How beef farmers can get closer to net zero

There are many ways to start tackling net zero, which will be system dependent, such as animal health and welfare, genetics, breed selection, nutrition and grazing management. Mia Ellis, of Westpoint Farm Vets, shares a few ways to reach these goals.

Recent funding made available from the government for animal health and welfare is a good starting place. Animals with diseases such as BVD or lameness have reduced productivity, which can manifest as reduced growth rates or sub-optimal fertility for example. Any disease affecting the rumen has the potential to increase the individual cow methane emissions. Engaging with routine diagnostics such as faecal egg counts to reduce anthelmintics has an impact on reducing gastrointestinal parasite resistance and the carbon impact of drug production. By enhancing the cow's welfare this directly impacts the cow's productivity.

Nutrition has a huge impact on a cow's feed conversion, its body condition (BCS) and vitamin/mineral balance. Each breed has an ideal carcass for slaughter. This can be partially monitored during life with BCS; if an animal has a poor BCS this could be an indication of disease or poor nutrition, and equally if an animal has a high BCS they are diminishing their return by taking on too much feed for the end product. Both will influence the carcass at slaughter. If grazing cattle, is it possible to have them on a mixed grass sward or introduce a herbal ley? These improve the variety of macro and micronutrients available, along with some herbs having anthelmintic properties alongside improving the ability of the soil to capture carbon. Consider different grazing management rather than set stocking, such as paddock grazing or rotational grazing, aiding the pasture's resilience to extreme weather. If you're not doing so already, could your farm start to grow more cattle feed for the winter, reducing transport related emissions in your beef production?

Selecting the right breed for your system is important. You should aim to reduce dehorning/disbudding by selecting a polled breed of cow or breeding it into the herd, as these cause stress and reduce animal growth rates.

If you have poor grazing or the herd will be extensive for most of the year, consider smaller, hardy native breeds which have fantastic grass conversion. Beef genetics is a growing area, especially in some breeds such as Angus and selections can be made for faster growing animals, easy calving, good milk production, good mothering ability and reduced methane emissions. This is quite advanced; a simple starting method is to measure growth rates. Weigh the calf when it is born, at 100 days, 200 days and note its slaughter weight. Choose to breed from dams that have better growth rates, as these calves require less feed to produce the same product therefore have a reduced impact on the land.

Investigating your farm's disease status, monitoring growth rates and choosing breeds carefully are all impactful ways to help reduce your farm's greenhouse gas emission impact. **FG**