

# Reducing the environmental impact of an office move: a step-by-step example

#### Introduction

Moving office offers companies the opportunity to design and create an inspiring working environment that enables staff and business to thrive, but with that comes the risk of growing your environmental footprint before you have even unlocked the door. Access to high quality repurposed furniture and technological advances, mean this no longer need be the case – using alternate solutions to deliver a truly low carbon solution. Although taking steps to address this impact may not be as visible as sharing a fleet of electric cars or cladding the company's roofs with solar panels, it is nonetheless a testament to a business's true commitment to environmental stewardship.

When Natural Capital Partners decided to move its London office, minimising the environmental impact – both in terms of the construction and ongoing operation of the offices - was an essential consideration. This is their story.

"We're using up all of our natural resources, so the circular economy is the way forward – it is as simple as that. And that's a good thing - the circular economy has far-reaching benefits, from offering customers exceptional value for money and helping them reduce CO<sub>2</sub> emissions, to diverting re-usable 'waste' from disposal and job creation."

Jason Mokana, Business Development Manager, London Re-Use Limited

## **Changing times**

In September 2015, The CarbonNeutral Company relaunched as Natural Capital Partners to reflect the evolving nature of the business, having expanded its offerings to include renewable energy, UK forest creation and Water Benefit Certificates, in addition to carbon emissions reductions.

The company had been working out of offices in Kings Cross for nine years, but these needed refurbishing and updating, and the U-shape office floorplan no longer supported the collaborative working environment that was essential to the business. With the company moving in new directions and an expiring lease on the premises looming, everything pointed towards a move.

The challenge for Natural Capital Partners would be in relocating to a new, ergonomically-friendly and collaborative work environment in a way that was consistent with the company's work to help its clients reduce their own environmental footprint, without breaking the bank. As well as that, the innovative organisation wanted to provide an example of best practice; helping inform and inspire other businesses that don't have the resources of large facilities and logistics teams to do the same.

## **Scoping out**

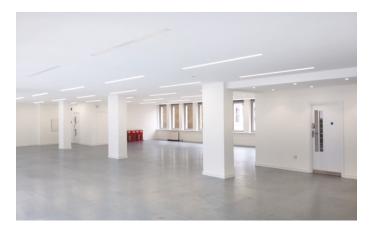
After visits to more than 50 locations in and around London, a new lease was signed at 167 Fleet Street, giving finance manager Louan Mouton and his team just under three months to make the office fit for move-in.

To account for the entire environmental impact of the move, a holistic approach was adopted, giving consideration to all emissions sources and use of resources, from the sourcing of materials to the emissions associated with contractors attending site. Any residual emissions would be offset to net zero to achieve CarbonNeutral® certification.

For 19 years, Natural Capital Partners has worked with businesses to reduce their impact on the environment. It launched The CarbonNeutral Protocol in 2002 to certify businesses CarbonNeutral®. As a certified CarbonNeutral® company itself, the business calculates its total greenhouse gas (GHG) emissions annually and reduces these to net zero through a combination of internal reduction efforts and the purchase of high quality carbon credits from a portfolio of global carbon offset projects. The residual emissions generated through the office move - a total of 33 tonnes CO<sub>2</sub>e - will be offset to zero to achieve CarbonNeutral® fit-out certification.

Find out more about Natural Capital Partners' approach to responsible business in its 2015 Corporate Responsibility Report.

The main impact of the move would be associated with the procurement – and re-use – of fixtures and fittings during the build and fit-out and furnishing phases, and how the office would be lit and cooled/heated during its day-to-day use.



The blank canvas afforded by the new office space enabled total flexibility in design, functionality and environmental performance.

## It's win-win, says the boss

At Natural Capital Partners, we work with some of the world's most progressive and pioneering companies when it comes to addressing their environmental and social impacts; to maintain credibility with these businesses we have to show them that we walk the talk in every action that we take. So when it came to moving office, we knew we needed to create a highly-productive and ergonomically-friendly workspace with a minimal environmental footprint that reflected our core values as a company, who we are and what we do.

The old office was no longer fit for purpose. We knew we needed to move and wanted to reduce the emissions associated with that. But as the CEO, I also needed to understand the financial ramifications, and whether there would be a premium attached to a low carbon office move. Now that we are all settled into the new offices in Fleet Street, I can gladly report that we met all of our financial goals, as well as environmental, and that we have actually saved money in the process.

The thing I am most pleased about, though, is the effect on morale. Just from being in the office, listening to people and seeing them interact, I know intuitively that it was a great decision. The layout of the open plan office makes it much easier for people to just turn around and collaborate with a colleague and there's a real buzz in the air now that you get with open plan spaces.

I don't think many people realise just how much effort has gone into lessening the environmental impact of the move; as far as they see it, this is just a much nicer office - and that's fine by me."

