



# Quality of Product for the Environment

Dr Emma Gregson

# Farmer-processor relationships and processor-led measures for enhanced environmental quality



- Milk processors are working hard within their own businesses.
- Focus is much wider than carbon.
- Dairy UK conducts environmental benchmarking to track industry progress.
- The UK Dairy Roadmap is a voluntary, pre-competitive, whole supply chain sustainability initiative. Processors and farmers work together.
- Many processors are doing much more.

# Milk Processor Areas of Focus

## ENVIRONMENTAL POLICY & OPERATION CHALLENGES:

Energy & Climate Change	Net Zero, Industrial Decarbonisation, Carbon Footprint, Carbon Pricing
Plastic & Packaging	EPR, PPT, DRS, Single Use Plastics, UK Plastics Pact
Food Waste	Courtauld Commitment 2025, Food Waste Reporting
Water	Water Abstraction Plan, Water Stewardship, Drinking Water Directive
Air Quality	Clean Air Strategy, MCPD, Ammonia, F-gas, Transport
Farm & Sourcing	ELMS, Biodiversity, Soya, Palm Oil, Due Diligence
Sustainable Diets	National Food Strategy, Green Claims, Environmental Labelling

## ONGOING REGULATION & COMPLIANCE:

- Environmental Permitting & BREF
- PPT & EPR
- Climate Change Schemes
  - Climate Change Agreements
  - EU/UK Emissions Trading Schemes
  - SECR
  - TCFD, TNFD

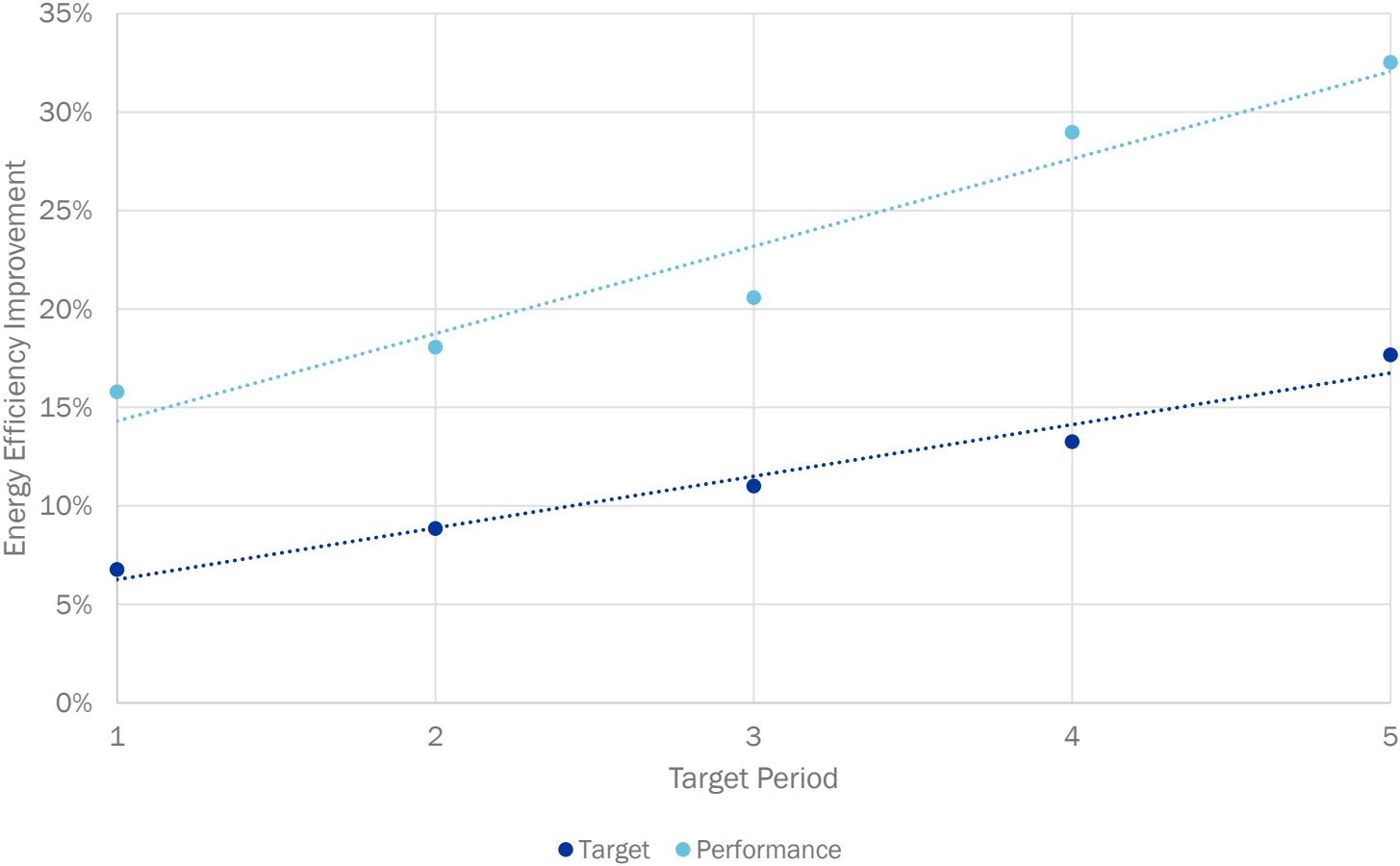
## FUTURE LEGISLATION:

