A SUSTAINABILITY STORY FOR TODAY AND TOMORROW

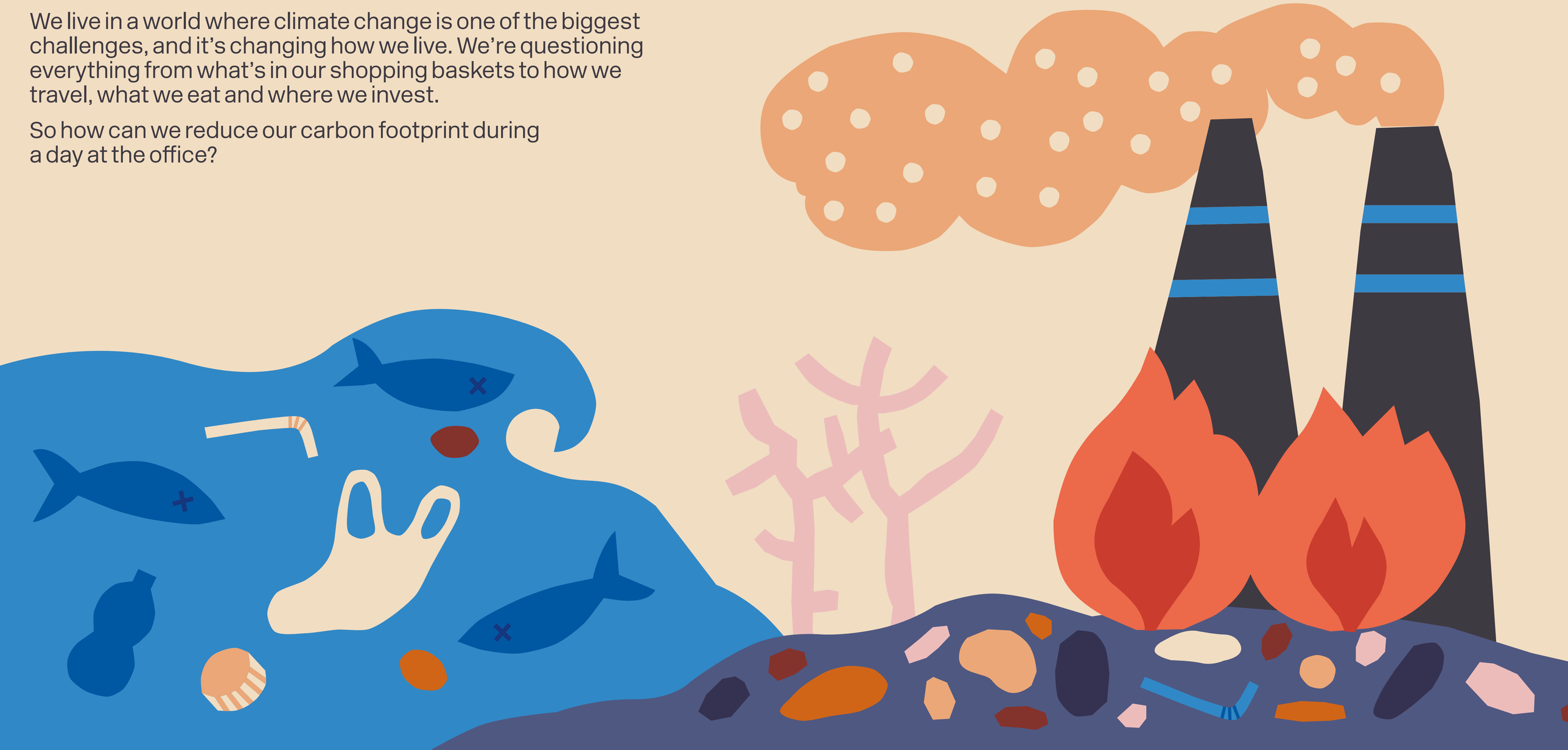
GRESHAM ST PAUL'S

Brought to you by
STANHOPE

THE WORLD IS CHANGING

We live in a world where climate change is one of the biggest challenges, and it's changing how we live. We're questioning everything from what's in our shopping baskets to how we travel, what we eat and where we invest.

