Sustainability – Cow of the Future

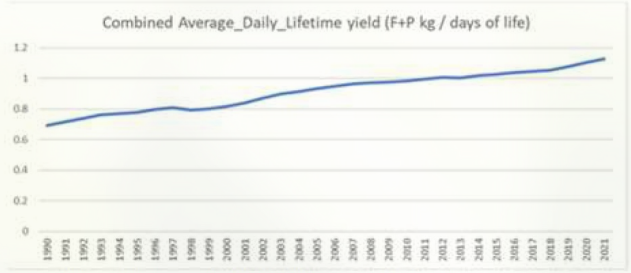
John Torrance
Curtismill Holsteins

Looks Like vs Be Like

Pillars of Sustainability

Industry Trends

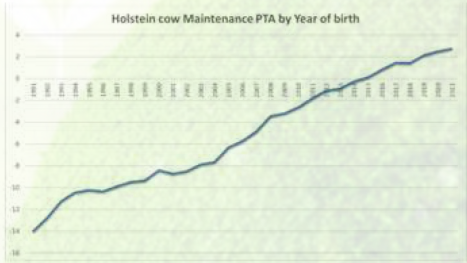
Improving industry efficiency - measured by Daily Lifetime Yield



Source: Milk recording data used in AHDB's Dec'21 genetic evaluation release

What next does the industry want from our cows?

Unfavourable trend in Maintenance



- Bigger cows means we now have an equivalent of 60,000 tonnes of cow LW to feed each day in the UK !
  - Which is ~90,000 mature HOL cows
- For an average herd of 200 cows
  - Roughly 10 extra cows to feed