- Due Diligence, Environmental labelling

## MONITORING, REPORTING & COMMUNICATION

- The UK Dairy Roadmap
- Environmental Benchmarking
- UK Water Roadmap, UK Soy Manifesto, Courtauld Commitment 2030

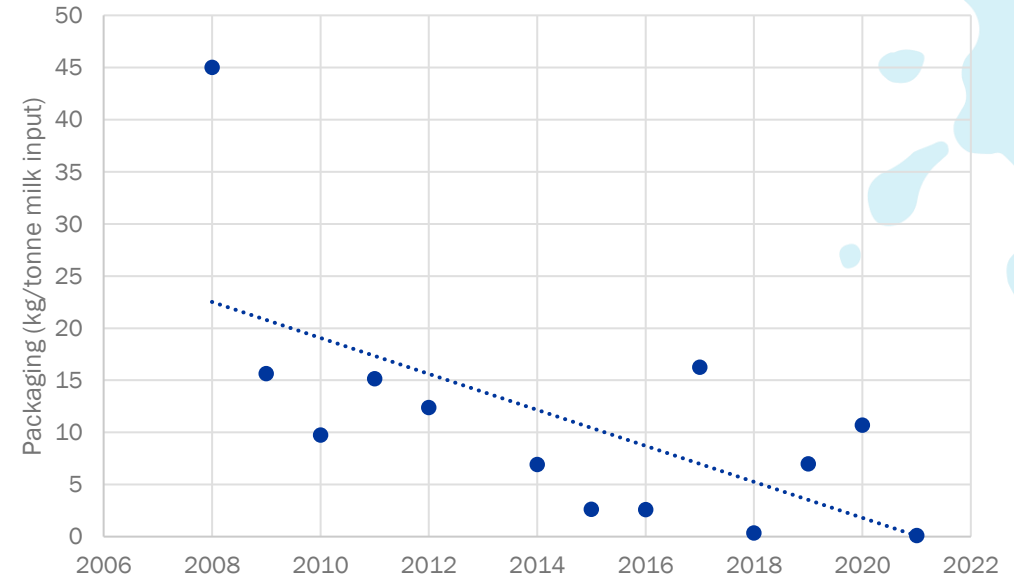
# Climate Change Agreements



# Reducing plastic packaging



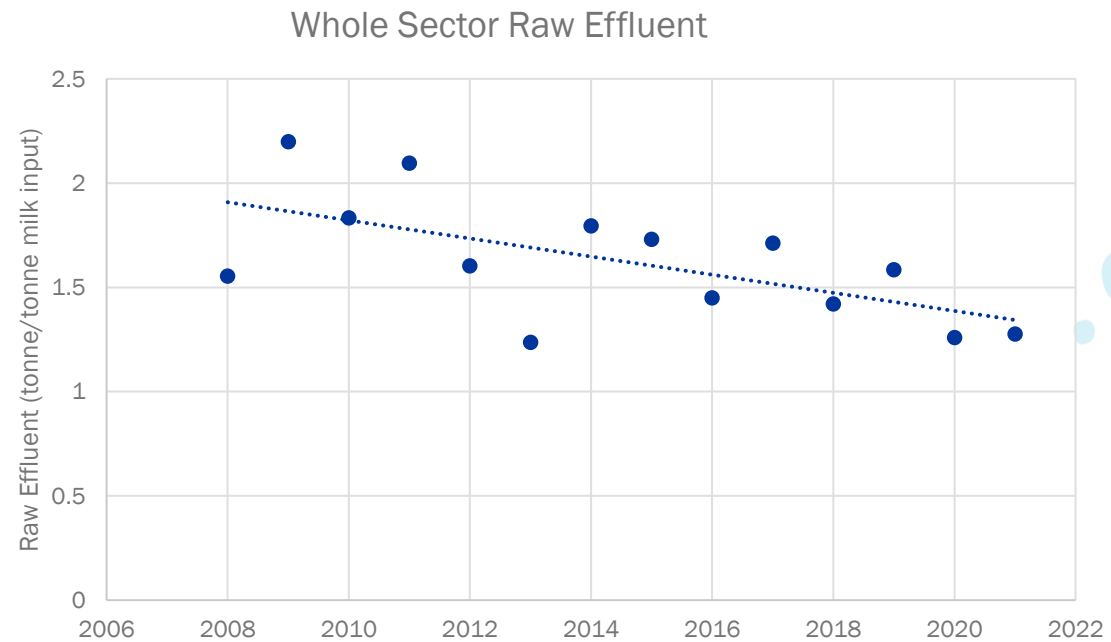
Whole Sector Packaging Use



- Lightweighting milk bottles – limited by need to retain structural integrity.
- Nampak Plastics spent four years developing a lighter weight bottle with reduced carbon footprint.
- Result: 25% less plastic. Saving ~16,000 tonnes of plastic and ~34,000 tonnes of CO<sub>2</sub>/year (2014).
- Dairy companies looking to reduce and reuse where possible



# Reducing water usage



- Saputo Dairy UK have reduced water usage intensity by 29% over the past 6 years.
- As well as reducing water demand, this reduces raw effluent.
- Process water goes through advanced treatment to enable reuse.
- Two thirds of water needed for Saputo's milk processing comes from recycled sources.
- Result: >1million litres/day reduction in freshwater.

**Climate Change:** Limit global warming to 1.5°C. Zero contribution from the dairy sector towards global warming by 2050.

**Water:** No serious pollution incidents, compliance with Farming Rules for Water, sustainable water usage and best treatment/use of wastewater including reuse where possible.