So how can we reduce our carbon footprint during a day at the office?



WE CAN MAKE A DIFFERENCE

A day in the life of a carbon-conscious office worker. Imagine how the savings would add up if we worked together.

NOT PRINTING THE EMAIL
40G CO_2
saved for a three-page email

ENJOYING A HOMEMADE SANDWICH
500G CO_2
saved compared to ready-made

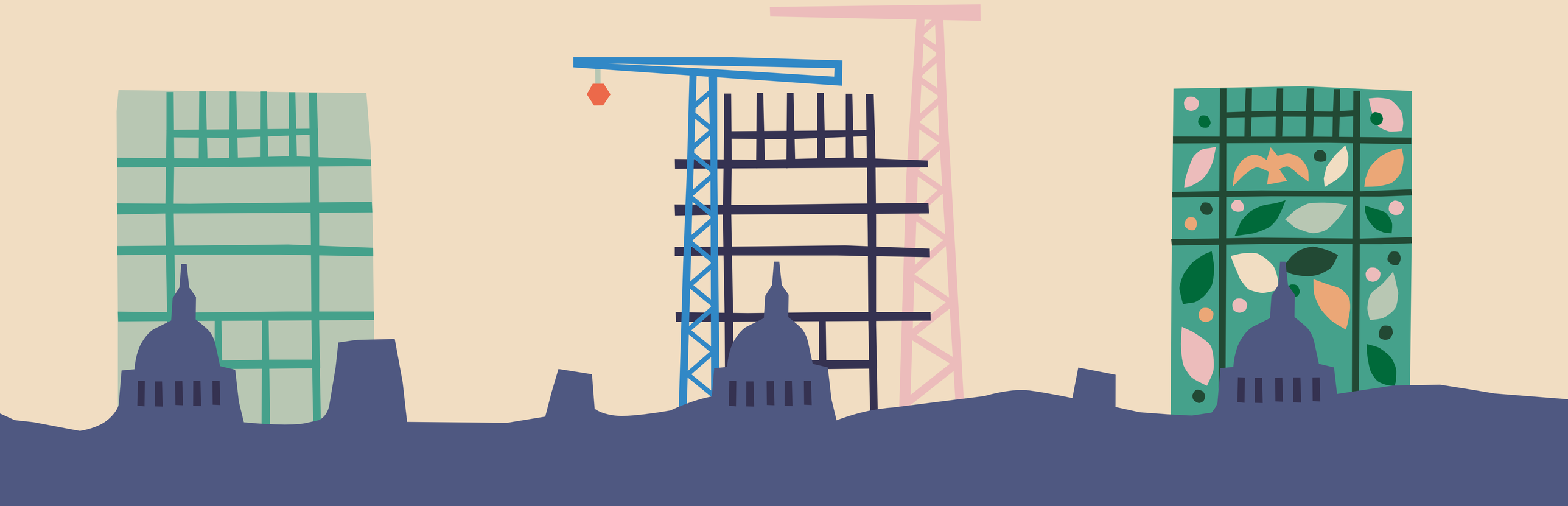
CYCLING TO WORK
3.5KG CO_2
saved compared to driving two miles each way

