



Dairy Nexus

John Newbold

23Nov21

Dairy Nexus

- Vision

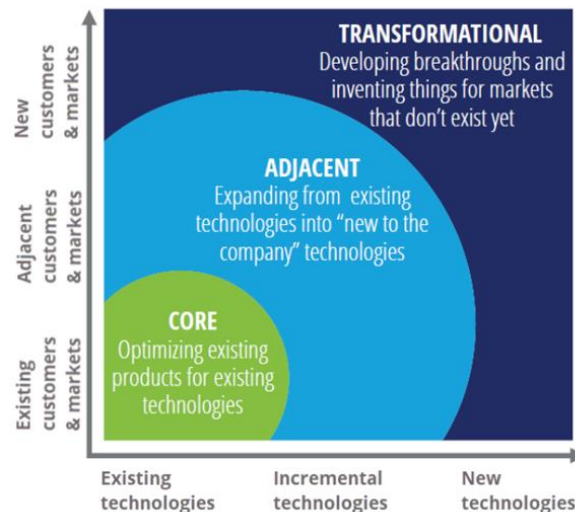
**Dairying is a core component of a thriving, inclusive,
net-zero circular bioeconomy**

- Mission

Accelerate the realisation of this vision

Dairy Nexus

- Collaborative innovation
 - ‘a range of stakeholders engaged in the collective exploration and development of solutions to common problems’
- Innovation ambition
 - Core – optimising existing products
 - Transformational – inventing new products for new markets



Dairy Nexus

- £8M capital through The Borderlands* Inclusive Growth Deal
 - Buildings:
 - Hub (office/meeting/coworking space)
 - Laboratories
 - Biorefinery (pilot-scale processing)
 - Milk Technology Unit
 - Equipment
 - Data for Digital Twinning
 - permeating Barony dairy farm
 - used at partner farms
- Integrated with
 - expansion of dairy farm at SRUC Barony campus
 - Digital Dairy Value Chain
- Timetable
 - Outline Business Case approved, Full Business Case in preparation
 - Detailed design work underway



New farm

Current farm

Hub

Biorefinery

MTU

Digital Twin

New farm

Current farm

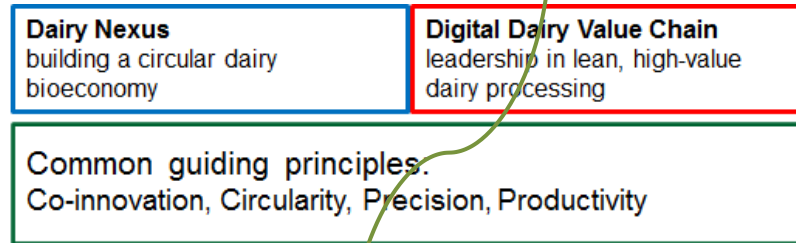
SRUC Barony Campus

Beech Ave

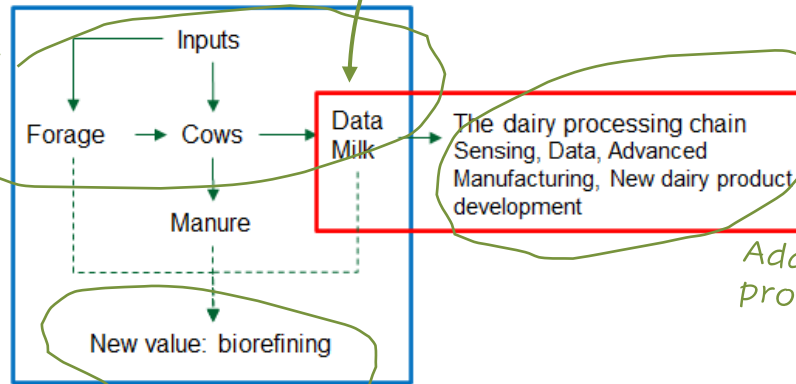
Dairy Nexus and Digital Dairy Value Chain



Milk processing R&D and Data Hub at SRUC Barony Campus: creating the bridge between farm and factory



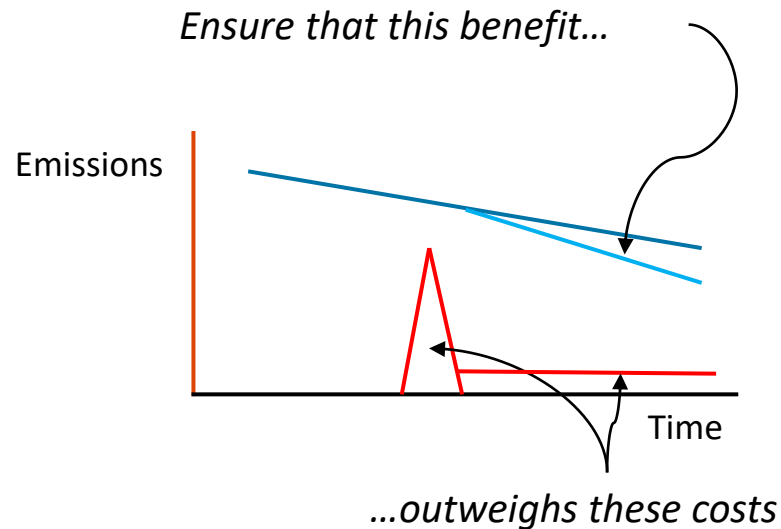
Core innovation in dairy farming: accelerating sustainable productivity growth



Transformative innovation: new products and new industries from dairy bioresources

Adding value to the milk processing sector

Dairy Nexus and Net Zero



- = declining emissions* from the regional dairy sector
- = accelerated decline in emissions due to operation of Dairy Nexus
- ^ = emissions generated during construction of Dairy Nexus
- = emissions generated during the operation of Dairy Nexus

* Dairy Nexus ambition to accelerate reduction in emission intensity (CO₂e/kg milk of standard composition)