Appendix A: Abatement technologies in agriculture

Table A1. Abatement technologies in the GreenREFORM agricultural module

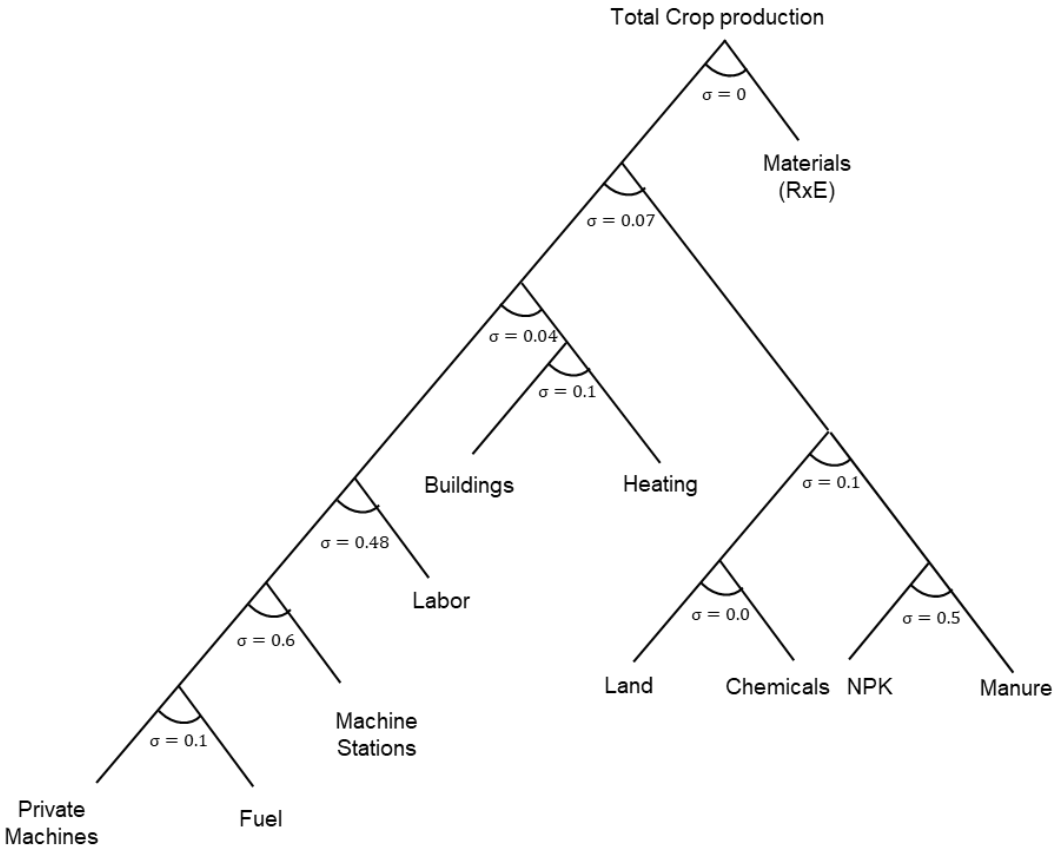
Technology	Application	Total potential (CH_4)	Total potential (N_2O)	Avg. cost of implementing (€ per tCO_2e reduced)
Bovaer	Enteric fermentation, conventional cattle	21%	-	57
Tent cover + floating layer*	Manure storage, pigs	10%	10%	47
Tent cover + floating layer*	Manure storage, cattle	4%	4%	53
Nitrification inhibitor*	Manure applied to field, conventional crops	-	40%	173
Nitrification inhibitor*	Inorganic fertiliser, conventional crops	-	40%	173
Nitrification inhibitor*	Manure applied to fields, organic crops	-	40%	177
Manure acidification in stable **	Manure storage, cattle	5%	-	143
Slurry cooling	Manure storage, pigs	2%	-	627
Technology	Application	Total potential ($ktCO_2e$)		Avg. cost of implementing (€ per tCO_2e reduced)
Biochar	Pyrolysis and storage of biochar	800		270

Note: Costs are in 2019 constant prices. Technologies marked with a single asterisk are those significantly taken into use at a tax rate of €100 per tCO_2e. Technologies marked with two asterisks have already reached full diffusion in baseline.

