Appendix 3

In this guide

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Table 3. Summary of responses: Are there other changes (at any stage of development) aimed at achieving net zero that you expect to make an impact? What are they?

Category	Academia	Manufacturing	Farmers & veterinary surgeon	Other

Farming methods	• Gene editing • For crop and livestock resilience • Livestock and rumen microbes as part of the pangenome approach • Land use • Balance between for agriculture and for carbon storage	• Supply shed natural climate solutions	• Novel carbon-storing soil amendments (biochar, enhanced rock weathering)	• Alternativ the Habe bosch pro • Controlle environm farming (

Energy	• Green energy • Bioenergy with carbon capture and storage - not in the food system, but uses land so will affect the food system • Replace water heated, jacketed pipework with lower energy electrical systems • Solar powered thermally efficient systems working at the 50-95 degree Celsius range. • Energy reduction	• Green energy • Governmental support for the development of new sustainable energy technologies to replace hydrocarbon use • Clean hydrogen instead of methane as a gas supply. • Fusion	• Green en • Electrifica • Decarbon of crop sy grown in tunnels • Hydrogen economy investme governme • Carbon cr for soil sequestra

Government				• Governm investme • Adoption National I Strategy
Transport	• Shorter supply chains • Reduced car use post Covid; reduced flying.		• Move to predominantly sea freighted / road transported imported produce away from Air freight.	• Vehicle electrifica
Consumer diet change		• Public attitude and education, cultured meat expansion and acceptance and fermented meat substitutes expansion and acceptance.	• Reducing import of animal protein from high Greenhouse Gas (GHG) emission intensity systems • 'Quality not quantity' changes in consumer eating habits.	• Consume being par solution • Novel foo • Alternativ protein productio

Waste	• Development of circular economy principles to utilise waste streams			• Conversio reduction food wast • Into 'ferti at scale • Valorisati side strea • Reducing waste • Recycling polypropy
Packaging			• Bio-based materials in long-lived consumer and construction products	
Measurement		• Better diagnostics and analytical approaches	• Measuring baselines on farm	• Measuren and moni of Greenh Gas (GHG emissions environm performa

Technology	• Robotics, Information and Communication Technology (ICT) developments on farm and in factory environment (Industry 4.0).