



# LMC - MAKING A DIFFERENCE



# Understanding Sustainability-a NI Red Meat Industry Perspective

Colin Smith- Industry Development Manager- LMC



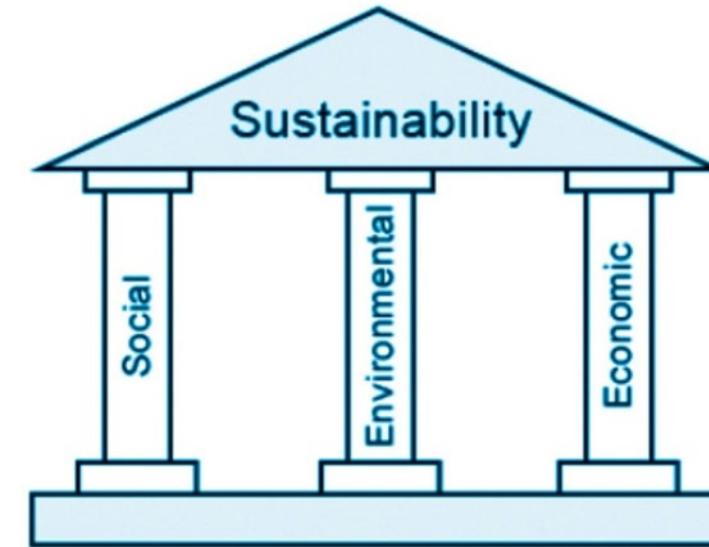
# Food sustainability

- Food is defined by the Oxford English Dictionary as 'any nutritious substance that people or animals eat or drink or that plants absorb in order to maintain life and growth'.
- Sustainability is defined as 'The ability to be maintained at a certain rate or level' or 'Avoidance of the depletion of natural resources in order to maintain an ecological balance'.
- Food Sustainability therefore could be described as adopting practices to produce a nutritious substance that people or animals eat that will avoid the depletion of natural resources.
- Put very simply, producing food in a way that ensures it will not run out either now or at some point in the future.



