Appendix 4

In this guide

Table 4. Summary of responses: What do you expect the effects of changes towards net zero being rolled out already to be?

Category	Academia	Manufacturing	Farmers & veterinary surgeon	Other

Farming methods	• Less food production in the UK especially of ruminants and probably wheat and barley • Circular agriculture principles, precision farming	• Crop production inputs • Move away from synthetic nitrogen-based fertiliser to more organic based • Field carbon sequestration. • Increased environmental hygiene risk (particularly Listeria mono) in non-competitive growing environments and post-harvest environments where less biocide use • Increased product contamination risks (e.g., toxic weeds) due to lack of herbicide options • Removal of food safety steps (e.g., product washing) • Less process steps and eyes on crop	• Improved productivity per hectare (vertical farming)	

Food safety risk		• Possibility of nutritional and some food safety risks	• Increased risk of zoonosis / animal derived pathogens – particularly with further intensification of livestock rearing • Conditioners, amendments – potential for new risks and bad practice	
Energy		• Long term energy security and resilience		
Lower carbon emissions	• Lower carbon emissions	• Lower carbon emissions	• Reduction in carbon	• Lower carbon emissions

Process optimisation	• Progressive improvement in food processing cost		• Process optimisation • Better use of the limited resources • Better materials for the same shelf life • Improvement in the efficiency of established models and supply chains.
Investment	• Higher investment	• Increased investment	
Knowledge sharing	• Greater awareness		• Sharing best practice. Better understanding of what food system we need

Land use	• Changes in land use • Greater interest in the countryside and less respect for land ownership without delivering public benefit			• Changes in land management and food production
Attitudinal change	• Attitude shift in consumer demands (e.g., less meat consumption)		• 'Quality not quantity' changes in consumer eating habits	• Less meat consumption
Taxation		• Changes in taxation		
Increased costs		• Higher costs • Short term Opex increases • In electricity	• Increased price of quality food	
More complexity		• More complexity		

Local procurement	• More local procurement	• Reducing import of animal protein from high Greenhouse Gas (GHG) emission intensity systems	
Waste			• Waste collection
Packaging			• Packaging redesign
Nutrition			• Better nutrition
Data			• More data and measurable
Technology			• Roboticisatio and automation