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OPINION

Climate Action

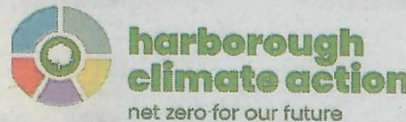
Harborough Climate Action

What businesses mean by 'net zero'

Increasingly we see businesses advertising their operations to be 'low carbon', 'zero carbon', 'net zero', or 'carbon positive', but what does this all mean, really?

'Carbon' in this context is a shorthand catch-all term for any of the seven greenhouse gas emissions. These gases are so named because they contribute the most to the greenhouse gas effect, which, with their ever-increasing accumulation from man-made activities, is causing the deleterious warming of the planet. The greenhouse gas effect is, however, a natural phenomenon that is necessary to sustain life because, without such atmospheric gases, the Earth would be approximately 20°C cooler.

Everyday activities we all do can generate greenhouse gas emissions. For example, boiling the kettle or watching TV uses electricity which was generated in a power station from the burning of fossil fuels. The sum of these activities creates a person's carbon footprint. The activities of a business can be analysed in a similar way, with the long-term goal of reducing the emissions the business contributes. For measuring and reporting the operations of a business, the greenhouse gas emissions are categorised into three scopes. Scope 1 emissions are the direct emissions from sources that are owned or controlled by the organisation, for example, vehicle fleets. Scope 2 emissions are indirect emissions associated with the purchase of electricity, heat, steam, or cooling. Finally, Scope 3 emissions, which are often the most significant, are the indirect emissions from activities within the organisation's value chain, for example, the raw material extraction and processing for the manufacture of a product. This means that if every business in the world reported its Scope 1 emissions, there would be no need for Scope 3 to be accounted for. In the UK, businesses above a certain size are required to measure and report their Scope 1 and 2 emissions with Scope 3 being largely voluntary.



Harborough Climate Action column provide a regular column for the Harborough Mail. Here is their latest article.

For an organisation to achieve its net zero goals, it must first tally every emission source within its operation, from purchased goods to employee commuting, and reduce these wherever possible through the introduction of decarbonisation strategies such as renewable energy or electric vehicles. Invariably, any production or consumption will result in some emissions and for the remaining emissions there are carbon offsets! Carbon offsets are purchased to offset emissions and make an organisation's total carbon emissions zero; one carbon offset permits one tonne of carbon dioxide emissions, the equivalent of a sphere eleven metres in diameter or the size of a large hot air balloon. Carbon offsets fund projects that are designed to mitigate climate change by reducing or removing carbon; examples include reforestation or environmental conservation. The nascent carbon offset industry is, however, rife with controversy, as many projects may not be as effective as they claim, and therefore businesses must be diligent in their research and employ a third party for validation and verification.

After extensive measurement, reduction and costly offsetting of their activities, a business can claim to be 'low carbon', 'zero carbon', 'net zero' or 'carbon positive'.