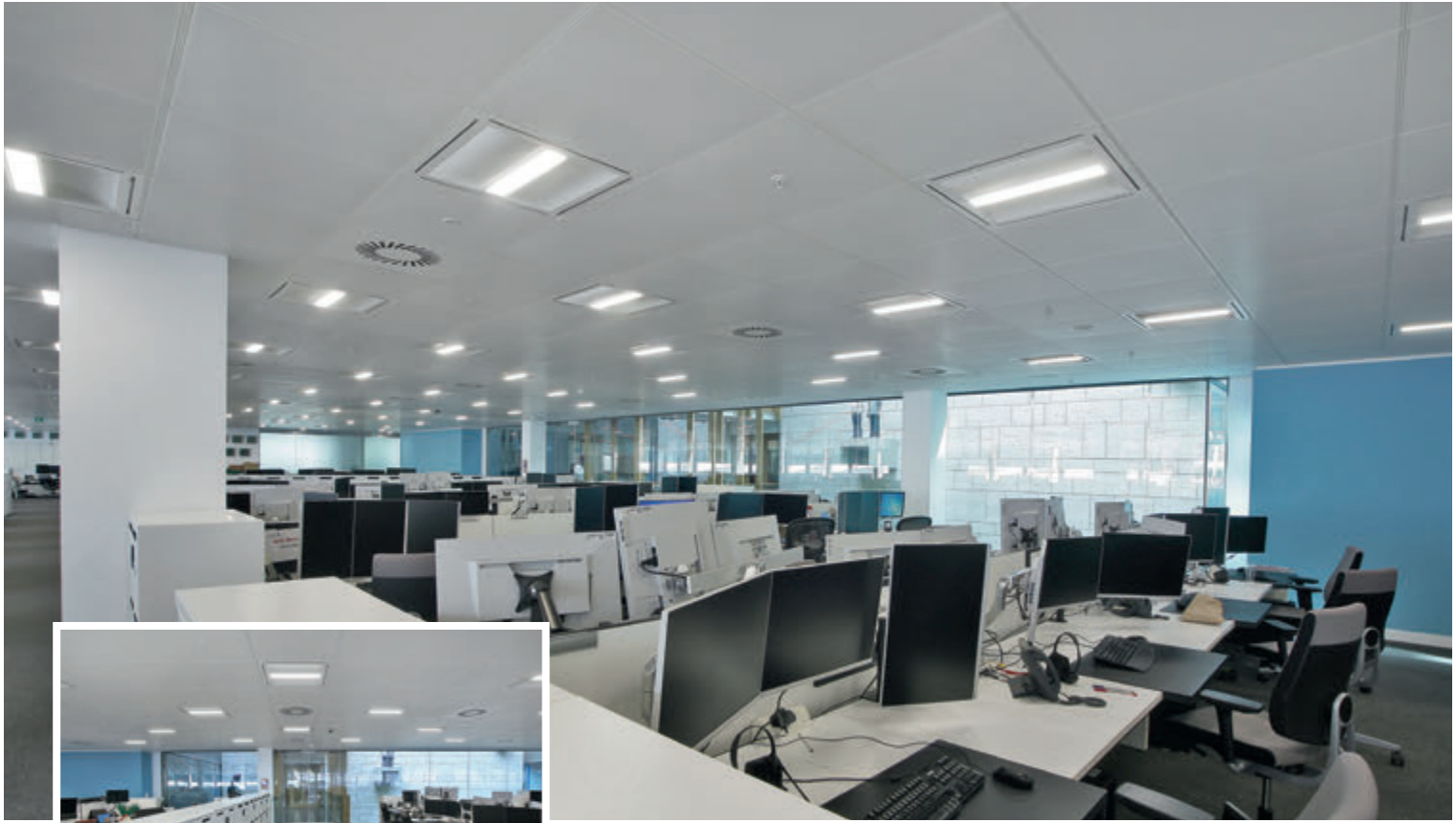
Easy installation scheme.

Reduction in energy.

Carbon reduction.

