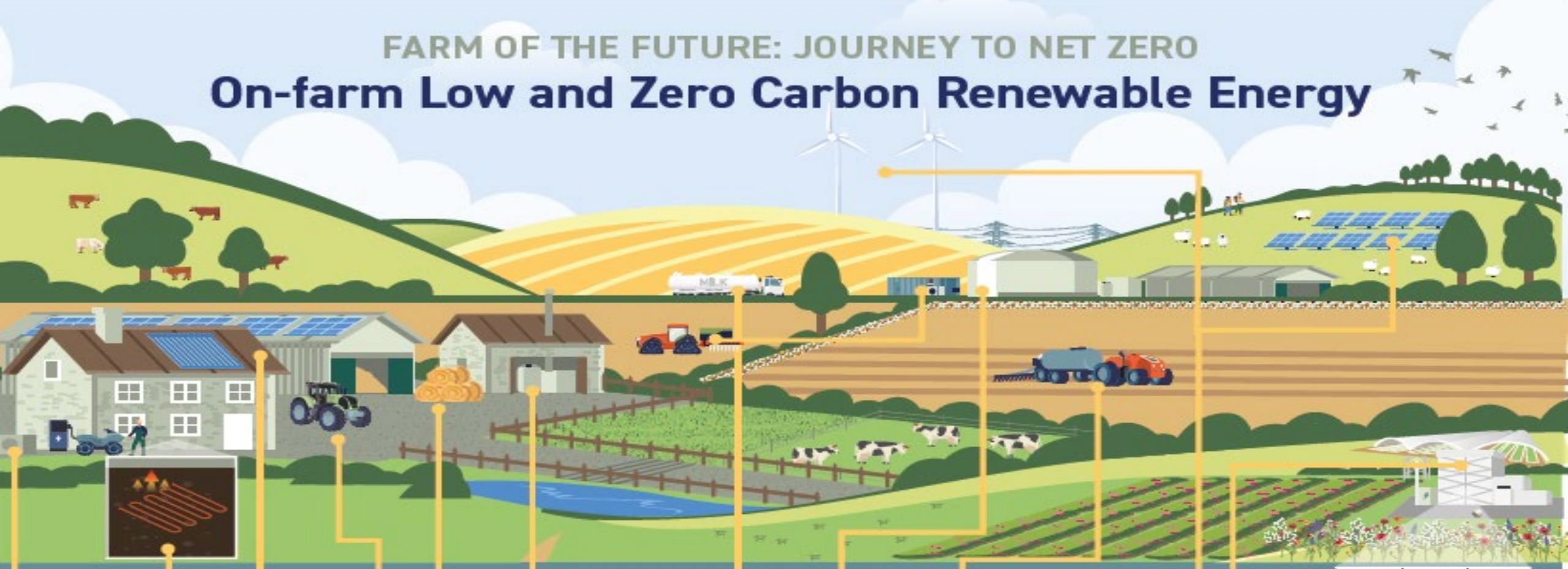
FARM OF THE FUTURE: JOURNEY TO NET ZERO

On-farm Low and Zero Carbon Renewable Energy



Rural Heating

Heat pumps - Air / ground / water source heat pumps to supply heating (and potentially cooling) for housing, plus farm buildings, polytunnels or processing.

SCAN ME

Rural Heating

Solar thermal - to supplement housing & farm (space/process) heat requirements, plus thermal storage.

Farm Vehicles

Pre 2030 - replace red diesel with clean fuels for non-road vehicles – zero emissions ICE power for cultivation / harvest operations.

Biomass Heat

Biomass energy (inc. straw / wood) for space heating/cooling or requirements like grain drying or primary processing.

Diesel Replacement

HGV's & large farm vehicles need low/zero carbon fuels, inc. farm produced (off-grid) biomethane or biofuels and in time - hydrogen.

Anaerobic Digestion

Farm residues, crops & local food waste to supply natural fertiliser and biogas or biomethane (upgraded on or off grid), for heat and vehicle fuel.

Nutrient Recycling

Digestates and composts used to recycle carbon and nutrients from farm and other bio-residues back to land.

Hydrogen Supply

Potential for on-site hydrogen production from excess renewables (wind / solar) for vehicle or other rural uses.

Energy Storage

On-site power storage for excess renewables / cheap electricity in batteries (inc. vehicle batteries - V2G), - also heat storage batteries.

Novel Systems

vertical and advanced protected cropping systems combined with zero carbon energy - also suited to urban farming.