

NET ZERO ENERGY SYSTEMS: UNLOCKING OUR PATH TO NET ZERO



**Engineering
Net Zero**
In partnership with our planet

ATKINS
Member of the SNC-Lavalin Group

CHALLENGE

Our existing energy system is the engine room of our global economy, powering and heating all areas of society. A Net Zero or clean-energy system will need to do the same, but at a much larger scale to meet the rising demand for power as the wider economy implements their own Net Zero plans.

Whole-system thinking will be essential to effectively plot a pathway to a Net Zero energy system future and, importantly, the transition to a Net Zero energy system will be exactly that, a transition. Clean-energy solutions, new technologies and the fourth industrial revolution will need to converge to drive the integration of a new clean-energy system over time and in a phased manner.

Building capacity while transitioning to a clean-energy system, ensuring security of supply and that the energy system is resilient and adaptive to our changing climate, form the largest priorities the energy systems face. Importantly, the energy systems' success in this transition will be critical to decarbonising the wider economy.

We are ready to support our clients in facing their energy system challenges, whether it be decarbonising key areas of the existing system, integrating clean-energy solutions within the existing system, or developing clean-energy solutions to enable the decarbonisation of the wider built environment.

Our whole-system thinking approach provides an end-to-end capability across the whole lifecycle of energy system assets, ensuring our clients' aspirations and commitments to Net Zero are achieved.

MAKE CARBON VISIBLE

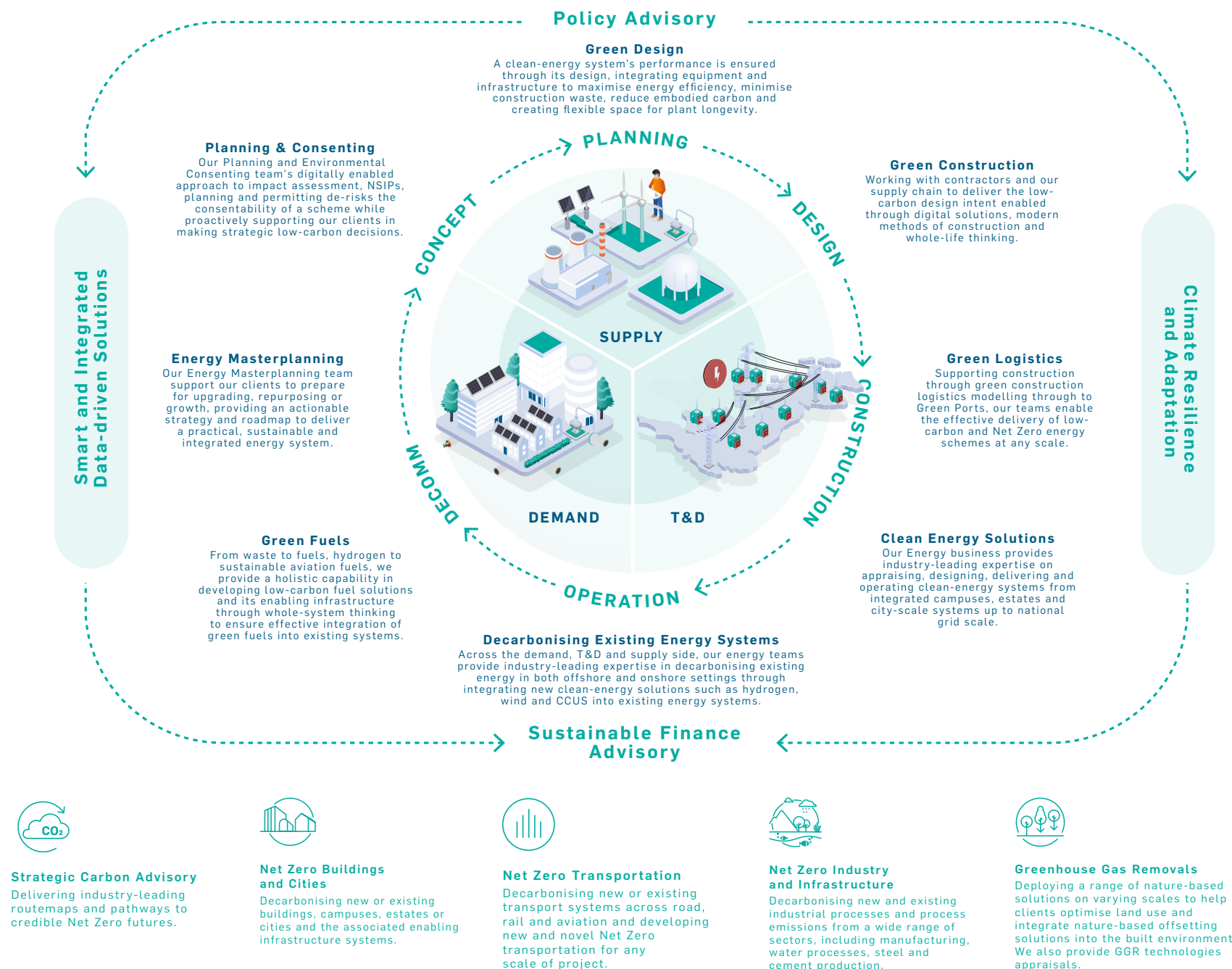
We do not see carbon as clearly as we see cost. It is often invisible in the design and construction process and obscured in production behind more obvious concerns of throughput, quality and reliability.

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, we have developed a range of other targeted propositions that complement and interface with this Net Zero Energy Systems offering.



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