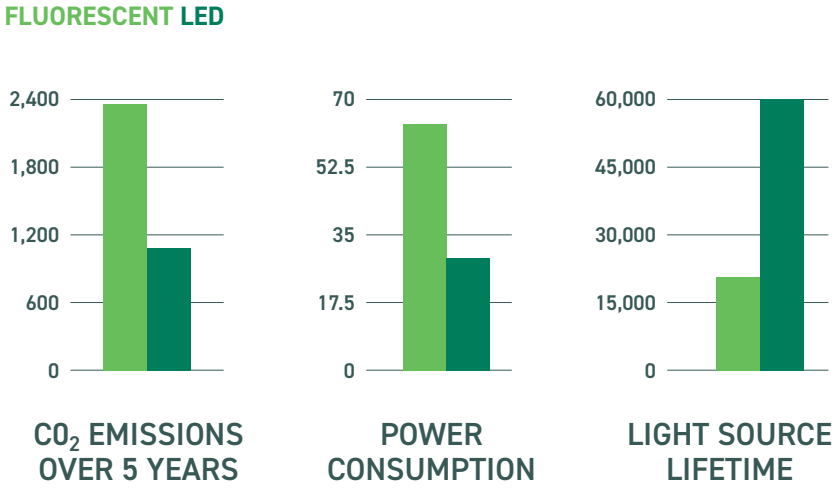
Reduced maintenance time.

Simple installation.



Reusing the luminaire housing saved 46 tonnes of steel being produced. This equates to 85 tonnes of carbon, the equivalent to running an average car for 411,238 km.

Switching to LED substantially reduces energy consumption. A reduction of 53% in energy use results in a saving of 1233 tonnes of carbon over a 5 year period.



70% power saving

70% reduction in carbon

200% increase in lamp life

Comparable lumen output

Reduce
Refurbish
Reuse
Restore

Imperial College Library

SCOPE: Standing 107m (351ft) tall
157 luminaires
SECTOR: Education
REQUIREMENT: LED refurbishment

WHAT WAS ACHIEVED:

The existing luminaire is an integral bespoke component of the ceiling system and as such the carcass had to remain in situ, Future Designs designed and developed a unique LED gear tray to locate within the existing fixture meeting the design intent of not affecting the ceiling system and maintaining the look and feel of the original design.

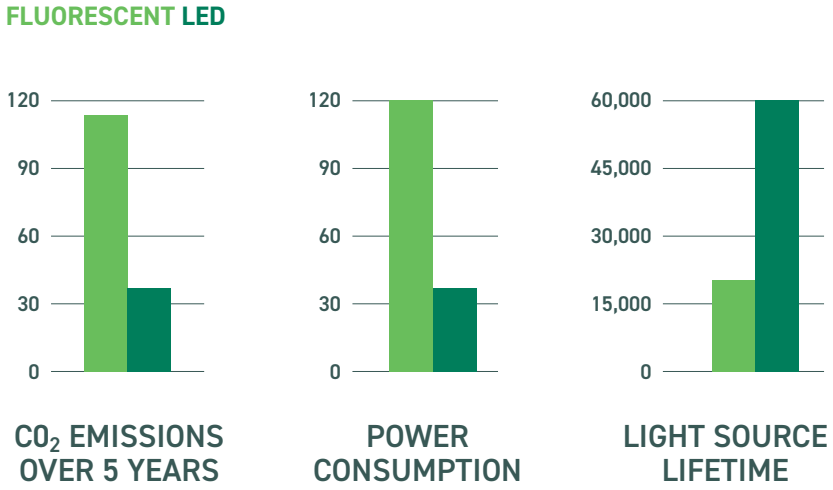
Demonstrated a significant power saving, financial saving and carbon reduction.

Created a sustainable upgrade plan.

Developed photometrically to ensure correct light levels.

Reusing the luminaire housing saved 1.9 tonnes of steel being produced. This equates to 3.5 tonnes of carbon, the equivalent to microwaving 151,980 meals.

Switching to LED substantially reduces energy consumption. A reduction of 50% in energy use results in a saving of 936 tonnes of carbon over a 5 year period.