TAKING THE STAIRS
100G CO_2
saved compared to the average lift journey

THREE CHOICES FOR GRESHAM ST PAULS

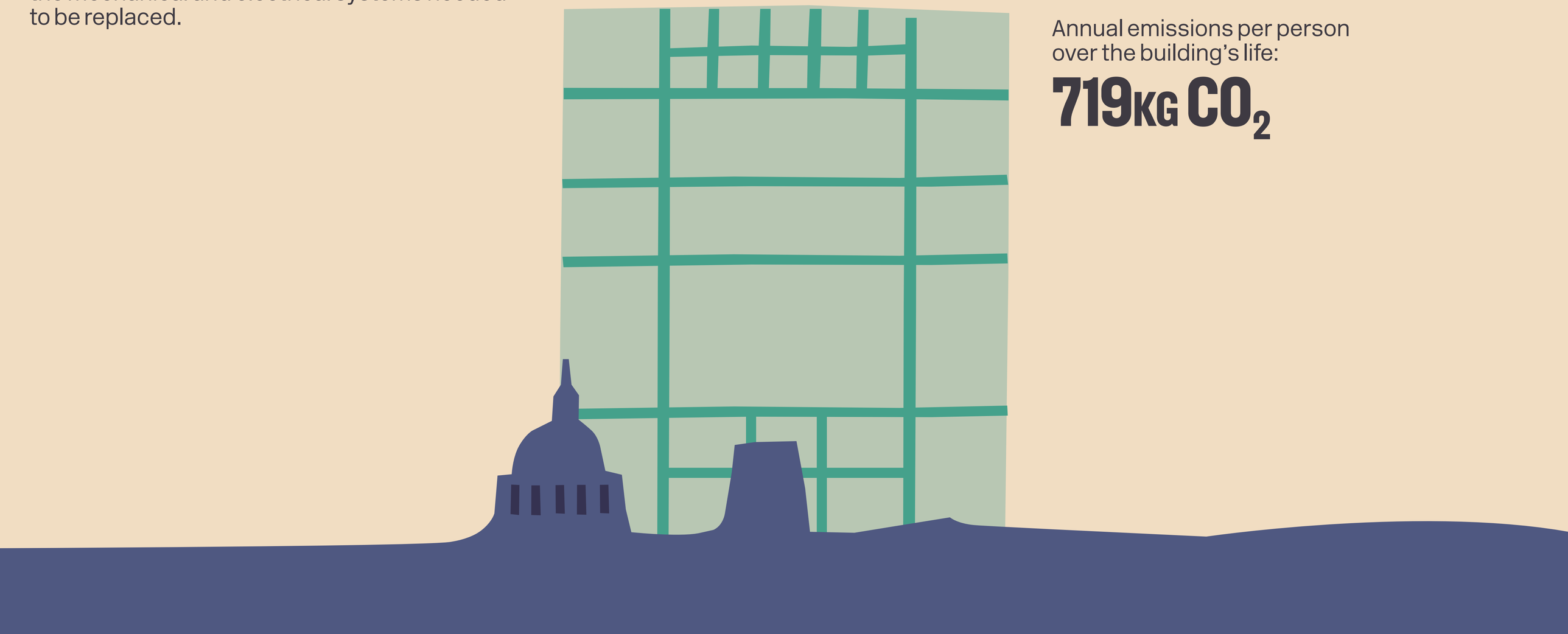
It's going to take something bigger.

We can all do our bit to save the planet, but tackling the climate emergency also calls for systemic change. At Stanhope, we had three choices about how to develop Gresham St Paul's, a 20-year-old building in the City of London.



1
KEEP IT THE SAME

The building had been well maintained, so only the mechanical and electrical systems needed to be replaced.

