Net Zero measures and implications for food safety: Summary of workshop discussions

Appendix 1 - Complete list of 41 activities

In this guide

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- 1. Background and introduction
- 2. Workshop findings
- 3. <u>Appendix 1 Complete list of 41 activities</u>
- 4. Appendix 2 Food safety and Net Zero measures
- 5. Workshop facilitation plan
- 1. Changed fertilizer practices including new formulations and more organic systems of production
- 2. New crop and plant varieties produced by conventional and new breeding methodologies
- 3. Less chemical options for pest control and moves to more Integrated Pest Management
- 4. Changes to cultivation methods reduced tillage
- 5. Changed rotations and crop mixtures
- 6. Policy changes to increase on-farm biodiversity and carbon sequestration
- 7. Development of circular economy principles to utilise waste streams
- 8. Reduction of inputs (e.g. water, biocides) that affect food safety
- 9. Improving nutrient management
- 10. Protection of peatlands and increased carbon sequestration
- 11. Encouragement to protect soil biodiversity
- 12. Increased use of agroforestry, cover and nitrogen fixing crops
- 13. Mixed rotations which include livestock
- 14. More hedgerows, woodland and forests
- 15. Investments in Anaerobic Digestor plants
- 16. Land use change; Balance between for agriculture and for carbon storage
 - 1. a. Planting woody biomass (for energy production / Biochar)

- 2. b. Restoration of peatlands
- 3. c. Agroforestry
- 17. Mixed rotations including livestock
- 18. Greater integration of arable and livestock farming
- 19. Multi-stream culture systems (e.g., fish plus water plants such as watercress)
- 20. Ocean farming and harvesting of seaweed
- 21. Novel animal feed; insect protein, soy replacement, new proteins
- 22. Insect feed in aquaculture
- 23. Supplements for livestock to reduce methane
- 24. Livestock and rumen microbes as part of the pangenome approach
- 25. Livestock breeding (traditional and/or GE and/or GM) for more sustainable traits
- 26. Bio based and other novel packaging and food contact materials
- 27. Reduced plastic packaging
- 28. Conversion of and reuse of food waste
- 29. Abstraction of slurry (to allow use of low emission slurry spreading machines)
- 30. Manure management; anaerobic digestion
- 31. More plant-based diets
- 32. Novel proteins in consumer diet; insects, cultured meat, meat and dairy substitutes
- 33. Decarbonisation of crops grown in polytunnels
- 34. Vertical Farming systems
- 35. Robots and drones used in farming systems
- 36. Animal and plant health Sustainable intensification Lower carbon agronomy
 - 1. a. Intensive indoor dairy and livestock systems
 - 2. b. Intensive plant growing systems
- 37. high-tech production systems (glasshouses, Controlled Environment Agriculture (CEA), hydroponics)
- 38. Reduced water uses
 - 1. a. Recycled water
 - 2. b. Reduced washing
- 39. Energy use reduction measures
- 40. Land-based renewables and energy storage, for on-farm and export
- 41. Bioenergy with carbon capture and storage not in the food system, but uses land so will affect the food system