**Waste & Recycling:** All non-natural farm waste to be reused or recycled, with zero waste to landfill.

**Soils:** Farmers know and actively manage their soils, resulting in increased soil organic matter content, good NPK balance and living roots and ground cover whenever possible.

**Biodiversity:** Improve biodiversity on dairy farms.

**Air Quality:** Minimise emissions, dust and secondary particulates resulting from agricultural activities to reduce wider environmental and human health impacts.



# Governance & Working Groups

## STEERING GROUP

Sets the strategic direction of the Roadmap and drives industry engagement and alignment.



## WORKING GROUPS

### BASELINE DATA

Lead: Nic Parsons (AHDB)

To determine, source, collate and analyse key sustainability data.

### BEST PRACTICE

Lead: Nic Parsons (AHDB)

To develop and share key messages with farmers around sustainable best practice.

### CARBON FOOTPRINT

Lead: Emma Gregson (Dairy UK) & David Cotton

To engage all farmers, determine and track a UK average carbon footprint.

### COMMUNICATION

Lead: Judith Bryans (Dairy UK)

To develop consistent communications to farmers, stakeholders and consumers

### REGENERATIVE Ag.

Lead: RABDF

To agree an industry definition and support farmers on their regenerative journeys.

**MEMBERSHIP:** To be formed of relevant experts and stakeholders within the industry.

## STAKEHOLDER ENGAGEMENT FORUM

Coordination, collaboration, consultation and engagement of dairy industry stakeholders.

