The Race to Net Zero

What it is and how to get there

The world is how we shape it

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At Sopra Steria, we're taking a leading role in the fight against catastrophic climate change with our commitment to reaching Net Zero emissions by 2028, which is 22 years ahead of the government's legal target. In addition, we're proud to be helping some of the most forward-thinking and innovative organisations to achieve Net Zero, and in doing so, enable them to reach revenue targets, improve cost efficiencies, develop staff and client engagement whilst enjoying sustainable long-term growth.

We all have a role to play

Every day we all do things that give rise to greenhouse gas emissions; cooking dinner, driving the car, watching the TV – all these things use energy, and today much of that energy comes from burning fossil fuels like oil and natural gas.

As we know, greenhouse gases cause global warming, which in turn causes climate change. Climate change threatens to disrupt the Earth's natural systems and the human life that depends on them.

In response to the climate crisis, the UK Government announced its commitment to reaching Net Zero by 2050. We no longer have a choice and to reach the legal targets, organisations have to act now or risk not complying with regulation. It also presents a significant opportunity to make a positive contribution to the world. Organisations that are leading the way in tackling their impact on the climate are those that are best positioned to grow over the long-term.

What is Net Zero?

Net Zero is achieved when the amount of greenhouse gas emissions produced and the amount removed from the atmosphere are balanced. To minimise the effects of climate change, we must reduce and eventually eliminate emissions of greenhouse gases from the combustion of fossil fuels.

In November 2021, delegates from around the world will join for COP26 to put in place action based on the commitments outlined in the 2015 Paris Agreement. **The four goals the UK will action at COP26 include Mitigation, Adaptation, Finance and Collaboration.**

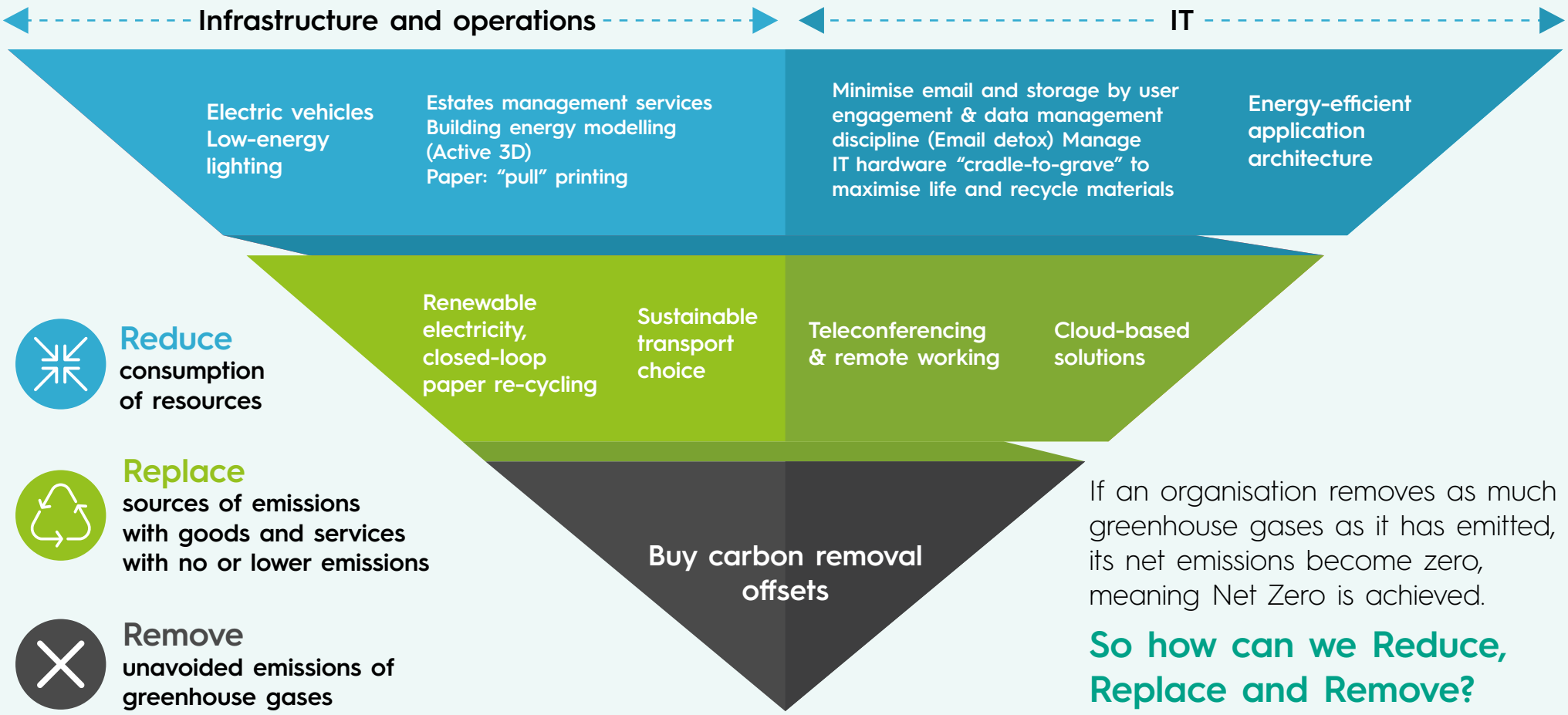
The requirement for organisations to become Net Zero in line with the UK as a whole means that they must make emissions management part of business-as-usual and integrate emissions reduction into their strategies. Despite many organisations having made the commitment to Net Zero, actually formulating a road map on how to get there can feel overwhelming and complex.