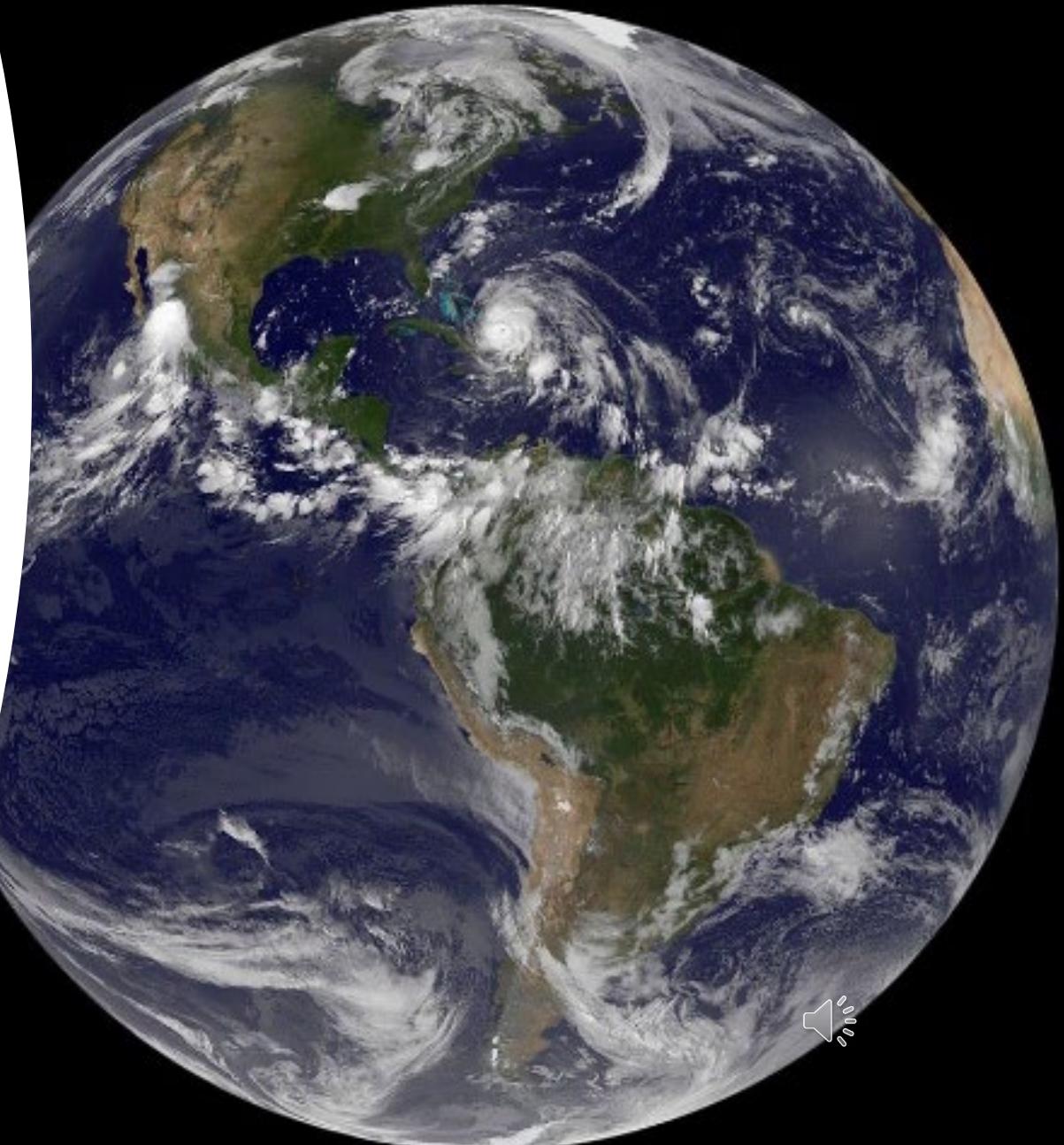
# Three Pillars of Sustainability

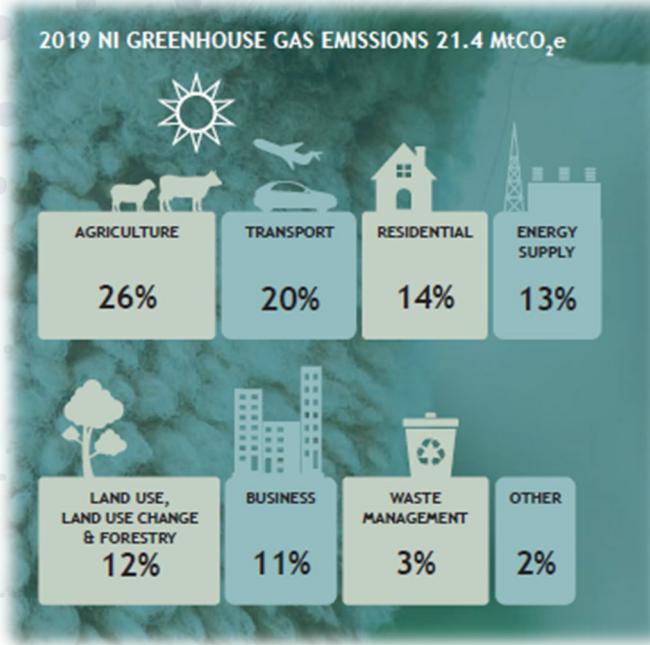
- There are different elements to food sustainability:
  1. Economic sustainability
  2. Environmental sustainability
  3. Social sustainability
- Each of these elements of sustainability is closely linked.



## Thinking Globally- Acting Locally

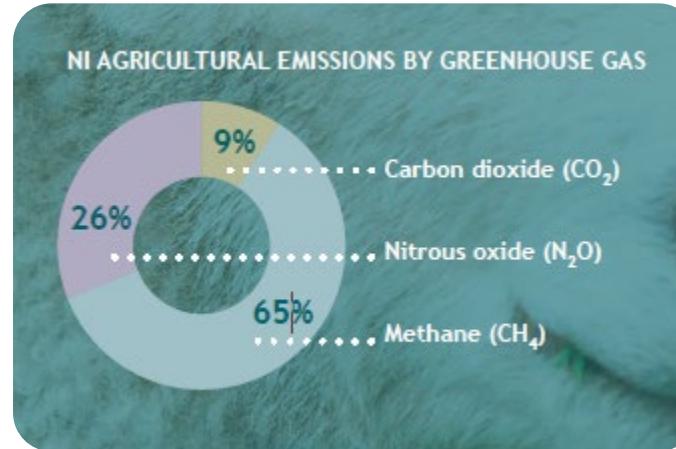
- Meeting targets and reducing emissions
  - *Paris Agreement limit global warming to well below 2 °C*
  - *UK Climate Change Act 2008*
  - *Climate Change Act (Northern Ireland) 2022*
- (1) The Northern Ireland departments must ensure that the net Northern Ireland emissions account for the year 2050 is at least 100% lower than the baseline.
- (2) The Northern Ireland departments must ensure that the net Northern Ireland emissions account for carbon dioxide for the year 2050 is at least 100% lower than the baseline for carbon dioxide.
- (3) The duty in subsection (1) does not require the net Northern Ireland emissions account for methane for the year 2050 to be more than 46% lower than the baseline for methane.
- *Supply chain commitments*





