



Net Zero and Strategy Planning – Why is it important for organisations to commence their net zero strategy now?

By George Adams, Director of Energy and Engineering at SPIE

The global journey to net zero CO₂ starts with evaluating the carbon footprint of nations and organisations, and there are suitable methods available for all types of companies; these can range from single traders to SMEs and large corporations.

The footprint of a product or service through a Life Cycle Assessment can be established if the supply chain is adequately mapped out, inclusive of embedded carbon. In turn, the results can be clearly communicated to stakeholders and partners, and subsequently, climate goals determined and agreed.

With a carbon footprint in place, it is then possible to detail the journey of how to achieve a net zero strategy. However, organisations must realise that net zero is no longer a nice to have, it is an essential business priority. Therefore, achieving climate emergency objectives can and should go hand-in-hand to accomplish a sustainable business that investors and employees want to engage with.

In terms of carbon footprint, a large proportion is from buildings and transport; the built environment contributes around 40%. With around 32 million UK buildings in total, it is clear to see there is much to be done, especially as 80% of these buildings by 2050 will still be with us. However, the net zero target of 2050 is too late and is reflected in the new UK Government world's most ambitious climate change target to reduce emissions by 78% by 2035, compared to 1990 levels. This will require significant improvements in infrastructure, transport and wide-ranging use of low carbon energy supplies.

The way forward is rapidly moving from research into application and action to reduce both carbon and energy across the economy. However, the pace needs to increase. For instance, we need to get to grips with such matters as concluding the science-based criteria/targets by:

- Adequately engaging with the supply chain.
- Establishing clear and progressive leadership to achieve net zero.
- Understanding the subject, its urgency, and the implications of failure.
- Focusing less on the so-called low-hanging fruit and more on the big issues.
- Understanding effective carbon offsets and carbon removal packages and the fact that if we stopped all fossil fuel use at this instant, we would still likely exceed the 1.5 degrees C upper limit of climate change.

SPIE has been actively involved in energy and carbon reduction for many years in both the design, build and maintenance of the Built Environment across projects such as but not limited to major airports, commercial sectors, healthcare, manufacturing, and educational facilities. From this experience, we can be clear that achieving net zero in the built environment requires huge efforts to make buildings more efficient, whilst also supplying buildings with clean energy sources whether from the national grid or locally generated.

On reflection, in 2006/7, Sir Nicholas Stern (British Economist) showed us all that to not limit global warming to 2 degrees C would risk the loss of 20% of global GDP, and all the impacts



of that. Nevertheless, we now know we need the limit to be 1.5 degrees C if we are to succeed in the fight against climate change.

UK Roadmap to Net Zero

