



REPLANET

A SUSTAINABLE FUTURE FOR ALL



HALLIDAY FRASER MUNRO
CHARTERED ARCHITECTS & PLANNING CONSULTANTS



Introduction

As architects and planners, we have always been aware of the social, economic and environmental responsibility we have.

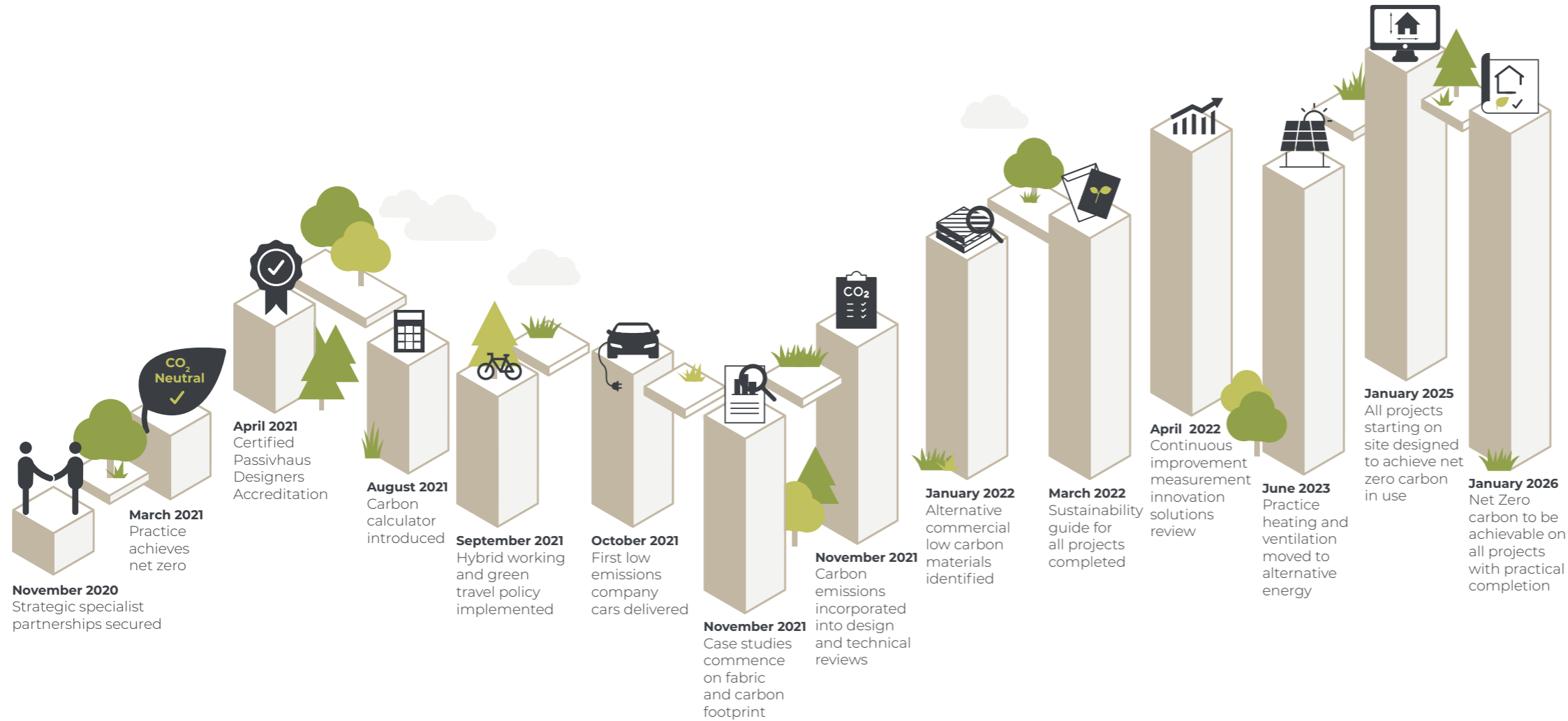
However, the current climate crisis has prompted a step change in sustainability across the globe. Our success to date has been supported by the excellent level of service we provide to our clients. This has been achieved by being at the forefront of technology, understanding our clients vision and exceeding all expectations for their projects. Replanet will ensure we continue to provide this level of service while meeting sustainability requirements.

Replanet is our journey to carbon zero and a sustainable future for all.

Our team and partners are our biggest asset. They are fully committed to the successful delivery of buildings and spaces that will achieve our clients targets on embodied carbon, operational carbon and their vision for communities to lead sustainable healthy lives.

It's a concept that everyone in our practice is 100% behind and we are arming our teams with all the skills, knowledge and tools they require to deliver our clients ambitious plans.

The lead-times for buildings are long. Tomorrow's buildings are already on the drawing table today, and those buildings will impact our environment for decades, if not centuries, into the future and this is why we are supporting our clients journeys to carbon zero now. We have already achieved huge progress in reducing our own business operations to carbon zero, and we have signed up to the RIBA 2030 challenge.



