Resilient, future-facing, low carbon infrastructure

NET ZERO BUILDINGS AND CITIES: ADAPT AND DECARBONISE

Challenge

New Buildings can be designed to be Net Zero Carbon today, but 80% of the buildings that will exist in 2050 are already built.

How can new and existing buildings be integrated to create Net Zero Carbon communities?

Scale is also an important consideration as for many organisations their focus can range from individual building developments, operating or maintaining campuses or estates or looking at how to deliver sustainable cities. At such scales consideration around the wider system that such new or existing development reside is key to their long term success.

Within this context organisations are having to consider Net Zero within a myriad of other competing commercial, economic, social and environmental priorities. This is particularly true considering the impact Covid-19 is having across society and the economy.

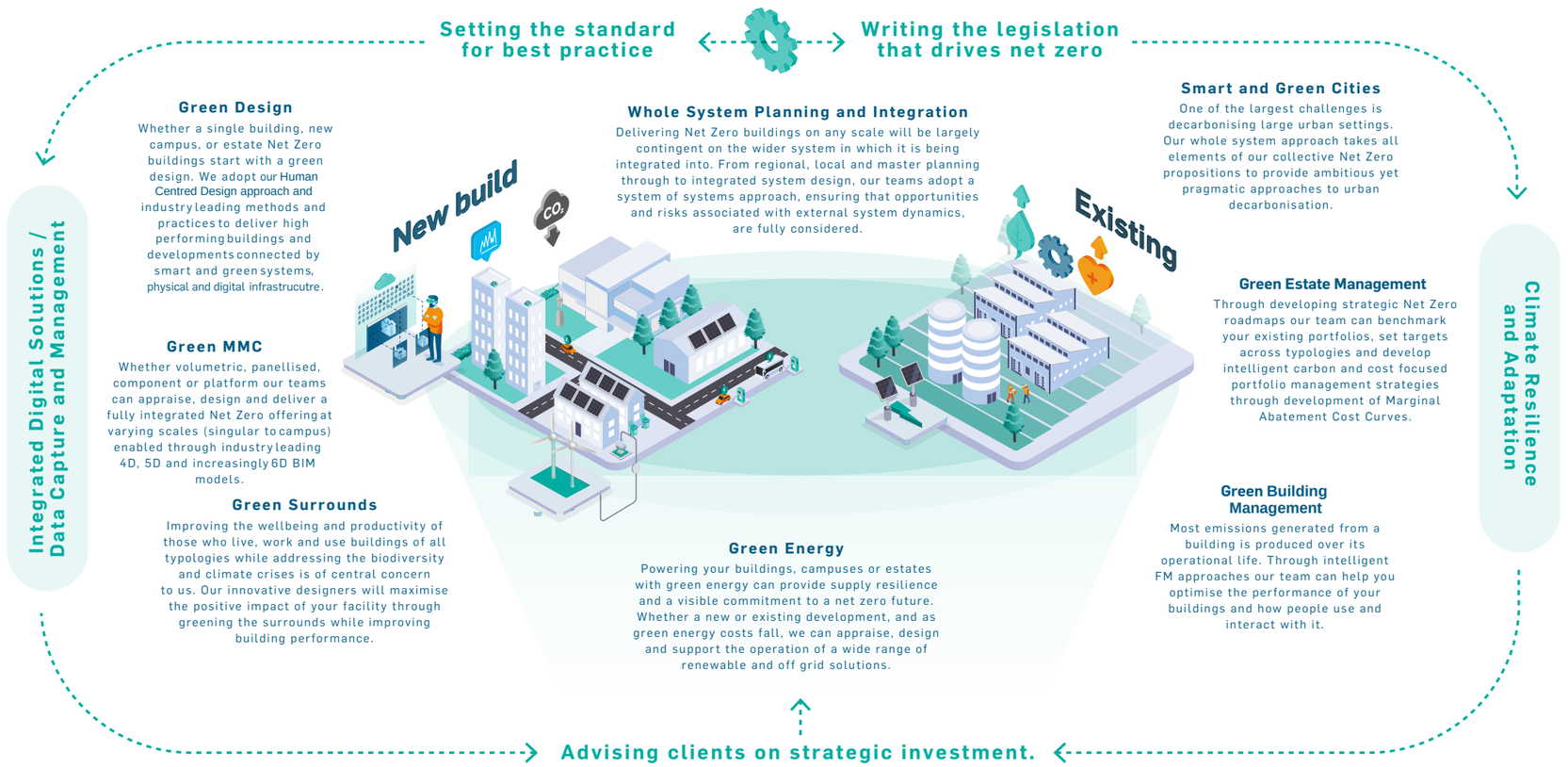
As such, translating the need for system thinking into pragmatic and deliverable programmes that deliver Net Zero outcomes can be deeply challenging depending on the business models organisations are bound by. However, smart and robust approaches exist to de-risk and overcome such challenges.

Our whole of system approach specifically targets this issue enabling our clients to develop intelligent and cost effective solutions where singular solutions can deliver multiple value outcomes at once.

Make Carbon Visible

We do not see carbon as clearly as we see cost. It is often invisible in the design and construction process and obscured in production behind more obvious concerns of throughput, quality and reliability. To effectively tackle carbon we must see it, clearly and in all areas where it occurs, and quantify it such that we can prioritise our interventions and measure our success.

Atkins carbon accounting tools ensure that construction and operational carbon is visible in the end-to-end process, upstream in material and component supply and downstream in distribution and end of life recycling. We extend this visibility across the entire team to enable a proactive, Carbon Value Engineering (C-VE) focus on major contributors. Our detailed carbon budgeting allows success to be measured, inspiring our people and demonstrating commitment to customers, society and our world.



As part of our whole system approach, out Net Zero Building proposition is augmented by our other Net Zero propositions, which toghether provide our whole system capabilities.

Net Zero Energy Systems
Decarbonsiing existing energy systems or implementing new and innovative Net Zero energy solutions on any scale of project.
Read more on our Net Zero Energy System approach HERE

Strategic Carbon Planning
Delivering industry leading routemaps and pathways to credible Net Zero futures.
Read more on our Strategic Carbon Planning approach HERE

Net Zero Transport Systems
Decarbonising new or existing transport systems across road, rail and aviation and developing new and novel net zero transport solutions for any scale of project.
Read more on our Net Zero Transport Systems approach HERE

Net Zero Industry and Infrastructure
Decarbonising new and existing industrial processes and process emissions from a wide range of sectors including manufacturing, water processes, steel and cement production.
Read more on our Net Zero Industry and Infrastructure approach HERE

Greenhouse Gas Removals
Deploying a range of nature based solutions on varying scales to help clients optimise land use and integrate nature based offsetting solutions into the built environment. We also provide GGR technologies appraisals.
Read more on our Net Zero Infrastructure approach HERE

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