In NI, the emissions profile reflects the economic importance of the agri-food sector and agriculture is the largest source sector of GHG emissions at 26%.

# NI's Environment Challenge



In livestock farming, emissions from the animal cannot be avoided. Ruminants (cattle and sheep) emit methane as part of a natural biological process as bacteria breaks down cellulose in their diet producing milk and meat from grassland. Methane is a short-lived GHG and therefore, must be treated differently to carbon dioxide.





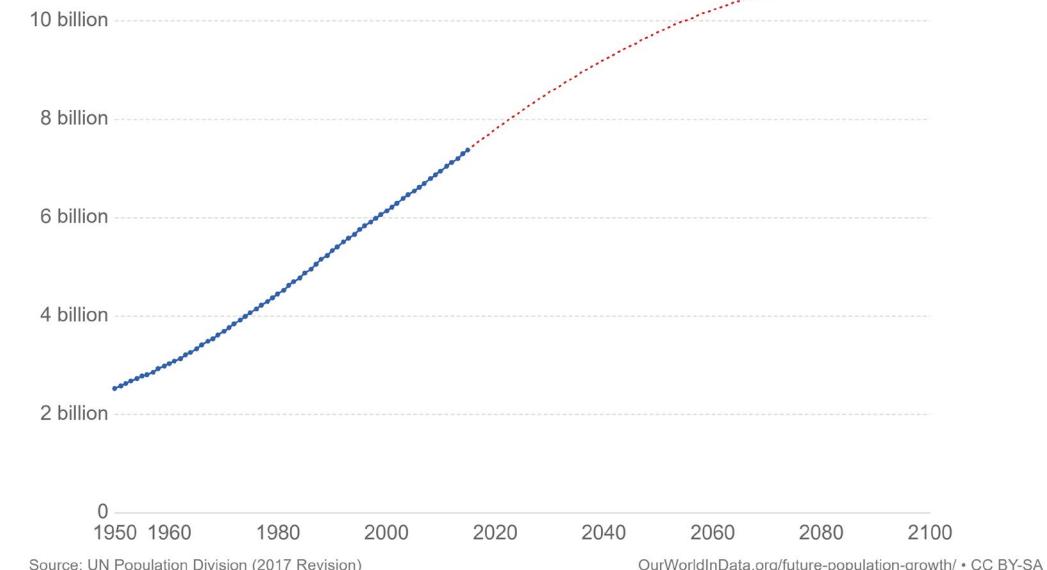
NI can produce enough food to feed 10 million people in the UK and further afield..

# A balancing act<sup>†</sup>



## Population projection by the UN, World

Shown is the total population since 1950 and the Medium Variant projections by the UN Population Division until 2100.



Source: UN Population Division (2017 Revision)

[OurWorldInData.org/future-population-growth/](http://OurWorldInData.org/future-population-growth/) • CC BY-SA

