

GHG and Rebound Effects in AgriTech

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Who are we, where are we from



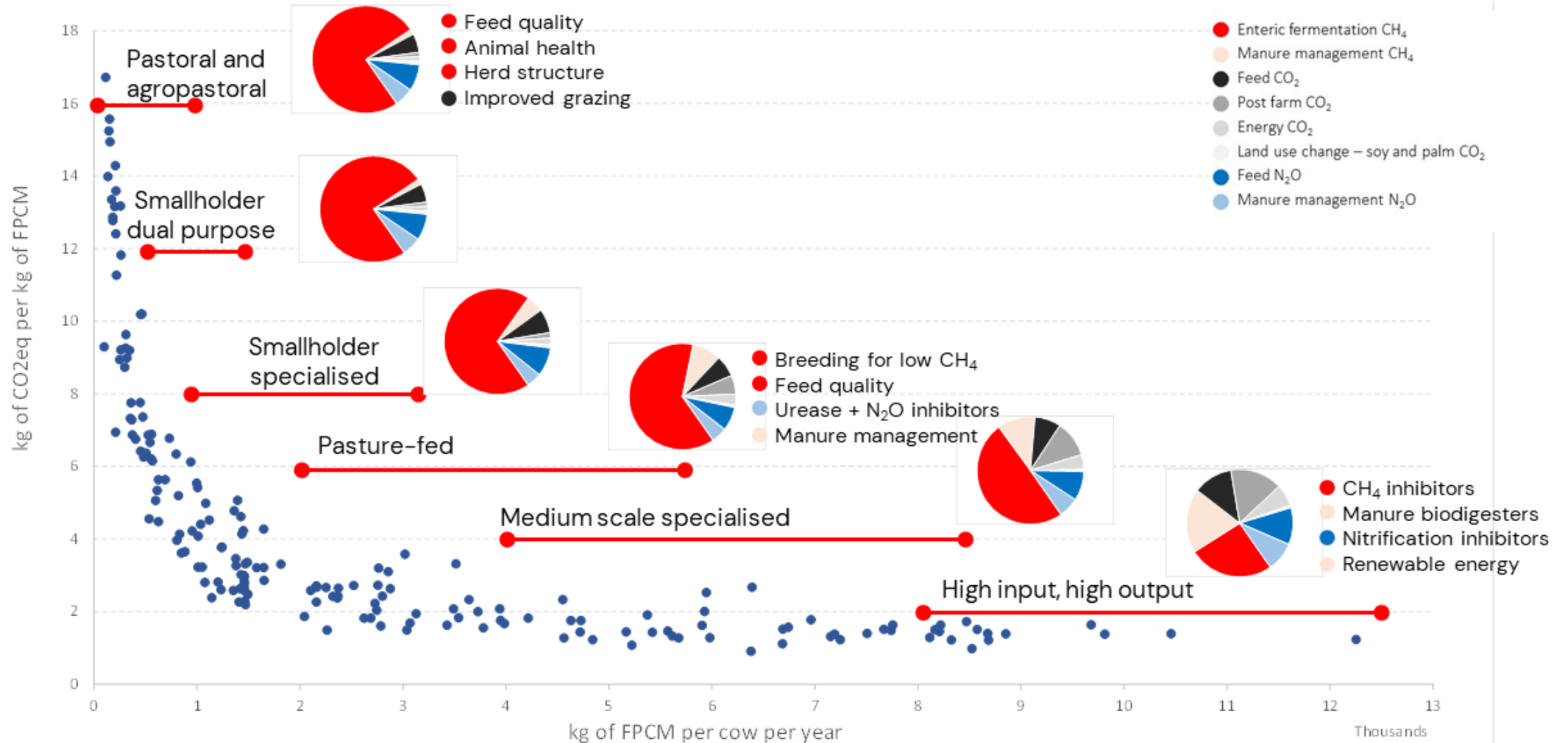
GHG and Scottish Dairy Farming (and ICT)

- Rapid growth in digital tech in dairy farming
- Often driven by potential efficiency improvements in milk yield, quality, fertility, welfare, etc.

- Ambient and real-time sensing
- Drones
- AI/ML
- Dashboards and Visualisation
- Robotics and Automation
- Communications Infrastructure
- Digital Twins



GHG Emissions Discourse in Dairy



Dairy AgriTech and Rebound Effects

- Farmers being oversold technology
- Spending less time with the farm, and more time with digital twins
- Increasing path dependency and lock-in on high carbon tech
- The carbon footprint of AgriTech is a low priority

Rebound effects occur when an intervention to an existing process or system (such as the utilisation of AgriTech to improve agricultural efficiency) results in unintended consequences, including those that go directly against the initial intended outcome.



Provocations for LOCO

- What is responsible and low carbon data collection and use in AgriTech?
- What are the risks of datafication on future farming practice?
- What training and education is needed to help farmers make LOCO choices?
- Openness, open source, ownership and monetisation of data, ecosystems, licenses
- How can LOCO enable a just and sustainable transition?

Thank you.

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