Stephen Killeen, CEO, Natural Capital Partners

## **Build and fit-out phase**

With the lease secured, Louan and his team set about sourcing a contractor to carry out the design and renovations. Each contractor was able to work with the totally blank canvas that the space offered, so keen attention was expected on design, function and, of course, environmental performance.

Commercial interiors firm <u>Stirling Grey</u> was selected for the role and the company would also be responsible for purchasing any new furniture. Importantly, Stirling Grey agreed to measure and track the environmental footprint of materials, the emissions generated from the worksite, and the indirect emissions from the delivery of materials.

Below are some of the key sustainability features incorporated into the refit:

- Glass interior walls used to draw natural light through the office and minimise need for artificial lighting.
- Lighting zones fitted with motion detectors to reduce unnecessary artificial lighting.
- Several independent heating and cooling zones to optimise the temperature in different areas.
- High-speed fibre optics built into office infrastructure to encourage high-quality audio and video communications, thereby reducing business travel needs.
- Flooring selected for lowest environmental impact with the highest wear-ability, noise reduction, comfort and flexibility.
- LEDs installed throughout (prior to refit).

## **Flawless flooring**

The new office floors are carpeted with a mix of Microsfera (with a total recycled content of 56.6%) and Elevation 111 (68.8%). These carpets from Interface were chosen for their impressive sustainability ratings and the Cool Carpet® service, through which Interface offers its customers a carbon neutral solution by offsetting the GHGs associated with the complete lifecycle of the carpet. In addition, the carpets can be returned at the end of their life through the Interface ReEntry scheme, where they will be reused as raw material for new carpet tiles.

# **Furnishing phase**

Every year, UK businesses spend an estimated £9 million disposing of desks to landfill. Clearly, a key objective in delivering an environmentally-friendly office is in minimising waste and finding second-hand alternatives wherever possible, while at the same time creating a fresh, clean workplace to inspire and motivate the team. The company decided to work with Rype Office, which specialises in providing repurposed office furniture from design to delivery.



A number of sustainability features were included in the retrofit, including lighting zones fitted with motion detectors and glass interior walls to minimise the need for artificial lighting.

## The salvage

As a first measure, **Rype Office** scoured the old office looking for items that could be salvaged, which included a number of worn meeting room chairs. Within a few weeks of professional care and attention, they had all been transformed into impeccably restored seating, complete with polished metalwork and reconditioned leather.

In total, around 15% of all the furniture now at 167 Fleet Street made its way over in one form or another from Kings Cross. The remaining furniture – 4.4 tonnes of it – was collected by the London Re-Use Network, a social enterprise that makes second-hand furniture available at low prices to local businesses, community groups and individuals.

### One man's trash...

Natural Capital Partners donated 4.4 tonnes of unwanted furniture to London Re-Use Limited, a commercial entity working with the public, private and social sectors to divert re-usable items from landfill and incineration and into the circular economy. Although some furniture was deemed unfit for purpose and recycled, the vast majority (circa 85%) was made available at very low prices to a range of organisations, from small firms, community groups and even individuals, or distributed at zero cost through the **London Re-Use Network**. The intended re-use is estimated to produce carbon savings of 19.57 tonnes of CO<sub>2</sub>e.

As of February 2016, 22% of the "unwanted" furniture had found new homes:

Type of organisation	Location	Items received
Construction company - site offices for new school build	London NW6	12 x desks
Estate agency - new start up business	London NW6	3 x operator chairs
Property management company - refurbishing their offices	Hillingdon, UB8	1 x reception desk 1 x credenza cupboard
Home care organisation	London W10	3 x operator chairs
Primary school - recruiting new staff member	London NW9	1 x pedestal, waste bins
Independent travel agency - group recruiting new staff	London N1	5 x pedestals
Social enterprise - promoting China's environmental strategies	London N1	2 x desks
A charity promoting education - for all in Burma	London SW1	6 x operator chairs
Member of the public - for home use	Kent, TN13	2 x wooden dining chairs

#### Second-hand solutions

That still left 85% of the furniture to be acquired, and the prospect of buying the remaining furniture from new would do little to meet the environmental aims. London-based Rype Office was able to help again, providing around 50% of the office needs from repurposed furniture. This included:

**Desk chairs:** Remanufactured Orangebox G64s task chairs in as-new condition with a five-year warranty to match. These have the full range of ergonomic adjustments and were reupholstered in a hardwearing 100% recycled polyester in Calculus blue to suit the corporate colour palette.

The lifetime carbon footprint of a remanufactured desk chair is  $22 \text{kg CO}_2 e$ , less than one third of one made from virgin materials (approximately 65-67kg CO<sub>2</sub>e).

**Desks:** Italian-designed Misura height-adjustable desks were chosen. New tops were made and the legs were remanufactured and resurfaced with a hardwearing powder coating in a colour to match the flooring.