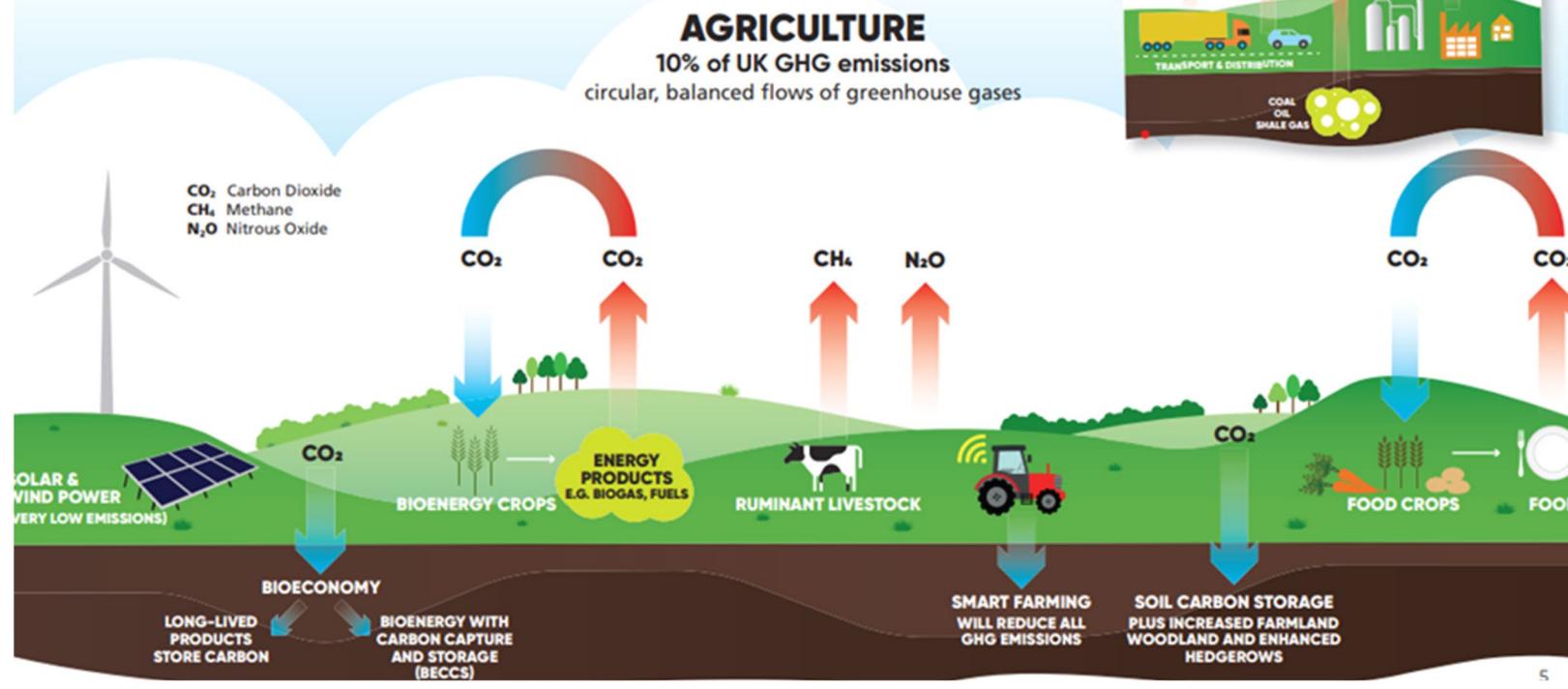
## • Feeding people

- 15 Nov – 8 billion people
- 820 million suffering from hunger -2021
- Agricultural production need to increase by ~60% to meet need
- Area for food production decreasing



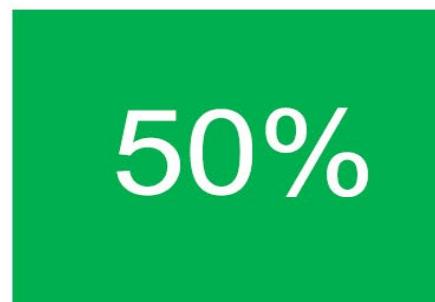
# Why agriculture is part of the solution to climate change

Agriculture, and the land-based economy, can play a key role in tackling climate change. It is uniquely placed to capture the major greenhouse gas – carbon dioxide (CO<sub>2</sub>) – from the air and turn it, with the help of farmers, into a wide range of foods, fibres and fuels. By enhancing this ability to capture carbon we can use it to generate “negative emissions” – actively removing CO<sub>2</sub> from the atmosphere and balancing agriculture’s emissions of methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) from food production.



# Sustainability is an important consideration for consumers

Publicly, sustainability is becoming a more important consideration...



