



COConstructZero business champion interview Simon Swan, future mobility director at Arcadis

Why is making progress on Net Zero important to your business?

As a business founded over a hundred years ago with the purpose of transforming unusable wetlands in the Netherlands into prosperous land for people to farm, live on and build communities, Arcadis is committed to placing sustainability at the heart of everything we do.

For ourselves and the clients we serve, this breaks down in to five key areas – energy and carbon, climate adaptation, circularity, nature and biodiversity and societal impact. The most pressing issue currently facing our business and clients, and the planet, is climate change.

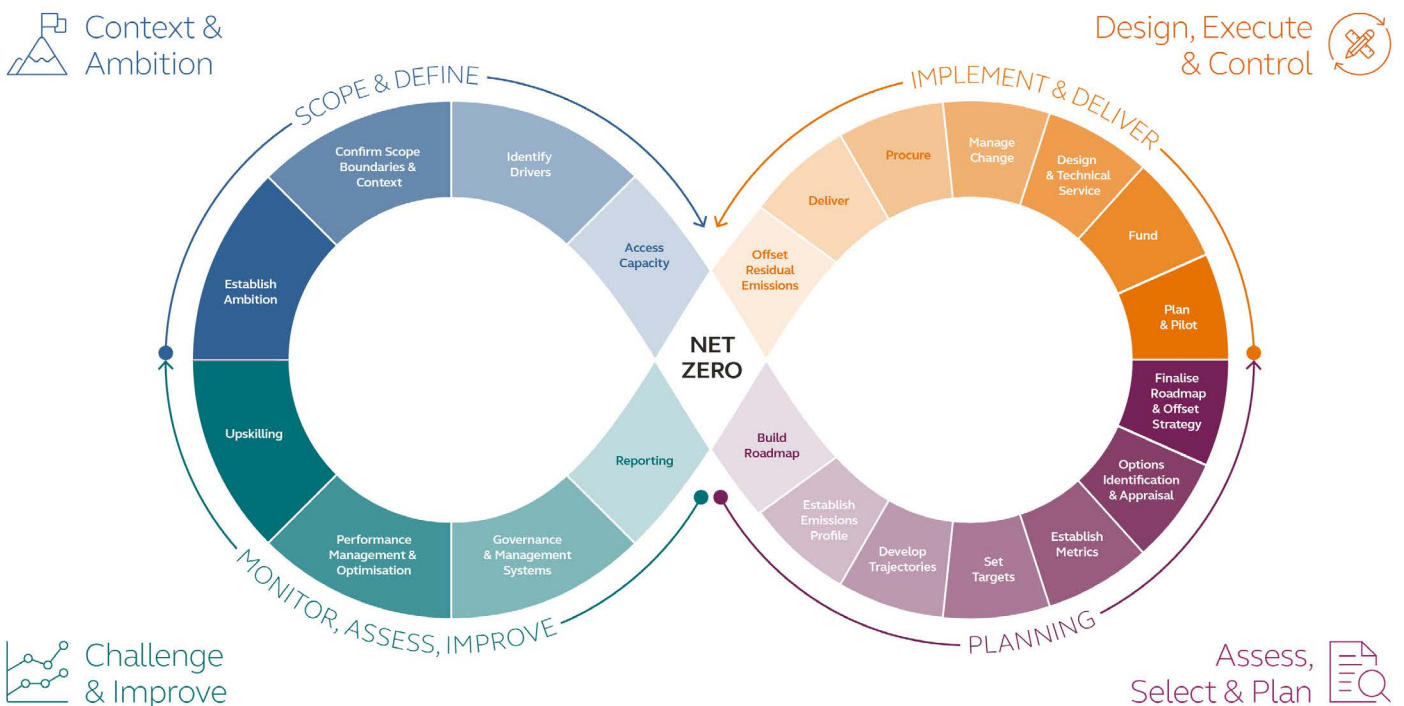
If we are to make progress in tackling this existential threat posed by climate change, it is critical we make progress in reaching Net Zero carbon emissions by balancing activities to make sure there is no increase in emissions. We know this won't be easy, but this is an opportunity for change, leadership, collaboration and innovation.

It requires strong direction to make different and sometimes difficult decisions at every opportunity.