  …each day

Future needs – Produce more from less

Productivity

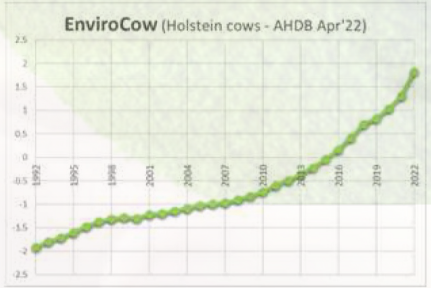
Longevity

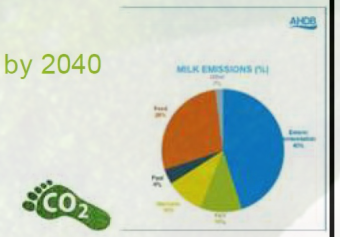
Feed Advantage

EnviroCow

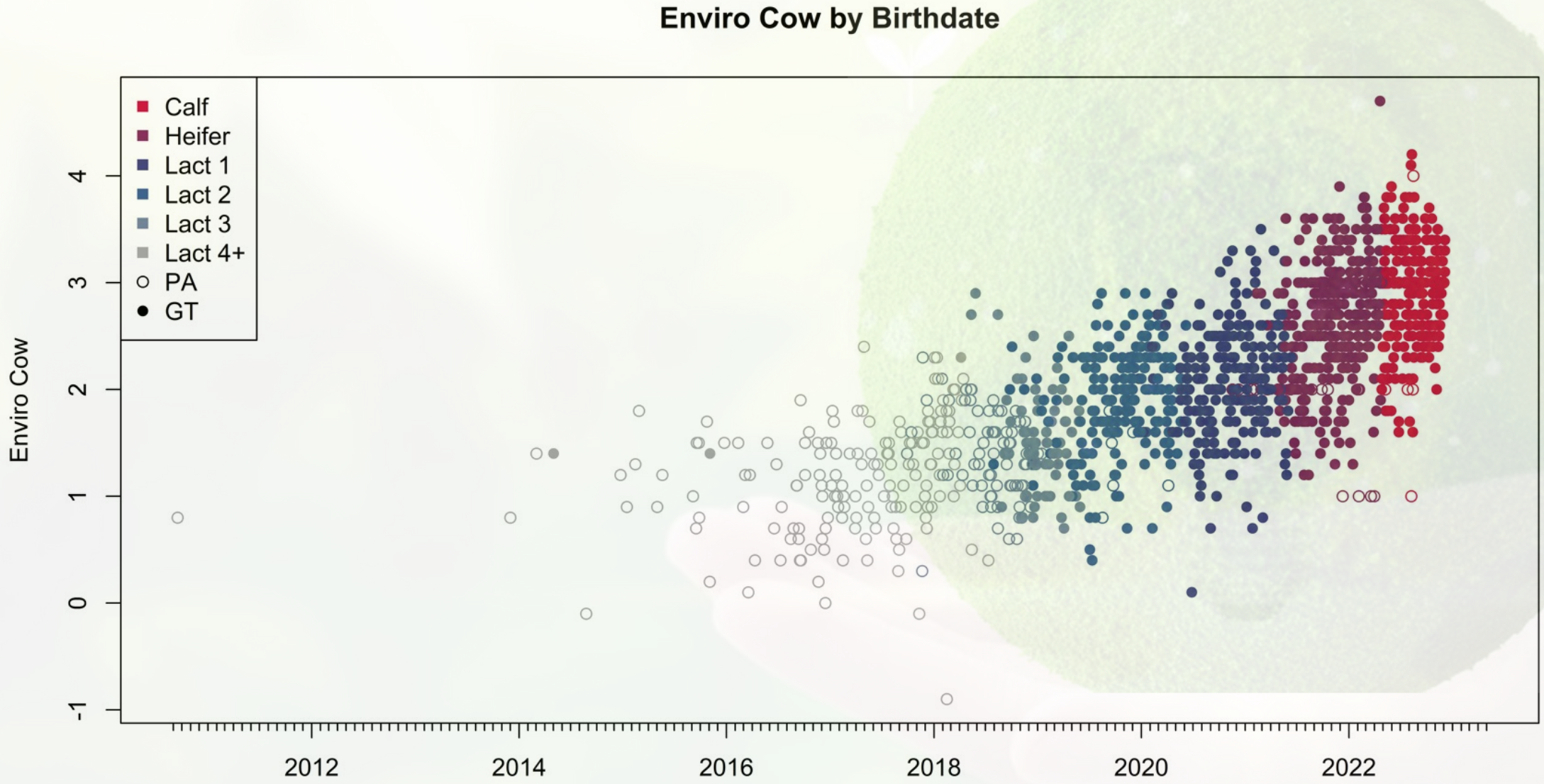
EnviroCow index

- Direct + indirect effects due to genetic improvement reduces CO_2e/kg FPCM by just over 1% each year
- Genetics is estimated to contribute a 20% reduction by 2040