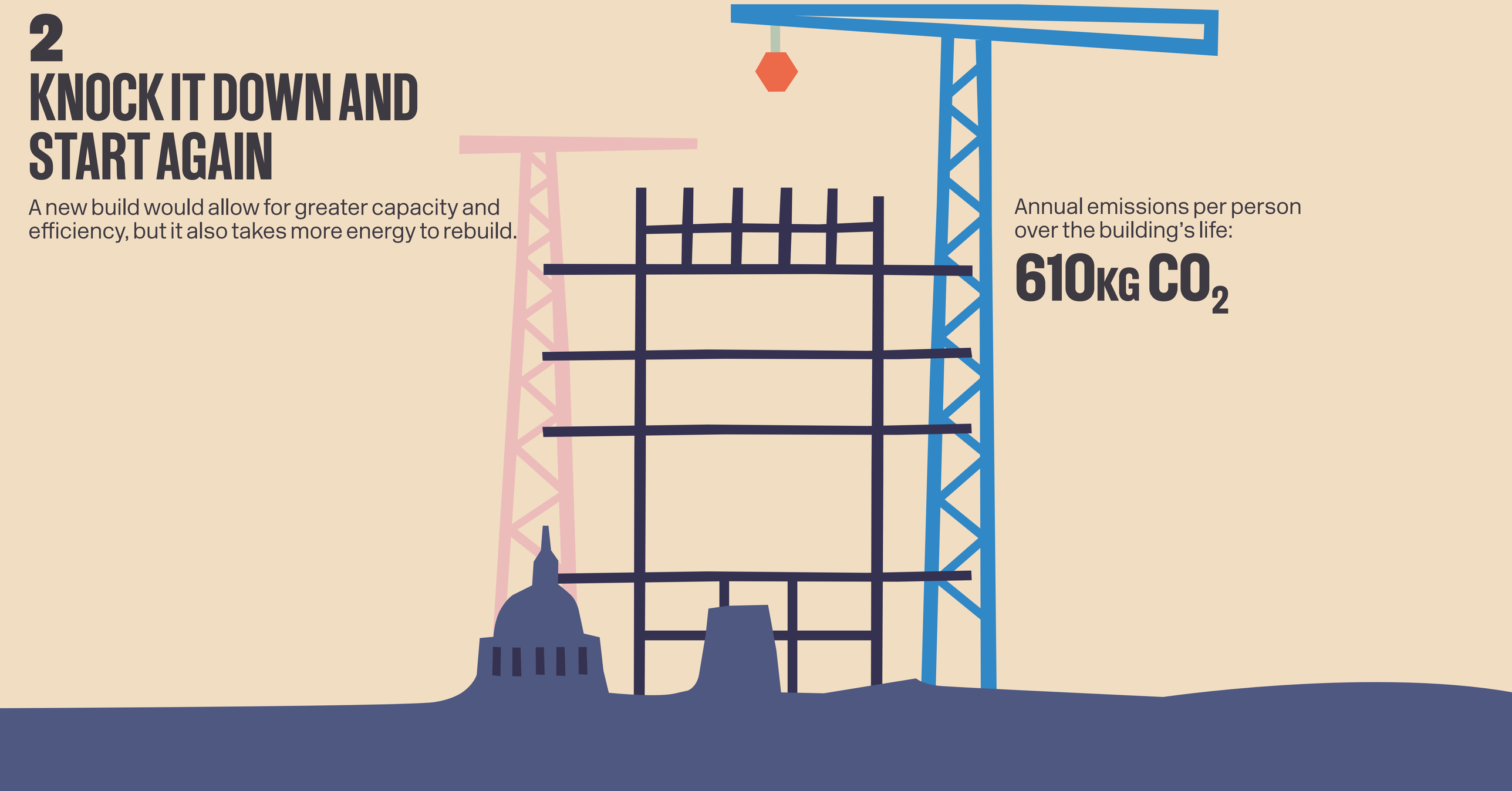


Annual emissions per person over the building's life:

719KG CO_2

2
KNOCK IT DOWN AND START AGAIN

A new build would allow for greater capacity and efficiency, but it also takes more energy to rebuild.



Annual emissions per person over the building's life:

610KG CO_2

3
AS GOOD AS NEW

Refurbishment provides an opportunity to increase the capacity of the building as well as improve the efficiency of the operating costs. So this is what we have done.

Annual emissions per person over the building's life:

553KG CO_2

3
AS GOOD AS NEW

WHAT DOES SYSTEMIC CHANGE LOOK LIKE?