59% power saving

59% reduction in carbon

260% increase in lamp life

Comparable lumen output

Reduce
Refurbish
Reuse
Restore

New London Architecture

SCOPE: On-site repurposing of 30 luminaires
INSTALLATION: Exhibition space and library

WHAT WAS ACHIEVED:

Future Designs had designed and built the existing fluorescent luminaires c10 years prior specifically for the project. During the upgrade, these luminaires were stripped of the old fluorescent lamps, control gear and gear trays and re-fitted with new LED gear trays, giving improved illuminance and power consumption. Bluetooth lighting management was included to enable maximum flexibility and control.

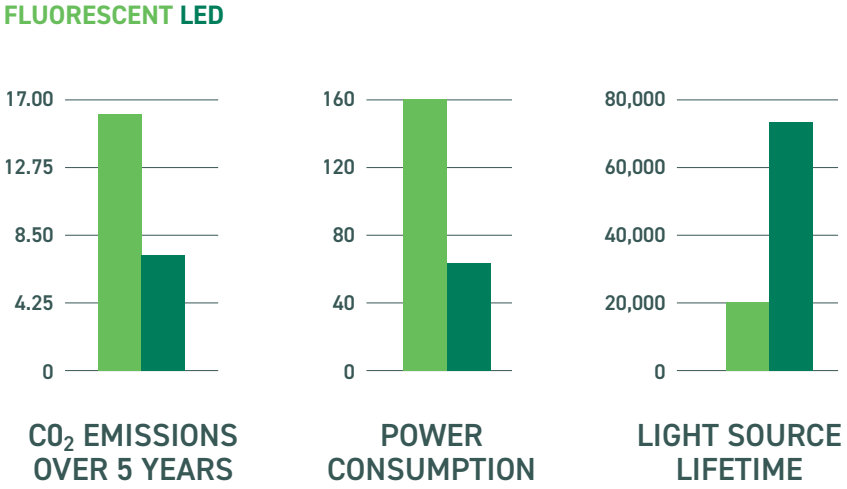
Demonstrated a significant power saving, financial saving and carbon reduction.

Created a sustainable upgrade plan.

Developed photometrically to ensure correct light levels.

Reusing the luminaire housing saved 0.3525 tonnes of steel being produced. This equates to 0.65 tonnes of carbon, the equivalent to microwaving 28,343 meals.

Switching to LED substantially reduces energy consumption. A reduction of 59% in energy use results in a saving of 9.46 tonnes of carbon over a 5 year period.



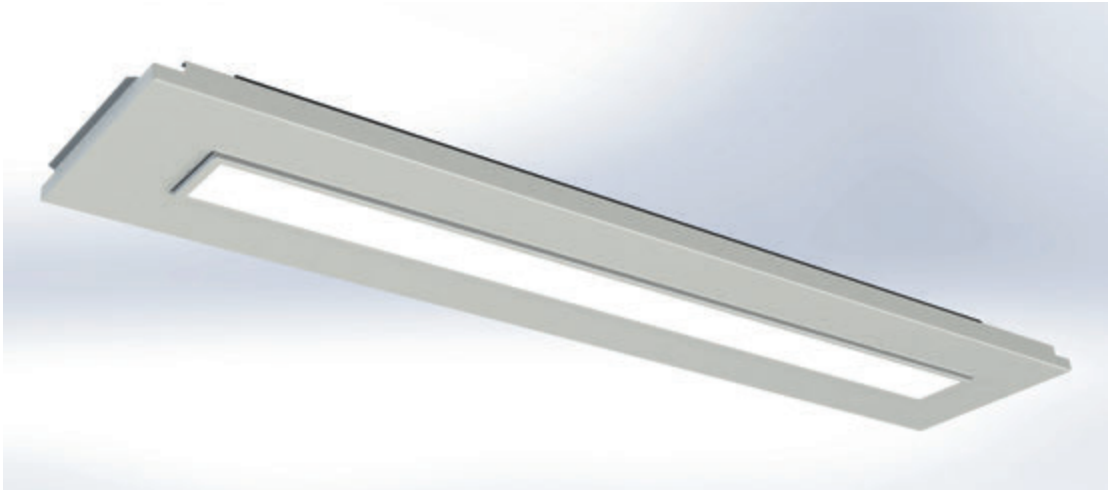
62% power saving

62% reduction in carbon

260% increase in lamp life

Comparable lumen output

Reduce
Refurbish
Reuse
Restore



Thanet Grange

SCOPE: Repurpose 1200 luminaires
SECTOR: Financial
REQUIREMENT: LED refurbishment