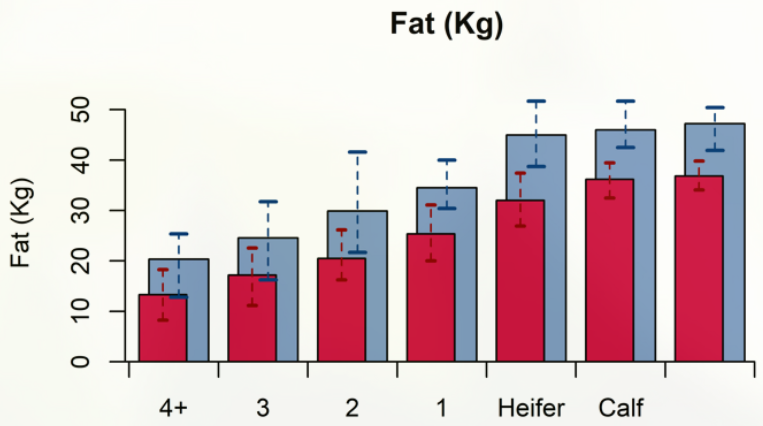


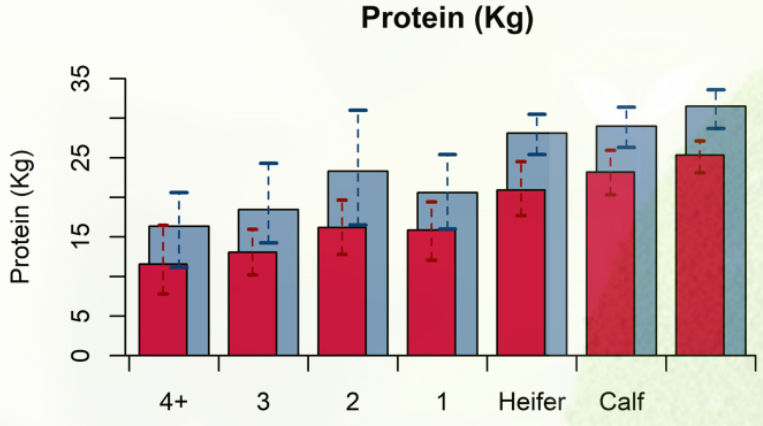


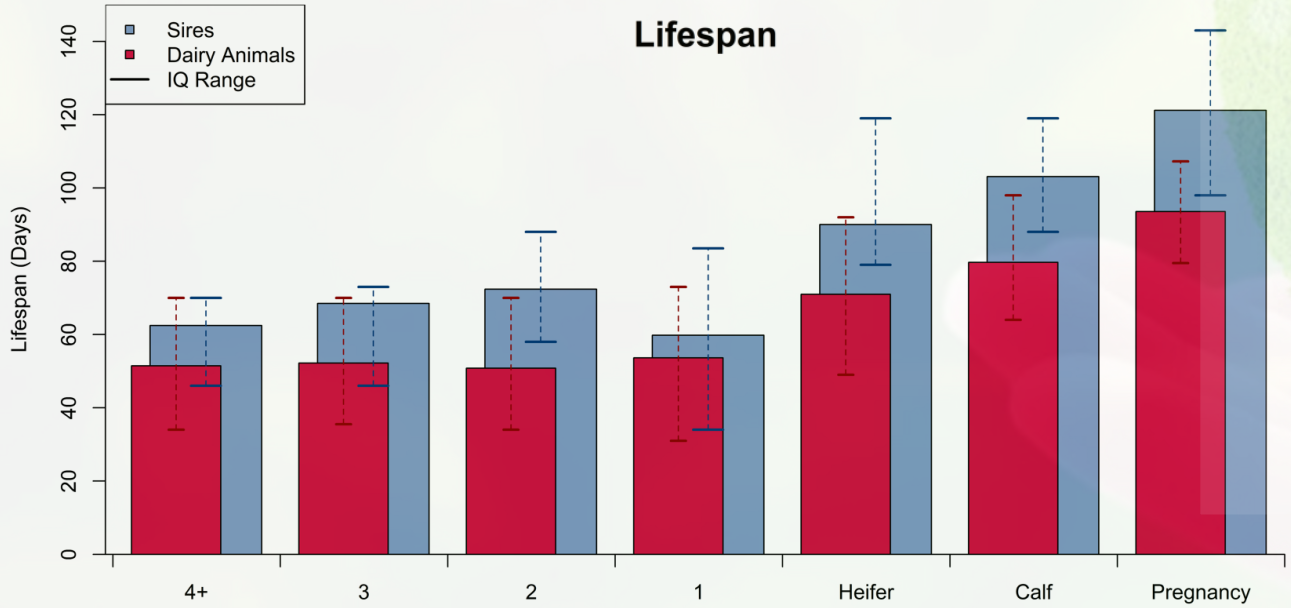
Curtismill Case Study Genetics

