



# Net Zero Live – IES Panel Discussion Q&A

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## How can the built environment move away from carbon offsetting in the pursuit of net zero?

The built environment sector is on the frontline of the sustainability challenges we face as the world works toward net zero. Around 40% of all carbon emissions are derived from the buildings in which we work and live – two thirds of this is from building operations and third is in either construction or embedded in materials.

New research undertaken by IES has also revealed that the built environment sector wants to see stronger policy leadership to deliver net zero and, perhaps most significantly, that too much emphasis is placed on carbon offsetting.

But how will we get to a net zero future without offsetting? How will different disciplines work together and what will the main drivers of change be in the coming years and decades? What role will digital technology play and how can we continue to develop buildings which are both functional and beautiful as materials, requirements and building use changes?

This was the topic of the IES Sponsored Net Zero Live panel discussion in association with Building Magazine, during which some interesting questions were posed.

The expert panel consisted of:

Ruth Kerrigan, Chief Operations Officer, IES

Geoff Southern, Studio Associate Director & Pdraig McMorow, Architect and Certified Passive House Consultant, IBI Group

Sarah Burki, Sustainability Manager, Tilbury Douglas

Conor Storkey, Head of Sustainability, Mace

Read on to hear IES COO Ruth Kerrigan's responses to the Q&A:

### **Q: How will we get to a net zero future without offsetting?**

**A:** The way to do this is through the local energy system; to create a local energy system we need to improve the efficiency of our buildings, i.e. reduce energy consumption, once we've done this we now have the potential for local renewables to have a significant impact to our buildings to meet the demand from the energy consumption of this building. Then we can look at how buildings could work together, either through microgeneration solutions or energy trading.

**Q: Are there any limits to how much a project can have its carbon offset, to be considered NetZero? Feels to me that developers could be lazy, build whatever they like, and just offset all of the carbon.**

**A:** Yes, this is the current problem, there are no rules on how you carbon offset and it's also not monitored well, for example what is to stop two companies using the same forest as their carbon offsetting mitigation.



**Q: There must be a point at which the size and type of a building does not make it viable to go down the route of excessive use of digital technology coupled with the energy requirements of heating/cooling/aircon etc. Is there a point at which it is more carbon offset effective not to fully implement all the requirements?**

**A:** This goes back to an earlier point, if your building is energy efficient, it is possible to then integrate technologies such as renewables and storage to make it carbon neutral but it must be efficient and well operated first.

**Q: The impact of net zero at the city level seems to come as a philosophical question for a change in culture. Would you say that? What would be the different key stakeholders to achieve this?**

**A:** I think net zero at a city level is very ambitious and difficult to achieve and it will actually only happen if all stakeholders across the city, from the city council to the local business to the citizens themselves, are part of the solution. Technologies will also be needed as well as large scale investment in building renovation and refurbishment. Check out what limerick are doing on positive energy blocks. <https://www.limerick.ie/cityxchange/demonstration-projects/project-3-co-create-distributed-positive-energy-blocks-through>