Gresham St Pauls' refurbished office space will save 6,660 tonnes CO2 over its lifetime, compared with a new building. That's equivalent to the annual carbon footprint of over 1,200 people in the UK.

Refurbished office buildings cut the carbon footprints of everyone who occupies them. They save carbon emissions effortlessly, at scale and every day — come rain or shine.

6,660 TONNES

CO2 saving over its lifetime.

OFFICES TO BE **PROUD OF**

At Gresham St Paul's, we're creating 165,000 sq ft of elegant, grade A office space.

Our refurbishment will improve business performance, foster creativity and boost personal wellbeing. The building boasts an exceptional spec and unique welcome experience.

BOOST PERSONAL **WELLBEING**

IMPROVE BUSINESS PERFORMANCE

FOSTER **CREATIVITY**

IN THE PROCESS...

We're cutting the building's lifetime carbon emissions by 23% per person compared to keeping the existing building going, and saving 9% per person compared with building a new one from scratch.

23%

Cutting the building's lifetime carbon emissions by 23% per person

9%

Saving 9% per person compared a new building from scratch

WE CAN DO **MORE** WHEN WE DO IT **TOGETHER**

GRESHAM **ST PAUL'S**

Notes

The lifetime carbon emissions for the refurbished Gresham St Paul's are projected to be 65,391 tonnes. With a building occupancy of 1,970 people and a lifetime of 60 years, that's 553kg CO2 per person each year — 23% lower than the existing building at 719kg CO2 per person each year. This is because, while the existing building has lower projected total emissions of 63,026 tonnes, its capacity is just 1,460 people. The lifetime projected emissions for a new build, on the other hand, would be 72,051 tonnes, so that's 610kg CO2 for every person behind a desk.

Refurbishing is a win for the planet, and a win for our occupiers who enjoy lower operating costs, outstanding office space, and the warm glow of being in it together.

Lifetime carbon emissions calculations for each scenario took into account the original building's embodied carbon emissions, its use and demolition, and the emissions that resulted from rebuilding or refurbishing where applicable. Read our full Carbon Footprint Profile here: bit.ly/LINKYLINK

This profile was created by WilkinsonEyre, with thanks to the development manager Stanhope who undertook it on behalf of AFIAA, as well as to the extended design and construction team: Mace, Watermans, Cantillon and Alinea.

Written and designed by dn&co.

About the statistics

The scope of the assessment was set in alignment with industry-best guidance contained in the "Whole life carbon assessment for the built environment" published by RICS (2017). The minimum requirements for whole life carbon assessment are as follows:

We considered the following life stages in the analysis, in line with RICS guidance (minimum requirements):
[A1–A3] Product stage
[A4-A5] Construction process stage
[B4] Replacement stage
[B6] Operational energy use

Additionally, we accounted for the CO2e emissions resulting from partial (scenario 3) or full demolition (scenario 2), which belong to the stage [C1-C4], end of life. These appear meaningful for the scope of the study.

Statistics used in this booklet are approximate, and we have rounded them to the nearest round number.

— Cycling to work assumes 2 miles in each direction instead of driving. (https://www.ourstreetsmpls.org/does_bike_commuting_affect_your_carbon_footprint_and_how_much)
— The footprint of a lift journey was calculated based on the average person taking four lift trips a day. (https://www.theguardian.com/environment/blog/2009/sep/04/lifts-energy-take-the-stairs)
— Homemade sandwiches have footprints that range 399g-843g while shop-bought range 739g-1441g. (https://www.sciencedirect.com/science/article/abs/pii/S2352550917300635?via%3Dihub)
— The saving from not printing an email depends on how long you would otherwise have spent looking at a screen. Our estimate is based solely on saving three pieces of 80gsm paper, as estimated by How Bad are Bananas?: The Carbon Footprint of Everything, and doesn't include the printing itself.
— The average person's annual carbon footprint is based on the UK's total emissions for 2018, which were 364.1 million tonnes and the current population of approximately 66 million.