It requires a new level of understanding and partnership – because no one wins unless we all do. And it requires innovation and a strong understanding of data to genuinely make Net Zero a reality. This is why we think that the COConstructZero initiative is so important, bringing together all parts of the construction industry to focus on areas where we can make a difference to the Net Zero challenge.

At Arcadis, we already have strong foundations to build on this through our commitment to 1.5C Science Based Targets, our partnerships the UK Green Building Council and World Business Council for Sustainable Development and the combined commitment of 27,000 Arcadians across 70 countries to make real progress towards Net Zero.

Arcadis' approach to making Net Zero a reality.



Which of the nine priorities are more relevant to your business and clients and why?

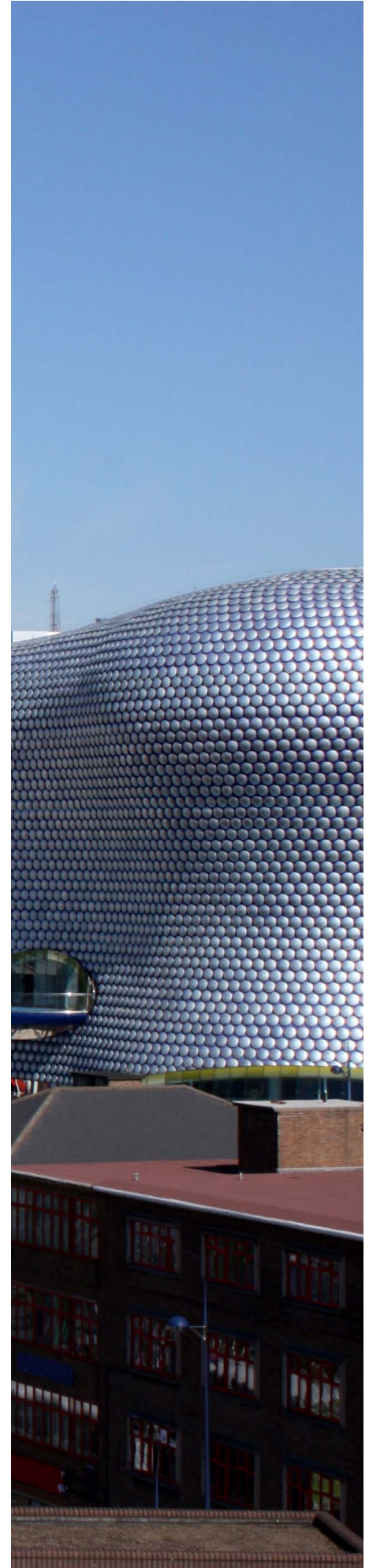
As one of the largest natural and built environment consultancies in the world, advising on major infrastructure, environmental and built asset projects, such as the Lower Thames Crossing and the Commonwealth Games in Birmingham, it is fair to say all the nine priorities are relevant and resonate with our business and clients.

We help our clients understand the full carbon impact of a whole construction project, from conception to completion. We offer support through complex decision-making processes, exploring sustainable solutions, like retrofit and electric vehicle (EV) infrastructure while providing the right tools and data at the right time to ensure we carry out projects efficiently and in line with circular design principles.

However, as a business focused across three global business areas – Places, Mobility and Resilience – we would mainly concentrate on the following four priorities:

- Priority 1 - Accelerating the shift of the construction workforce to zero emission vehicles and onsite plant
- Priority 3 - Championing developments and infrastructure investments that both enable connectivity with low carbon modes of transport and design to incorporate readiness for zero emission vehicles
- Priority 7 - Implementing carbon measurement, to support our construction projects in making quantifiable decisions to remove carbon
- Priority 8 - Become world leaders in designing out carbon, developing the capability of our designers and construction professionals to develop designs in line with circular economy - reducing embedded and operational carbon, shifting commercial models to incentivise and reward measurable carbon reductions.

My particular focus is on the development of a business focused on EV. Arcadis has backed my passion and we have expanded from undertaking initial strategy studies to leading a joint venture which is delivering a turnkey EV charging solution to clients with large vehicle fleets in the public and private sectors. In doing so, we are accelerating the journey to Net Zero of these client organisations.



What are you doing to make progress against the relevant priorities in the short and long-term?