With Replanet we have developed and prioritised key issues facing our clients today. We have achieved Carbon Neutrality as a Practice and signed up to the RIBA 2030 challenge. We are committed to being able to deliver buildings and spaces that can operate at net zero carbon which have a practical completion of 2026 onwards.

David Halliday



Refocus

Our team are adopting a range of initiatives to assist them with the key issues facing our clients today for the buildings of tomorrow.

Adopting Passivhaus principles is a central part of our strategy. Following extensive training programmes across our team, we're now fully accredited as Certified Passivhaus Designers. Deploying the principles, of airtightness, insulation, building orientation and heat recovery ventilation systems, we can deliver projects that operate carbon neutrally.

Working with our partners and utilising our detailed understanding of supply chains and construction techniques allows us to determine the optimal materials and balance cost with performance.

The refurbishment and repurposing of existing structures rather than starting from new has helped many of our clients establish the cost and environmental benefits of this approach. This massively reduces the embodied carbon in a single step while increasing the current and future value of their assets.

Planning what will happen to the materials in a building at the end of their life is critical to minimise their carbon footprint. Designing buildings with disassembly in mind ensures that you get maximum value from the component resources over time – reducing their embodied carbon.

This not only ensures that individual elements of the building can be reused but that the building can proactively adapt to the demands of the market, prolonging its useful life and reducing its impact on the planet. Simply extending the working life of a building has a significant effect on calculating its embodied carbon level.

Our planning team are playing an integral role in our Replanet initiative. They are actively helping to facilitate twenty-minute neighbourhoods, in which inhabitants can access facilities more sustainably, on foot or bike. They are actively working with master planners to revise and adjust zoning, lifting restrictions to facilitate the development of more sustainable housing and commercial buildings to fulfil the needs of these communities.

Recalibrate

Calculating operational, embodied and lifecycle carbon levels is extremely complex and requires detailed understanding of supply chains and construction techniques to determine the optimal materials and balance cost with performance.

Our commitment to advanced Building Information Modelling (BIM) technology puts us in a particularly strong position to do this and use the latest software to determine the best approach for your project.

We have always been sensitive to our clients' budgets. Ensuring that you get value for money by employing innovative designs, techniques and materials to enhance performance and mitigate costs is second nature to us.

That emphasis will not change but the equations we all use to evaluate buildings must change, if we are to achieve everything we need to. We will now look at projects holistically, assessing the impact of decisions at the design stage over the whole lifetime of the building.

While that might mean some additional build costs initially, once you factor in reductions in running costs, early investments in building efficiency will deliver economic and environmental returns over a relatively short time.

That is easier to bear if you will be using the building yourself but harder to justify if you are selling it on. However, as investors and lenders step up to the climate challenge, more and more of them are insisting on the very highest environmental performance standards – often significantly higher than current building regulations.

Changes in approach may also actually reduce costs. One of our first scheduled zero carbon commercial office projects, will only have six car spaces for electric charging. This reduces the cost of building the kind of large carpark that would have been typical for such a building in the past.

Our residential team are now actively delivering projects to the highest sustainability standards for clients across Scotland. For those commissioning social housing, the ability of sustainable design to reduce running costs close to zero is clearly a motivating factor.

While private developers may find additional build costs harder to square, we always stress the importance of being seen to be doing the right thing. Consumers are increasingly aware of their environmental responsibilities and some mortgage lenders now actively recognise the cost benefits of living in a sustainable home.

Creating better environments for young people to learn and to live.

Local authorities are awakening to the value of specifying Passivhaus standards for schools

and we are working with them to help achieve those goals. Even when achieving full Passivhaus certification proves too costly, we can apply many of the principles to radically reduce running costs and ensure that materials specified are in line with the environmental criteria outlined in the RIBA carbon Challenge. Carefully configured heat recovery ventilation systems are particularly valuable in creating a healthy learning environment without having to open or shut windows.

A sustainable approach to office buildings can help create a healthier working environment but its effect on the wider environment is what will really enhance its appeal. Major property investors, such as pension companies, are being driven more and more by Environmental Social and Governance (ESG) policies that determine their investment decisions. Similar concerns mean that tenants are looking for buildings that deliver the best performance and buyers are willing to pay a premium for properties that offer future-proof, environmental, standards.



Replanet

The World Green Building Council estimates that buildings and construction account for 39% of the world's total carbon emissions.

This demonstrates the sheer scale of what we must achieve if we are to protect the planet from catastrophic climate change. The only way we can get to where we need, is by rethinking everything we do, revising our approach to new buildings and reconfiguring existing buildings. If you'd like to get behind our Replanet project, and reset the built environment get in touch. We have a lot of work to do.

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