

What can air quality learn from net zero?

Climate Change Working Group

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The recent Qatar World Cup made headlines for several reasons other than football and prompted much debate around sports-washing in our globally connected world. Aside from the debates around the treatment of migrant workers and the acceptance of the LGBTQ+ community, one thing that stuck with me was the organisers' claim that the Qatar World Cup would be the first in history that was net zero. Now, I have not looked into the CO₂ emissions figures for the World Cup in too much detail, but logic dictates it would be reasonably challenging to achieve net zero when you need to build eight football stadiums and maintain 136 training pitches in the Gulf Desert Peninsula. Putting aside the debate around if net zero was really achieved though, it is notable that, for the organisers, it was really important to communicate that it was. In the context of a modern world-class sporting event, net zero was an important badge for the football shirt. No surprises though, there was not a similar rosette for air quality.

As a member of the IAQM/air quality community I feel we work hard for our discipline and care about what we do. We diligently complete monitoring surveys, carefully construct dispersion models and draft impact assessment reports to ensure development is undertaken responsibly. We make sure our findings are robust, conservative, defensible and worst-case. It is vital our findings stand up to scrutiny and meet published guidance. In many respects the world looks to what we do in the UK for our air quality assessments as a template of how to do it around the world. At the end of the process though, our reports, assessments, presentations and communications often conclude simply -- less than the required limits – 40µg/m³, not significant. Correct, yes. Box office, possibly not. Now, obviously, I don't expect every local authority air quality annual status report to read like a Stephen King thriller; but when I talk to my non-air quality friends about Net Zero the conversation is filled with the world cups, polar bears and David Attenborough.

If we briefly discuss air quality, my go-to fact is of 40,000 premature deaths – rousing stuff.

As we move to solve our societal problems in a more holistic manner, it is important that air quality and climate change challenges are considered together. It is therefore time for us in the air quality world to take some cues from the net zero playbook. Net zero as a concept is bold, ambitious and positive, something people naturally want to be. Yes, there is much debate around how realistic and achievable it is, but at least it is resulting in action and change.

“How can we galvanise air quality so it is a badge people want to wear? We need more stories and some with positive outcomes.”

How can we galvanise air quality so it is a badge people want to wear? We need more stories and some with positive outcomes. Air quality should – and will always be – linked to health (or ecological impacts where appropriate), and so rightly deaths must form part of the message. To stick in the public conscience and inspire the next generation it must not be the only message however. There are currently so many positive actions happening throughout the country to improve air quality, particularly in relation to Clean Air Zones. Our justification for these though often goes too quickly to links premature deaths or achieving a µg/m³ limit, both of which are less relatable than the positive action itself.

Do we need a figurehead? Net zero/climate change has a number of high profile carriers of the message. When Greta Thunberg emerged and re-energised the climate change debate there was some level of amusement that a single child was able to convince more people that this was an important issue than thousands



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of scientists armed with evidence and research. Though Greta's science was brief, the message was spot on. David Attenborough makes clear in each series he produces the importance of climate change, cementing in the public's consciousness the need for action. Should we look for a similar celebrity to help communicate the air quality message? Aside from ad hoc documentaries from Xand Van Tulleken I cannot think of a suitable candidate.

We as an industry are changing, the traditional air quality staples of monitoring and modelling for ambient NO₂ and PM₁₀ are being supplemented by other subjects (indoor air quality and net zero) and new ways of working (behavioural science and data science). I think, as we transition, we will find increasingly that messages which result in action are just as important as detail and science.

It sounds obvious but monitoring and modelling will never improve air quality on their own; they will only tell you the concentrations. Improvement only comes from action. Raising the profile is sometimes more important than the science itself. It is a cautious question, but does the science always have to be 100% verifiable if it results in the desired actions and improvements? Yes, it will be open to green-washing (see the World Cup), but does that matter if the publicity that comes from it helps to push the debate forwards? Yes, the science feels weak and uncertain when undertaking a net zero emissions inventory for thousands of tonnes of CO₂, compared to the painstaking adjustment of diffusion tube data to work out which side of the 40µg/m³ chasm you sit on. But only one of these two has a message so strong that everyone from FIFA to school kids want to join the cause!

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These Insights Articles are designed to provide a view on topical issues affecting those working in air quality. This thought piece has been authored by Jamie Clayton, Technical Director at Bureau Veritas and member of the [IAQM Climate Change Working Group](#).

About the Institute of Air Quality Management (IAQM)

The IAQM aims to be the authoritative voice for air quality by maintaining, enhancing and promoting the highest standards of working practices in the field and for the professional development of those who undertake this work. Membership of the IAQM is mainly drawn from practising air quality professionals working within the fields of air quality science, air quality assessment and air quality management.

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