To help organisations plan and implement actionable changes to achieve their Net Zero goals, **our consultants have developed a simple framework called the 'Three R's'.**

Introducing the Three R's

The 'Three R's' approach of tackling climate change include Reduce, Replace and Remove. This involves:

- Reducing the consumption of energy, particularly energy that comes from fossil fuels
- Replacing fossil fuels as a source of energy with energy from renewable sources
- Removing from the atmosphere the greenhouse gases that it emits



Reduce
consumption of resources

Replace
sources of emissions with goods and services with no or lower emissions

Remove
unavoided emissions of greenhouse gases

If an organisation removes as much greenhouse gases as it has emitted, its net emissions become zero, meaning Net Zero is achieved.

So how can we Reduce, Replace and Remove?

Reduce

The first step is to identify and quantify the extent of an organisation's carbon footprint. This provides clarity on what needs to be done. The focus is then identifying ways in which emissions can be reduced over the short, medium and longer-term.

Technology can enable effective monitoring of energy consumption within different buildings. By modelling the use of energy, using energy efficient lighting and motion sensors, the Green BIM solution from Sopra Steria's subsidiary Active 3D can reduce the energy consumption of a building by up to 30%.

The flip side of technology is that the equipment we use day-to-day consumes a lot of energy. Sopra Steria designs mobile apps to enable more efficient use of energy and reduces the drain on a device's battery. An organisation's digital presence also uses energy. To power a website, energy is needed by the server that runs it, the network that transmits information between the server and the user, as well as the energy needed by the user's device. It is possible to design a website to minimise the consumption of energy and minimise this contribution to an organisation's carbon footprint.

Storing data, such as files and emails and making them instantly available, consumes resources and energy. This can be kept to a minimum by simple good housekeeping, such as deleting things that we no longer need.

Printing consumes paper, toner and energy. Simple steps towards implementing best practices, such as 'think before you print', and considering whether there is a better way of conveying that information will make a difference.

Reviewing the lifecycle of items you use is a useful way to highlight areas where energy consumption can be reduced. For example, manufacturing a laptop consumes about 1MWh of primary energy (and manufacturing a desktop computer consumes about twice that). Using that laptop for 8 hours a day for 200 days each year will consume about 80kWh of electricity – a very small fraction of the amount of energy invested in manufacturing it. In terms of energy, then, it makes sense to continue to use such a laptop for as long as possible – by passing it on to a new owner if it no longer meets your needs. When it does eventually break down or become obsolete, make sure that the components and raw materials in it are recycled and reused – saving the energy required to extract those materials.

Every phase of the lifecycle from manufacture to disposal uses resources, so looking at opportunities to reduce the carbon footprint at each stage should be part of the overall plan.

Replace

Switching to renewable electricity is one example of replacing a source of emissions. Instead of generating electricity from fossil fuels, investing in using an energy source with much lower emissions such as wind, water or biofuels will have a positive impact on reducing an organisation's carbon footprint. A word of caution though, by consuming renewable electricity that you don't really need reduces the amount available on the network and therefore increases demand for electricity from fossil fuel generators.

Moving to cloud-based data centre solutions has many benefits, as well as using just a tenth of the computing power and energy compared to using dedicated data centres. This could reduce the carbon footprint significantly.

Transport also contributes significantly to carbon emissions, and there are many ways an organisation can reduce its impact through incentivising employees. For organisations in the region of Toulouse in France, Sopra Steria provided a digital, multi-actor platform for a system, COMMUTE, that has reduced the solo use of private vehicles by about 9% (reducing emissions by about 17tCO_2e a day) by enabling users to take means of transport with lower carbon footprints (car-pooling, car-sharing, cycling, etc.). It enabled car-sharing 100,000 times from 2018 to 2020 and increased the use of bicycles from 10% to 20%.

Remove

Even when you've done all you can to reduce your consumption of energy and manufactured products and have done all you can to replace them with alternatives, with lower carbon footprints, you'll very probably still have some residual emissions on your carbon accounts; particularly those with sources outside your direct control, like employee commuting, business travel and supply chain. You can eliminate these emissions from your accounts, not by eliminating them at source, but by removing an equivalent amount of carbon dioxide from the atmosphere using carbon removal offsets.

You can contribute to initiatives such as afforestation projects that remove a measured and certified amount of carbon dioxide from the atmosphere equivalent to your residual emissions, leaving your carbon account Net Zero.

Final thoughts

The Three R's approach can help you to develop a strategic plan that is right for your organisation. There is a real urgency for governments and organisations to take action, redesign how they do business and make the transition to a Net Zero carbon economy. 2050 may seem like a long way off, but the planning needs to start now. Those organisations that are pioneers in implementing fundamental shifts to the way they operate are the ones who will maintain and strengthen their competitive advantage. Inaction is the greatest threat, both to the planet but also to our everyday lives and the economy. The cost of doing nothing vastly outweighs the investment needed to start on the journey to Net Zero.

More information

At Sopra Steria, we have a dedicated team of specialist sustainability consultants ready to accompany you on your organisations journey to a sustainable future. We are committed to leading the way in sustainability and our achievements and awards are what set us apart.

We understand that there is no all-purpose route to Net Zero, which is why we will work closely with you to truly understand your organisation to help navigate your challenges and tailor a solution to suit.

Sopra Steria has over a decade of practical experience in measuring, understanding and managing our GHG (carbon) emissions, and are preparing to make our own transition to Net Zero by 2028. This experience combined with our business process transformation credentials means we are well equipped to guide and support your organisation on its journey to Net Zero.

For more information about our Net Zero and Sustainability consultancy services, please contact Siva or Johnathan at the details below:

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We look forward to working with you.

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