Priority 1

We operate a fleet of technical vehicles and plant as part of our environmental services division. We are currently trialling plug-in hybrid and EV vehicles for suitability against patterns of travel, charger availability and so on. As leases for vehicles come up for renewal, our plan is to adopt EV where practical. We have also installed trackers across the existing conventional fleet to track mileage and fuel use. We will use the insights from this data to plan our EV transition.

Priority 3

We have developed a consulting and delivery capability for EV within Arcadis, including the leadership of the Ultra EVC joint venture which provides a turnkey solution. Working in partnership with our client Tesco, Arcadis is supporting the UK's biggest supermarket chain plan to deliver and install the UK's largest retail electric vehicle charging network. This saw the team provide project, programme management and process consultancy services to ensure that the EV charging points were installed as efficiently as possible across a portfolio of 400 stores nationwide. The project marks a 14% increase in the number of public charging bays in the UK, making it easier for people to recharge whenever and wherever they are. We also have major commissions with clients including Home Office and the Metropolitan Police to support their EV fleet transition.

Priority 7

Arcadis has been measuring embodied carbon on projects in the Netherlands for many years and we have mature tools and expertise in place. We have been successful in sharing our insight and expertise on major projects including the Lower Thames Crossing. We have introduced our assessment system, 'Cosis' to UK clients and are using it to benchmark and optimise embodied carbon during the design stage of residential and commercial developments. We have also supported clients in the infrastructure sector in the selection and adoption of LCA assessment systems.

Priority 8

Resource efficient design and engineering is an important part of our work and through the high-profile projects we work on, we have significant opportunities to design out carbon. One such example is our recent work on behalf of the EKFB joint venture on the C23 section on HS2. In line with JV commitments to protect the environment and the places where we work, we have eliminated 40% of embodied carbon from the baseline design through the optimisation of the alignment of the railway and the design of structures. We are aiming to go even further on our future work on some of the UK's most important infrastructure schemes.



How have you helped your supply chain understand what is required against the nine priorities?

We are in the process of relocating our London office and this has presented us with an excellent opportunity to engage with our design and construction supply chain to deliver an exemplar workplace. Areas where we have focused include:

Priority 2

Early engagement with the Principal Contractor (PC) has enabled us to exceed challenging waste reduction targets.

Priority 6

We have worked with the design team, PC and other suppliers from the start of the project to implement our sustainability criteria, focused particularly on enhanced energy reduction. Options including low-energy lighting selection to the alignment of our real-time intelligent building system will ensure that we have the capability to promote further energy reduction in the workplace. This work is supporting the developing of an updated global sustainability standard for all of our workplaces to further drive reductions in energy, water usage and waste.

As a business leader what do you think the biggest challenge is and how are you working to overcome it?

In my view, the biggest challenge that we face in the industry is that we are not clear on where we should focus our efforts to reduce carbon impacts. We know that a large proportion of the UK's carbon emissions are associated with the creation and use of built assets, such as the heating of homes. Individual firms can put in place their own initiatives like Ultra EVC, but it is difficult to understand how we can work together as an industry, clients and project teams, to accelerate progress towards Net Zero.

This is why I think that COConstructZero is such an important and inspiring initiative, because it puts the steps that Arcadis and I have taken into an industry-wide context and it highlights that we can make a difference by working together.

The other great challenge is initiating change. I know from my experience of establishing a sustainability-based business unit in Arcadis that it needs a lot of energy and determination to drive change – even for a great idea like EV. I know that we will need to be very clear and patient in our efforts to bring the whole of our fragmented industry on the Net Zero journey, but I know that it will happen. Our children will be asking us about what we are doing to make a difference and I genuinely believe that it is that kind of pressure, combined with a clear course of action that will drive the change.

In your view what is the one innovation or change that is going to have the biggest impact on carbon or progress in our industry?

I don't think that there is a single magic bullet that will help our industry address the Net Zero challenge. The nine priorities of COConstructZero make it clear that we can't solve the problem by one simple action such as eliminating carbon from concrete or steel.

For me, I think the single biggest change needs to be around people's awareness of the issue and their willingness to act. This will range from the leaders of businesses through individual team members to homeowners and car drivers who will all need to change their behaviours to enable us to reach Net Zero Carbon. I'm not sure whether this can be achieved simply by training and awareness. I can imagine that incentives and penalties will be needed like those which have supported the rapid uptake of EV in Norway.

What I do know, is that we won't be able to achieve our aims unless we are all working together.