Trade Bodies  
Retail

Farmers  
Hospitality & Food Services

Processors  
Unions

Government  
NGOs



# Shared Knowledge

 72%  
**TARGETS**

  
**CARBON FOOTPRINT**



  
**WATER**

NEWSLETTER SIGN UP MAKE A PLEDGE

UK Dairy Roadmap 

HOME **FARMERS** PROCESSORS CONTACT 



# Farmers

Introduction

# Biodiversity

## Dairy Roadmap - Biodiversity Plan



### Counties hosting a pilot farm

**ENGLAND**

- Staffordshire
- Cheshire
- Gloucestershire
- Somerset

**WALES**

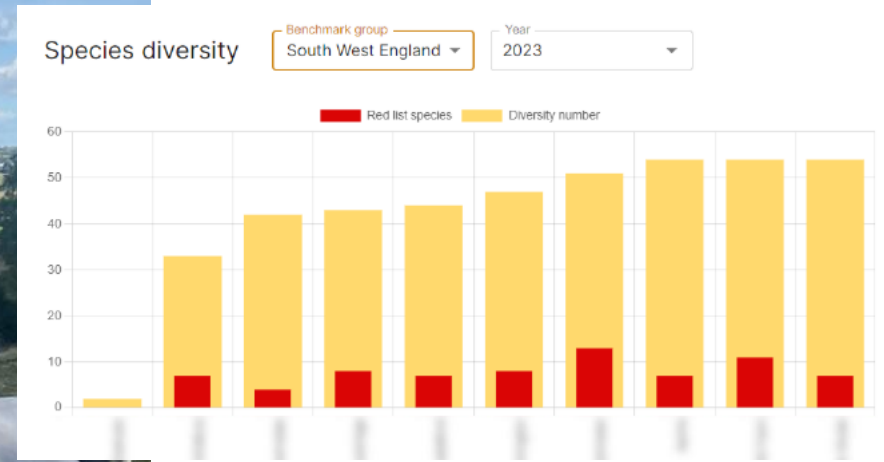
- Gwynedd
- Pembrokeshire

**SCOTLAND**

- West Kilbride
- Dumfries & Galloway

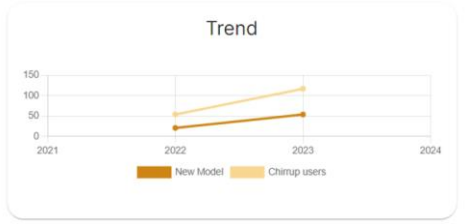
**N. IRELAND**

- Fermanagh
- Down



Chirrup rating <sup>1</sup>

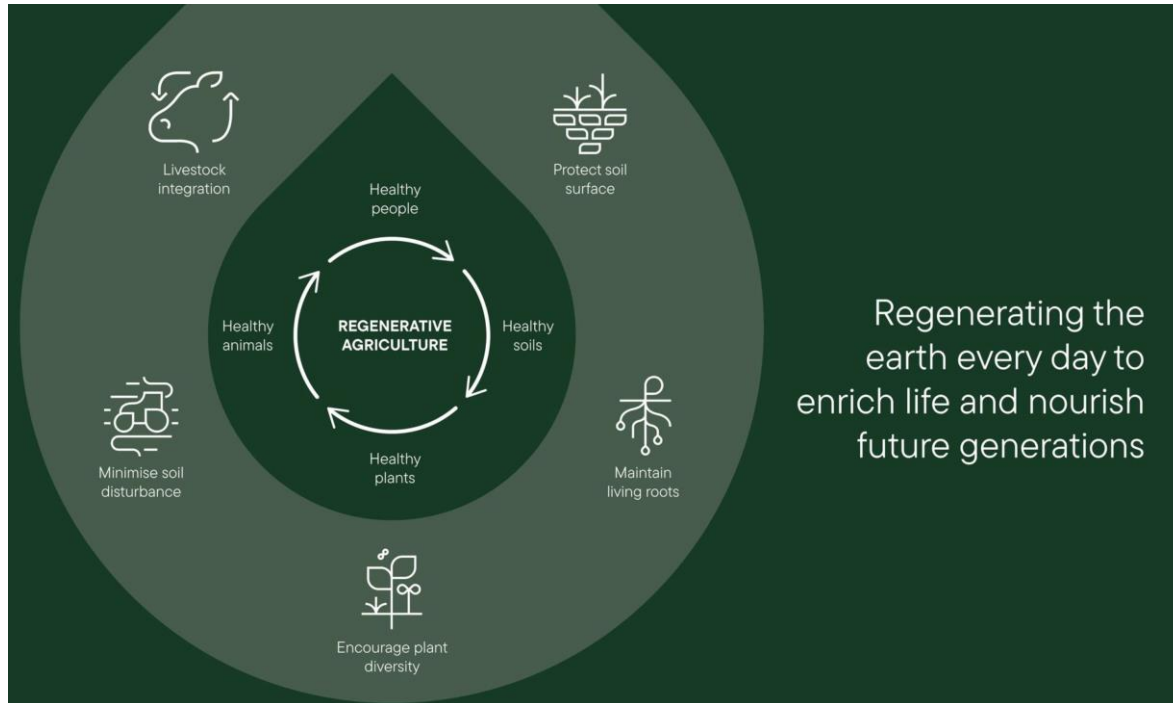
Monitoring  
Top quartile  
Improved







# Working with Farmers - First Milk



Regenerating the earth every day to enrich life and nourish future generations