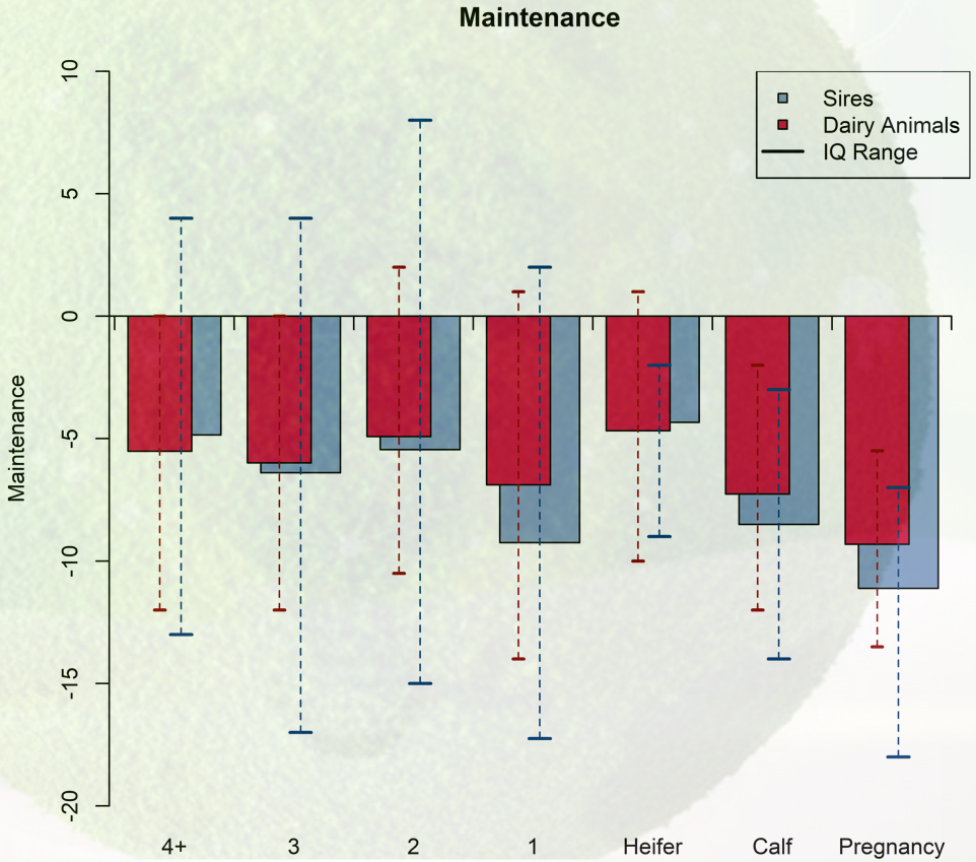


Curtismill Case Study Genetics

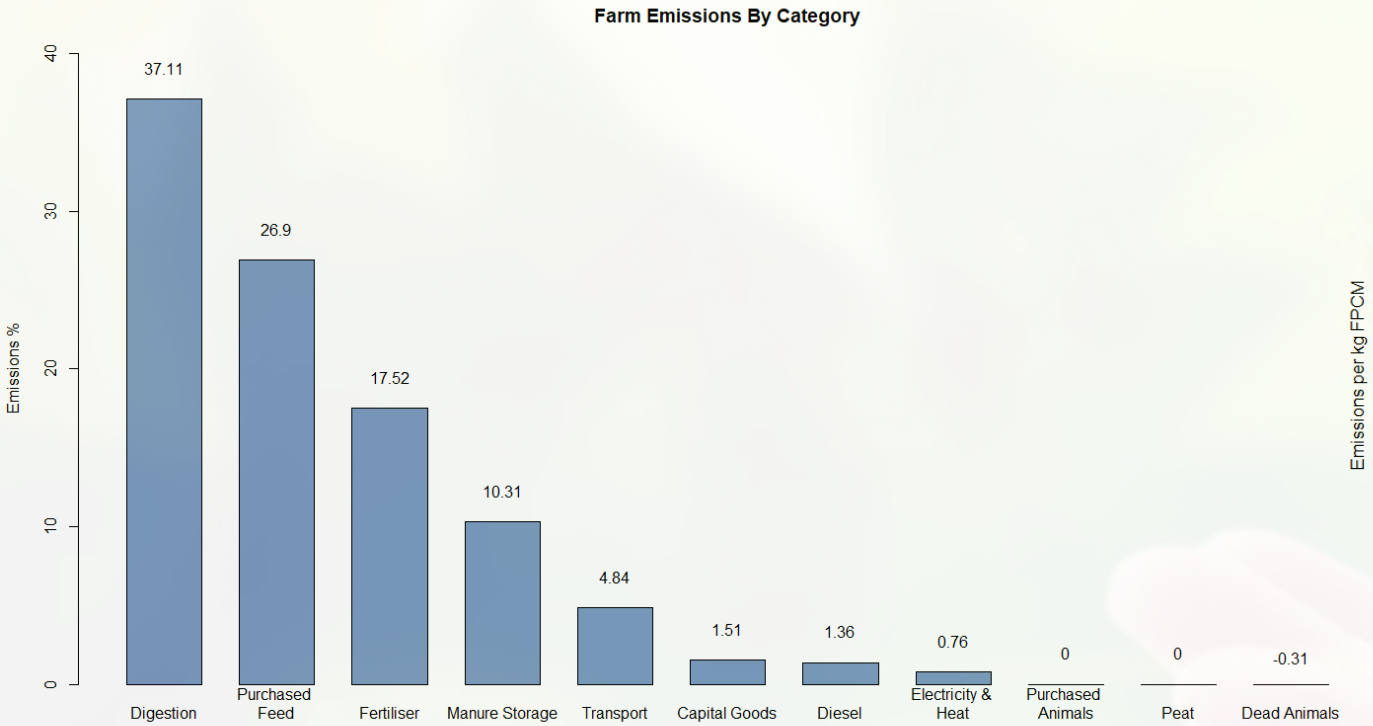


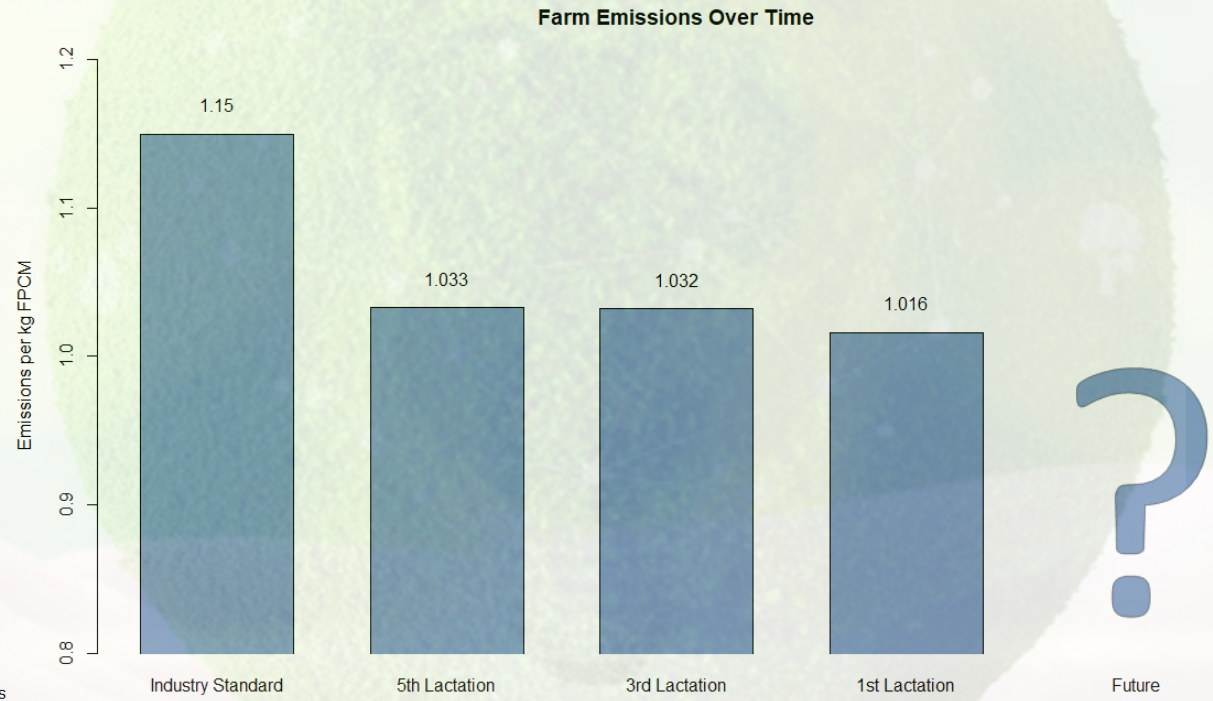






Curtismill Case Study Carbon





Current & Future Opportunities

- Trait Development
- Polled Gene
- Slick Gene
- Genomic Inbreeding
- Gene Editing