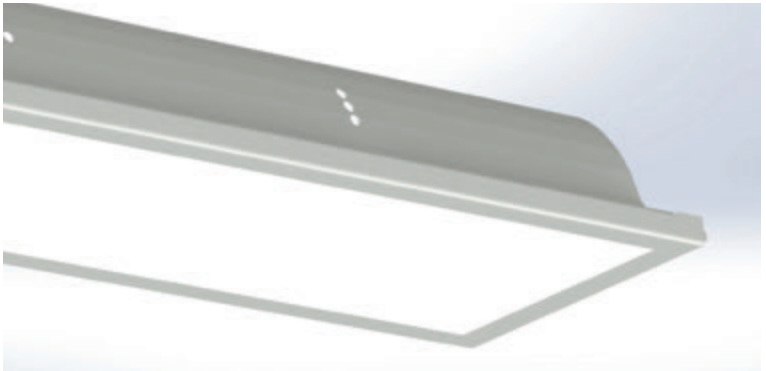
WHAT WAS ACHIEVED:

Phased delivery to Future Designs for LED conversion and re-supply to site of refitted linear. Custom gear trays, reflectors and facia were designed and installed, giving improved quality of light and significant energy savings. Packaging was re-used for collection and delivery and deliveries optimised.

Demonstrated a significant power saving, financial saving and carbon reduction.

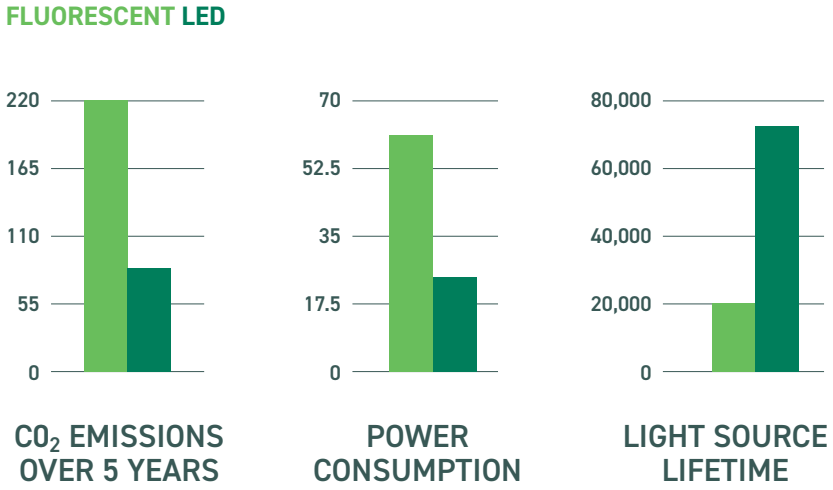
Created a sustainable upgrade plan.

Developed photometrically to ensure correct light levels.



Reusing the luminaire housing saved 4.18 tonnes of steel being produced. This equates to 7.74 tonnes of carbon, the equivalent to toasting 1,010,526 slices of bread.

Switching to LED substantially reduces energy consumption. A reduction of 62% in energy use results in a saving of 137 tonnes of carbon over a 5 year period.