- 0.5ppl regenerative farming bonus from April 1, 2022.
- >90% of members submitted Regenerative Farming Plans in year one, representing >96% of milk volume.
- These farms committed to almost 131,000 individual field-level regenerative interventions across more than 78,000 ha of land.

[dairyuk.org](http://dairyuk.org) | [milk.co.uk](http://milk.co.uk)

## Commitments:

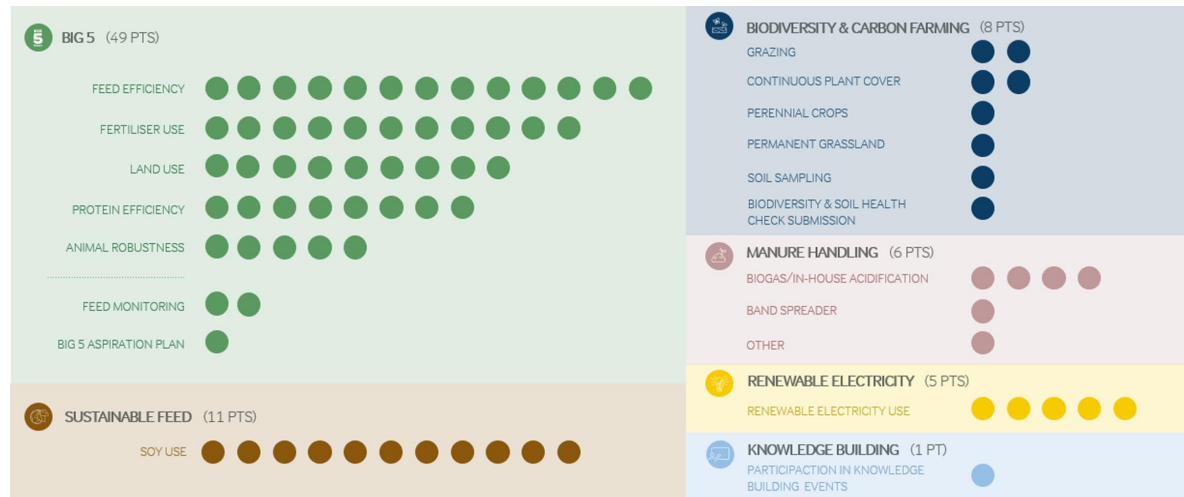
- Net zero carbon emissions by 2040.
- Reduce farm level carbon footprint by 50% by 2030.
- Net zero in milk transport and processing by 2035.
- Sequester 100,000 tonne of CO<sub>2</sub> per annum on members' farms by 2025.
- Increase milk from forage by 10 per cent by 2025.
- Transport and processing activity to be using 100% renewable fuel sources by 2030.
- Reduce antibiotic use by a further 10% by 2025.



# Working with Farmers - Arla



Arla – powering trucks with poop.

