

6. Get involved

Own your agency: what part will you play in the climate revolution?

Architect **Sam Turner** and structural engineer **James Norman** encourage professional activism to tackle the climate emergency.

2020 was a year of change, radically altering our working rhythms, and bringing a new perspective on the social fabric that supports us. It was also the year that the push for 'net zero' really gathered momentum. One year on, we need to work together to keep the progress going.

As has been discussed extensively over the past year^{1,2}, architects and engineers hold the potential in their work to produce carbon emissions in orders of magnitude greater than most people in society. We will not achieve net carbon neutrality without radical changes to our built environment and you, dear reader, are one of the people with the power to make a difference. You have a superpower in the fight against climate change, will you use it for good or evil?!

Recently, both authors attended the launch of the Climate Framework³, a UK cross-industry action group supported by a number of organisations including the RIBA and the IStructE. There were presentations from great speakers and the framework itself is very interesting, clearly embedding the UN Sustainable Development Goals into construction. However, the main point to take away from the evening was a simple fact: we will only be able to do this if we do it together. Tackling the global climate emergency is not an individual pursuit, it is something we must achieve as a community.

Industry groups like Construction Declares (www.constructiondeclares.com/), LETI (www.leti.london/) and the Architects Climate Action Network (ACAN; www.architectscan.org/) have been taking leading roles in defining the future of the construction industry and pushing those in power to work harder. These are all voluntary initiatives with inclusive, progressive behaviour baked into their structure, and their impact comes from the volume of combined voices.

Speaking out, however, is not

enough; there must be demonstrable change. We believe that engineers and architects have lost sight of their agency, not as individuals, but as a group. Just think, if we all stopped working tomorrow the fallout would be massive, construction would halt and infrastructure would fall into disrepair.

Now, we don't need to stop working, but we must recognise the power we hold. We must take action in the jobs we accept, the designs we present, the demands we put on suppliers, the way we operate our businesses and how we advocate for the built environment.

It is no longer responsible to wait for regulation to require better performance, for a client to request the 'eco' option or to offer 'sustainability' as an addition or specialism. The ability of future generations to meet their basic needs

is compromised by our proven over-consumption today.

If you are not acting with those trying to clean up the built environment, you are effectively working against them.

It is our duty to work with responsibility and integrity. By putting this at the heart of our work, we can forget trying to sell 'sustainability' as an enhancement to clients too often concerned more about finances than fairness. We must stop competing with each other and collaborate. In a state of emergency, we have to come together, share our knowledge and work collectively to address the problems we face. This will take honesty and vulnerability, acceptance that we don't hold all the answers ourselves, that we and the systems we create require constant improvement.

Effective climate activism is as much about behind-the-scenes change as demonstrating in the street



SHUTTERSTOCK

In *Where do we go from here?*⁴ Martin Luther King talks about the essential task of organising people in the civil rights movement: ‘This task is tedious, and lacks the drama of demonstrations, but it is necessary for meaningful results.’ The same could be said for long-term and sustained efforts required to bring the construction industry in line with planetary limits. Joining committees, building data, testing and lobbying – none of these tasks are particularly sexy and they don’t give the same adrenaline rush as shouting on the street with a placard, but they are more effective at bringing about the changes required.

The great regeneration* will not come about overnight, recalibration will take time and we will falter along the way, but time is seriously running out. The scientific models tell us we now have less than a decade to halve our carbon emissions and only three to get them to net zero, so we’d better get a move on!

As we step out of our comfort zones and unite, here are five suggestions for actions that we can all take now:

1) Sign up, set goals and review

We assume you have already signed the Structural Engineers’ Declaration (www.structuralengineersdeclare.com/), but the task only begins when you sign. Now is the time to take stock of the carbon footprint of your work, commit to company-wide goals and have open and honest discussions every six months to review how you are delivering on the promises you have made. People from all levels of the company must be involved to get a true picture of your performance. If you work alone, find or build a group to support each other, keep motivated and accountable.

2) Declare together

Every design should be labelled with the embodied carbon (CO₂e) cost as clearly as it is labelled with a financial cost. If we start doing this across the board rather than as individuals, then practices, sectors and our clients will become familiar with the real climate impact of our work. Stop talking about savings and talk about costs, a 10% improvement still leaves you with 90% of the carbon emissions you had before.



WE WILL ONLY OVERCOME THE CRISIS IF WE BUILD NET ZERO AS AN INDUSTRY, NOT A USP

Present the lowest-carbon option as default. If you can, show projections for operation, maintenance, and costs at the end of life. Think holistically with other disciplines and we can shift the focus of the industry.

3) Build a carbon-literate community

If you’ve read this far, you must be somewhat interested in taking action; but what about your colleagues, clients or collaborators? Take time to talk with them, understand the challenges they face and discuss how you can improve your work together. Learn and show your comprehension of the situation by becoming certified as carbon literate. Join efforts like LETI or ACAN where you’ll discover a welcoming community of people already working on solutions and pleased to have your input.

4) Share openly and freely

Share articles, resources and get involved in conversations; don’t just ‘like’, retweet, or agree, but invest time in adding your perspective to the dialogue. Share your work on social media, in meetings and talks – we cannot afford for low/zero-carbon design to be a specialism and we all know every project could be better. Share the lessons you’ve learned, the innovations, tools, research, etc. and help others to develop them. We will only overcome the crisis if we build net zero as an industry, not a USP.

5) Position yourself for the long haul – make it the work of your career

The climate crisis will define the next few decades, at least. Consider how your work will be viewed in 100 years’ time and how you helped avert disaster, or not. The green revolution has already begun and if you’re not part of it, you

will be left behind. Clients, graduates and the public are becoming increasingly climate aware and will be scrutinising your environmental responsibility. This isn’t something you can ignore, so dive in!

Play your part

From experience, getting involved in voluntary groups, finding better ways to work and leaning into a more regenerative culture is fantastically rewarding. It may all seem overwhelming and sometimes tedious, but really you can and must play a part. As Uncle Ben would remind Peter Parker in the *Spider-Man* comics, ‘With great power comes great responsibility’.

Sam Turner

BA(Hons), DipArch, ARB

Sam Turner is an architect and climate activist, his company Resilient Works (www.resilient-works.co.uk/) offers Climate Literacy training and consultancy on low-carbon, ethical design. He is the Movement Support Coordinator in ACAN; contact @onlysamturner on Twitter.

James Norman

MEng, PhD, CEng, MICE, FHEA

James Norman has designed a number of unusual, award-winning and sustainable buildings and is now Associate Professor of Sustainable Design at the University of Bristol.

REFERENCES

1) Arnold W. (2020) ‘The structural engineer’s responsibility in this climate emergency’, *The Structural Engineer*, 98 (6), pp. 10–11

2) Arup (2021) *Reducing carbon emissions... every working day* [Online] Available at: www.arup.com/perspectives/reducing-carbon-emissions-every-working-day (Accessed: January 2021)

3) Construction Industry Council (2020) *Climate Framework launched by Cross-Industry Action Group* [Online] Available at: <http://cic.org.uk/news/article.php?s=2020-12-10-climate-framework-launched-by-cross-industry-action-group> (Accessed: January 2021)

4) King M.L. (1967) *Where do we go from here?*, Boston, MA: Beacon Press

*A phrase being promoted to describe the building cultural revolution and well described in this presentation: <https://imaginethefuture.global/resources/images/Prelude-to-a-Great-Regeneration.pdf>



tse@istructe.org



@IStructE
#TheStructuralEngineer