Source: Stewart and Kirk (2024).

Appendix B: Nested CES production functions in agricultural sectors

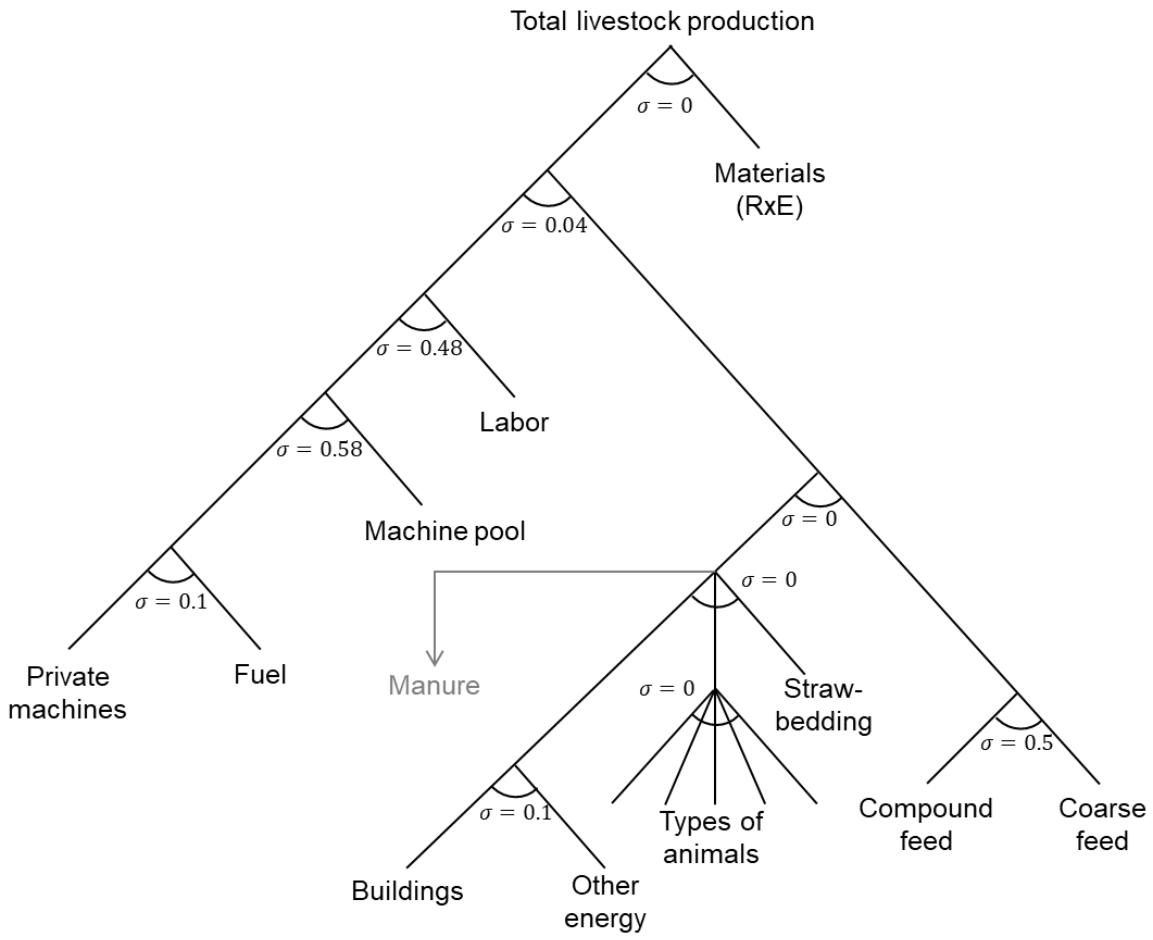
FIGURE B1. Crop production structure



Note: NPK refer to the three macronutrients in fertiliser that all plants need: nitrogen, phosphorus and potassium.

Source: Kirk and Hansen (2023).

FIGURE B2. Livestock production structure



Source: Kirk and Hansen (2023).