66% power saving

66% reduction in carbon

200% increase in lamp life

Comparable lumen output

Reduce
Refurbish
Reuse
Restore

One Curzon Street

SCOPE: 456 luminaires
SECTOR: Financial
REQUIREMENT: LED refurbishment

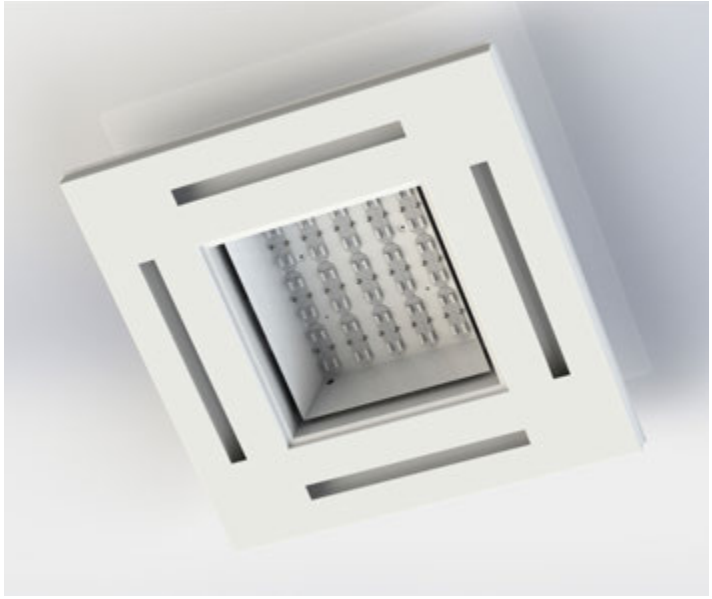
WHAT WAS ACHIEVED:

The existing luminaire is a 500 x 500 square recessed fixture complete with air-handling facility. This housed 2 x 40 Watt PLL lamps. Fittings were returned to our re-use centre for deep cleaning prior to installation of LED boards and associated control gear.

Demonstrated a significant power saving, financial saving and carbon reduction.

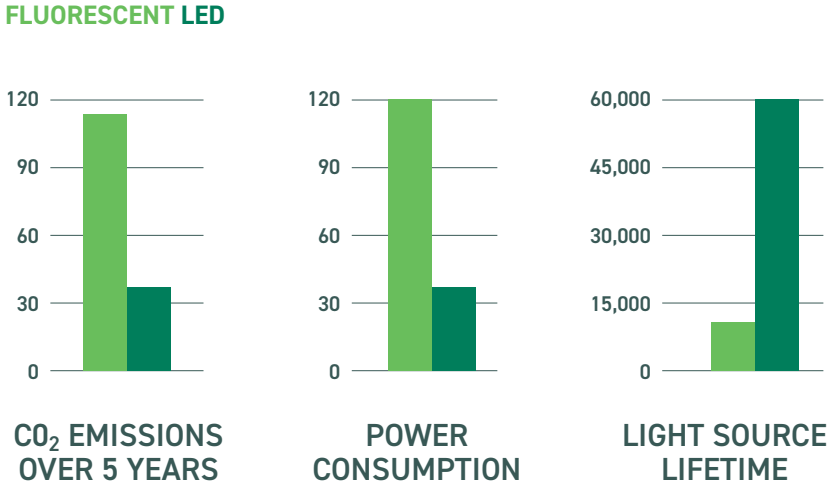
Created a sustainable upgrade plan.

Developed photometrically to ensure correct light levels.



Reusing the luminaire housing saved 0.40 tonnes of steel being produced. This equates to 0.74 tonnes of carbon, the equivalent to printing 11,689,337 A4 sheets.

Switching to LED substantially reduces energy consumption. A reduction of 66% in energy use results in a saving of 7 tonnes of carbon over a 5 year period.



Reduce
Refurbish
Reuse
Restore

restore

verb

to return something or someone to an earlier good condition or position:

The badly neglected paintings have all been carefully restored.

After a week in bed, she was fully restored to health (= she felt healthy again).

The former leader was today restored to power in the first free elections for 20 years.

Shell Chandeliers

Restoration in action

The fittings were in poor condition after years in storage.

Future Designs carried out the delicate and sympathetic restoration of six historic and significantly important chandeliers for Shell plc.

In storage for many years, the chandeliers were in poor condition and required a full strip down to their component parts. Each chandelier was sandblasted back to bare metal to allow for inspection and local repairs.

The decorative brass louvred ceiling rose was a key feature in the aesthetics of the chandelier. This sadly had sustained much damage. However it was fully restored using handmade brass parts where necessary, while maintaining as much of the original material as possible.

The circumference of the chandelier is adorned with solid glass rods. Rods were inspected for damage before being hand polished back to their original finish.

Our technical division designed new wiring looms to allow for dual switching to operate the bespoke LED lighting system.

Due to the fragile nature of the chandelier and site access restrictions, bespoke transit crates were manufactured to transport the chandeliers in. The crates were designed to allow for two scissor lifts to raise the chandeliers, still in their crate, into place and allow for connection to the ceiling support plate. Once supported, the crates were simply lowered leaving the finished chandelier suspended.