A number of old meeting room chairs were transformed into impeccably restored seating, and new tops were added to remanufactured frames and legs for the meeting room tables.

The lifetime carbon impact of these desks is around half the 97kg CO<sub>2</sub>e of a new desk at approximately 50kg CO<sub>2</sub>e.

**Meeting room tables:** Rype Office sourced remanufactured frames and legs from used Herman Miller pieces and added new tops laminated with grey oak to match the decor of the new office, with black edging to provide a contemporary, corporate finish.

In total, Rype Office helped Natural Capital Partners achieve carbon emission savings of more than 2.4 tonnes  $\mathrm{CO}_2 e$ , diverted several tonnes of "waste" furniture from landfill, and produced a cost saving well over 50% of the list price of new equivalent furniture. Better yet, Rype Office will buy back the furniture at the end of its useful life for further remanufacturing, tying in well with Natural Capital Partners' long-term approach to sustainability.

Louan said he was delighted with the results, which had saved money without compromising on quality or performance.

"The furniture is like new, but the environmental benefits are huge and, as you'd expect from a finance manager, paying half the price is a big plus," he said.

## Brand new, but sustainable

Footprint analysis using the Furniture Industry Research Association's carbon footprint tool suggests that over 90% of a product's environmental impact is down to the raw materials used in manufacture. By understanding the footprint of different materials, manufacturers are able to make more informed decisions on material selection.

Of the remaining 35% of the new office's furniture, everything was sourced through Stirling Grey from <u>Orangebox</u> - a member of the <u>Furniture Industry Sustainability Programme</u> and adherent of footprint analysis, and SAGAL - a family-owned business with sustainability at its core.

With each furniture item, Natural Capital Partners could clearly identify its recycled and recyclable content, and the complete carbon footprint from cradle to grave, including how that footprint is spread across its key materials. Across all new furniture items, the average recycled content stands at 27% and average recyclable content at 85%.

"The only concern customers ever have before buying remanufactured furniture is about quality; but the minute we show them our finished products and they realise they can't see any difference between them and brand new, it becomes a really easy rational decision. It's a real no brainer."

Dr Greg Lavery, Director, Rype Office

## Eight top tips for a low carbon office move

- 1 Think about it from day one rather than as an add-on once the project is started, to ensure all the options for the building's structure, lighting and heating are also considered.
- 2 Make it clear to your partners right from the beginning that low carbon is an essential part of the project and ensure they are equally committed so that all the proposals have the carbon footprint factored in.
- **3** Clarify with all your partners what data you will require to measure the footprint of each element of the project.
- **4** Evaluate the carbon footprint of office furniture from cradle to grave. A company that can provide a full Life Cycle Assessment (LCA) for each product will enable you to make an informed choice based on the total carbon footprint of furniture items.
- **5** Be open-minded about the potential of re-use and second hand alternatives: there are a growing number of organisations working within circular economy prinicples that can help you achieve the same quality output of buying new, without the associated cost and carbon footprint.
- **6** Arrange an outlet to donate unwanted items: in the excitement of an office move it's easy to forget about the space (and stuff) you're leaving behind, but don't miss the opportunity to benefit your local community while minimising the carbon footprint of disposal one man's waste is another man's treasure.
- 7 Encourage staff to participate in the process: an office move offers a great opportunity to engage staff on the environmental aspirations and actions of your business, while enabling them to play an active role in creating a sustainable working environment.
- 8 If you want to go that extra step to achieve a carbon neutral office move, offset your residual emissions through high quality carbon finance projects.

  This is a great way to re-confirm your commitment to environmental best practice and contribute to low carbon, sustainable development beyond your business boundary.



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#### Conclusion

When Natural Capital Partners decided to relocate its London office, the team had a clear objective: to limit the environmental impact of the move as much as was financially feasible, while ensuring the end product was an ergonomically-friendly, smart, productive working environment.

Although a lot of time and effort was spent finding not just the right office space, but also the contractors with the right approach who could deliver a quality service, the hard work paid off and the project provides a practical example of a low carbon move that can be shared and replicated.

And as for keeping to budget? Well, nearly. But finance manager Louan is not complaining.

"As an SME, moving office is always going to be a significant overhead cost, but considering what we were trying to achieve I think we did really well," he said. "Given the tight budget we came in at just 5% over, which is great. We made more savings than anticipated through the purchase of remanufactured furniture which gave us more money to spend elsewhere."

With most of the sustainability benefits unnoticeable to the naked eye, Louan said it was the response of the team that was the real winner.

"The new place is so light and airy, and has a really energetic atmosphere. The layout is much more collaborative and we've integrated a range of informal seating areas combined with more formal meeting rooms to meet all our different needs. Everyone is working well here – we couldn't ask for more than that."