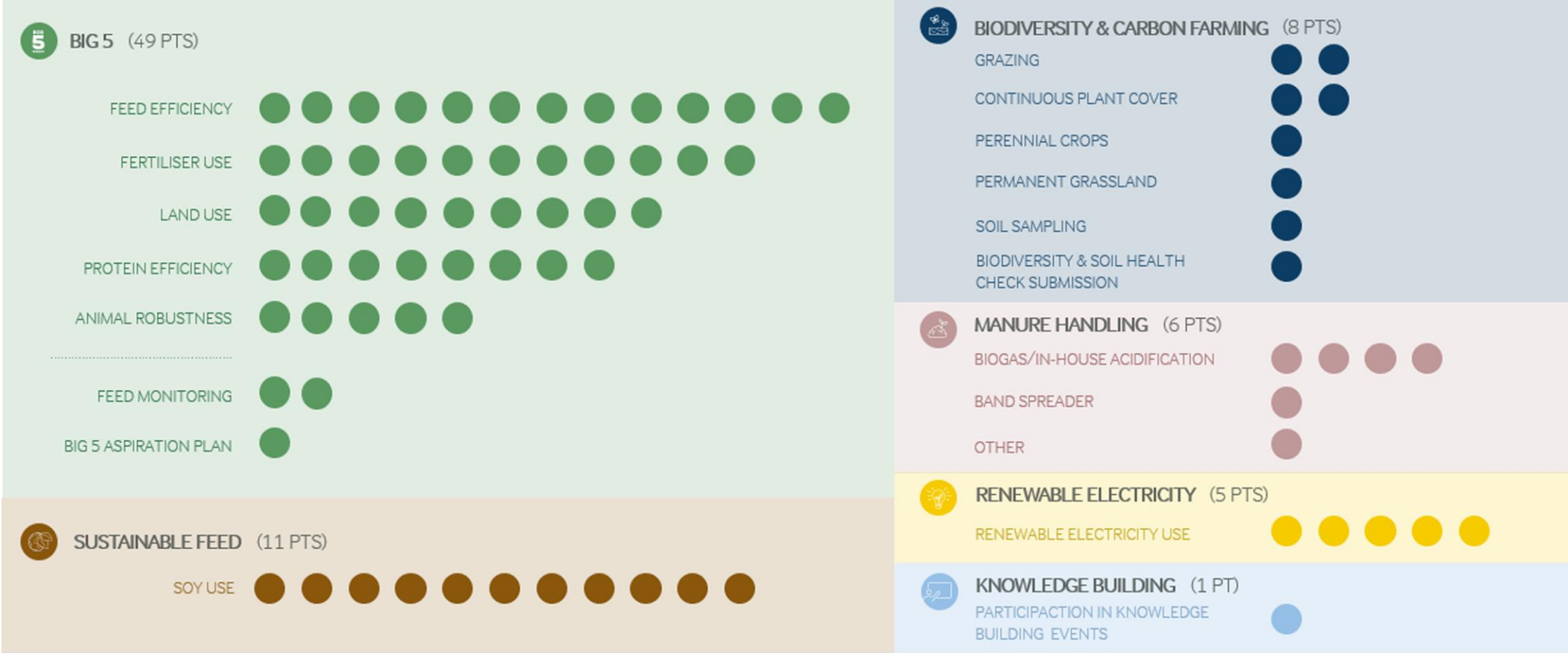


Arla – sustainability incentive model.

## Commitments:

- Climate net zero by 2050.
- Reduce scope 1 & 2 emissions by 63% by 2030 (2015 baseline).
- Reduce scope 3 emissions by 30% per kg of raw milk by 2030 (2015 baseline).
- Minimise food waste.
- Work alongside nature.
- Innovate to make packaging more recyclable (Cravendale, B.O.B and Big Milk bottles are 99% recyclable).

# Working with Farmers - Arla



Arla – sustainability incentive model.



# Working with Farmers – Leprino Foods UK



## Commitment:

- Soya free dairy by 2027.
- Starting with 10 farmers in 2023.

## Progress:

- >40 farmers removed soya in 2023, producing >75 million litres of milk.
- Reduced crude protein in diets has improved nitrogen efficiency.
- Reported improvements to milk yield and constituents.

# Sustainable Dairy

The sector has common goals.

There is no single or correct way to achieve sustainability.

Milk processors are working to improve sustainability within the factory, whilst supporting farmers to improve sustainability on farm.

The sector is deploying incentive models alongside science-based targets and robust evidence linking environmental sustainability to profitability and business resilience.

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# It's What We're Made Of

## Biodiversity