This project once again demonstrates Future Designs' ability to carry out complex restorations and refurbishments.

Foreign & Commonwealth Office

Pendant Replication and Refurbishment for the FCO

Future Designs was tasked to refurbish four existing pendants adorning this magnificent building. Full restoration was to be monitored by English Heritage to ensure the product was restored in line with their stringent requirements.

The pendants were stripped, video filmed and itemised. Certain components were deemed by us to be beyond reuse and were used as patterns to manufacture new cast aluminium finials, cast iron support hooks and a mild steel hub assembly.

The original castings were used to create a sand mould. Once cast, the castings were machined including the original size BSP threads. The two new replica aluminium casting were sand cast using the original product as the mould. The original items were not damaged during this process. A new brass spinning was manufactured taking sizes from the original items.

A solid brass band was rolled to 1.5m diameter. This was then embellished with two solid brass

strips, these were attached using soft solder. One original fret was removed and scanned before being laser cut in steel to match the original.

New support ring assemblies were made showing top and bottom bands complete with fret work and chain support hook. A brass finial was added to replace the side arms not required. The frames were finished in a bronze paint finish to match the original pendants.

The pendants were refitted with low energy efficient lamps using 1-10v dimmable ballasts. A new nylon chuck was produced to manufacture the unique ceiling hook support and associated supports to match the original. Photos and videos were taken during electrical testing to demonstrate to our client that all lamps were fully operational and dimming correctly prior to delivery. For each new pendant 2 x 1.5m opal acrylic domes were produced and each individual panel was hand cut to size.

The finished pendant was suspended and completely assembled to check fit and finish to ensure quality levels were achieved. English Heritage visited the factory to approve the reproduction.

We also provided guidance to the electrical contractor on how the new pendants were to be suspended to ensure continuity of the project to meet the clients high expectations. Each pendant was packed in a pallet box and delivered via dedicated courier to site and delivered directly to the contractor.

Still from the James Bond movie Skyfall showing the replica pendants.

Installed for many years these elegant luminaires required both cosmetic and technical upgrades to LED technology.

Each fitting was carefully inspected and stripped to component level prior to each part being recorded to ensure we carried out a sympathetic restoration.

The original nickel plated finish needed to be maintained, so each frame was carefully washed to remove the layers of dirt that had built up over the years and then hand polished to reveal the stunning high-gloss finish.

Tailored mild steel gear trays were designed and fabricated to house the new LED light source and control gear and was uniformly lit without dark areas or shadows.

4 John Carpenter Street London

Restoration of Art Deco style wall sconces for JP Morgan

An important part of the restoration was to upgrade the light from a traditional source to new low energy 4000 kelvin LED alternative with DALI controls, which included the manufacture of satin-finished glass diffusers to replace the original faded materials which enhanced the LED performance.

This was a wonderfully satisfying project to be involved in, not only demonstrating the technical capabilities at Future Design but the care and attention to detail in the restoration of a classic design to its former glory.

Reduce
Refurbish
Reuse
Restore

reuse

verb

to use something again:

To conserve resources, please reuse this carrier bag.

VANE adaptable lighting that can go from recessed to surface to suspended and back to recessed again.

VANE has been specifically designed to be adaptable. Recessed, surface and suspended products, whether modular or continuous can be re-configured to form a new luminaire design or system – RENEW.

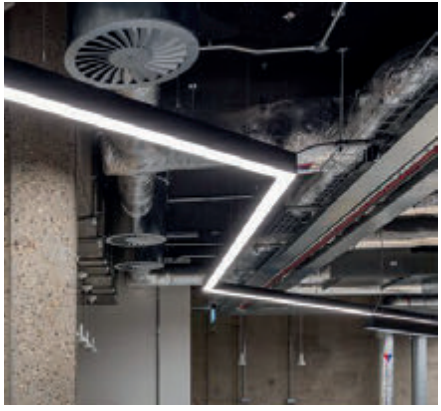
RENEW reduces waste by allowing CAT A installations to be repurposed and reformed to create dynamic CAT B spaces.

VANE can be remodelled into different lengths and shapes. We can help you redesign and reuse your lighting to create engaging spaces.

Take an existing installation and RENEW the luminaires into new designs to suit your space.

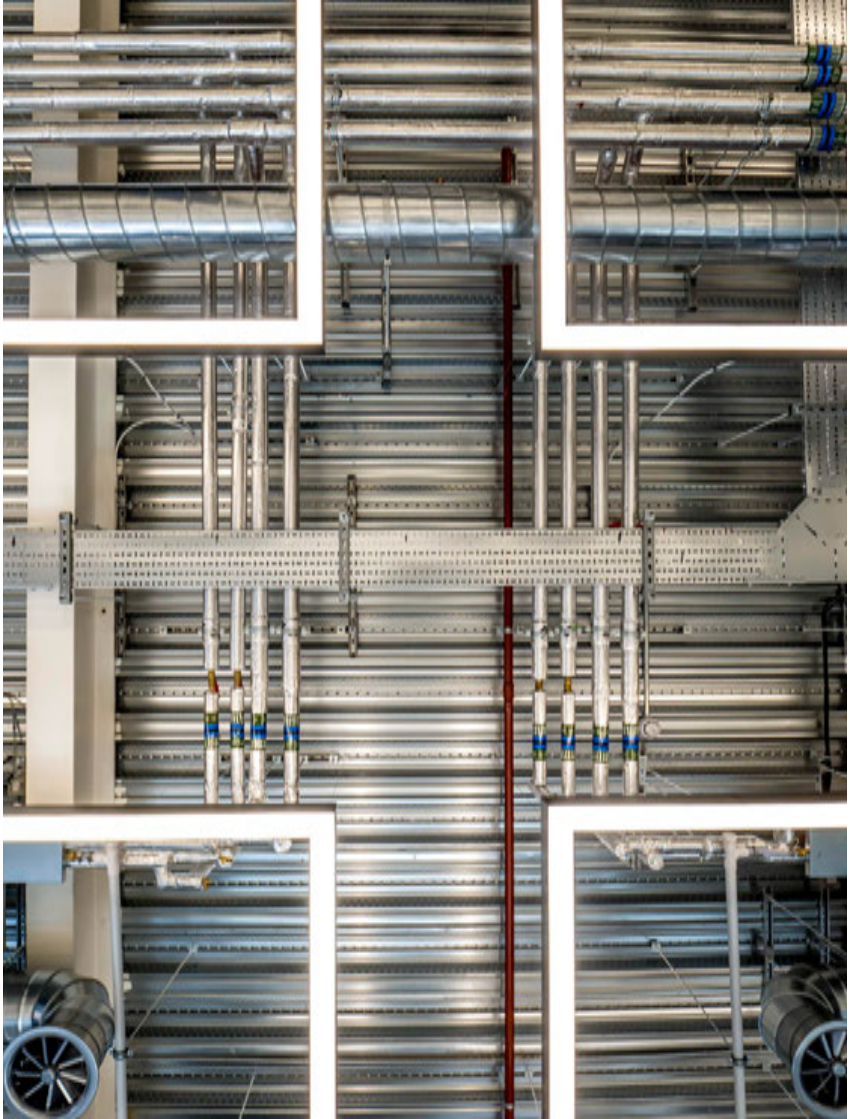
RENEW reduces waste and prevents luminaires from being discarded.

- Reduces waste
- Reduces material consumption
- Create unique designs
- Versatile & adaptable



RENEW

VANE has infinite design possiblities. Taking ceiling luminaires and turning them not only into new designs but also into wall mounted or free standing, allowing one simple luminaire to become adaptable.



Future Designs

Headquarters
The Lighthouse
Fircroft Way
Edenbridge
Kent, TN8 6EJ

Soho Lighthouse
21 Great Chapel St
London
W1F 8FP

Dubai Office
701, Single Business Tower,
Business Bay,
Dubai, UAE

HQ +44 (0)1732 867420
LDN +44 (0)20 3961 4500
DUBAI +971 4 385 8199

Future Designs Ltd
lightthefuture
Future Designs
light@futuredesigns.co.uk

futuredesigns.co.uk