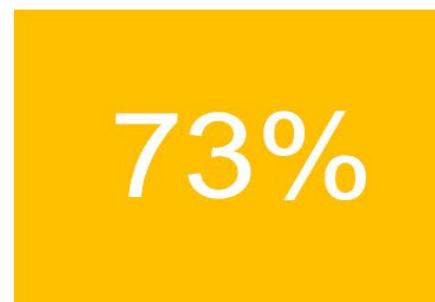
of millennials in Ireland  
believe they're accountable  
for protecting the  
environment



of Latin Americans think  
sustainably sources, fair trade  
food is very important when  
making a purchasing decision.



of US consumers consider  
sustainability when  
shopping for food.



of millennials are willing to  
spend more on a  
sustainable brand



# Sustainability a growing concern...

**Sustainability** remains a growing concern amongst consumers, and is growing across all Western European Countries

% of the population in Western Europe who agree that they 'avoid products harmful to the environment' (Dec 2018 vs. Dec 2014, % change)

58% ↘  
+14% vs. Dec 2014)



48% agree  
+27% vs. Dec 2014



62% agree  
+12% vs. Dec 2014



56% agree  
+17% vs. Dec 2014



58% agree  
+6% vs. Dec 2014



56% agree  
+21% vs. Dec 2014



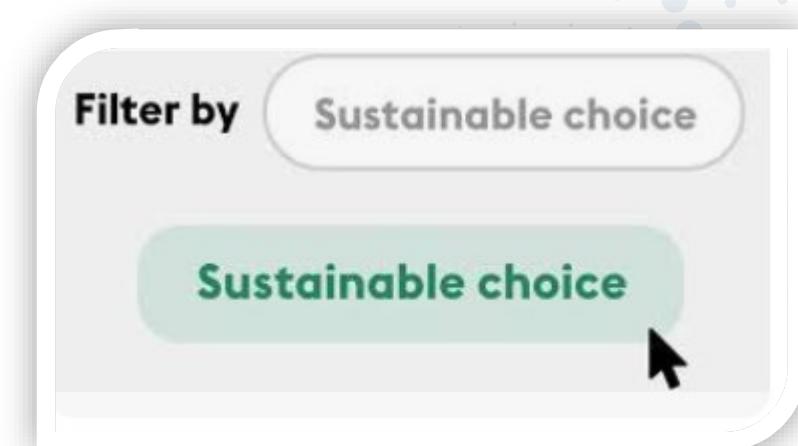
69% agree  
+3% vs. Dec 2014



# NIBL FQAS- A Sustainable Choice?



<https://www.lmcni.com/farm-quality-assurance>



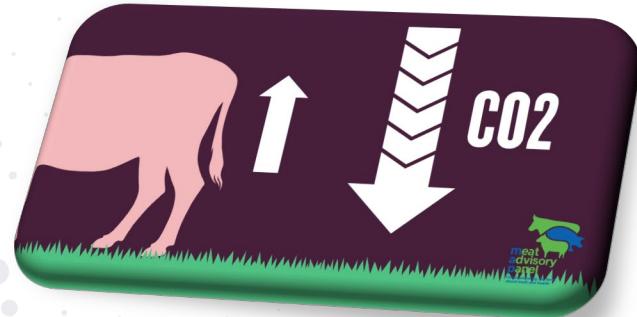
# Importing food is Exporting the problem!

- Beef production in Western Europe is currently 2.5 times more efficient in managing carbon emissions than the global average.
- Dairy farming in NI has reduced its carbon intensity by 37% between 1990 and 2020.
- GHG emissions from beef production in the UK are 52% lower than the global average.
- Carbon leakage is defined as the increase in CO<sub>2</sub> emissions outside the countries taking domestic mitigation action divided by the reduction in the emissions of these countries. (Source: *Intergovernmental Panel on Climate Change*)

***Do we as an industry strive to do better? YES!!***



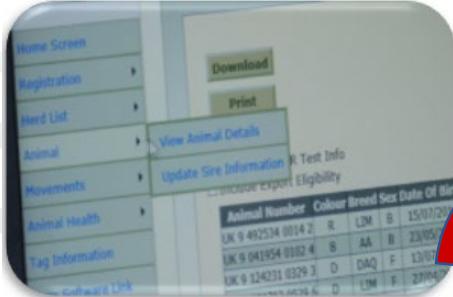
## NIBLS FQAS Journey to Net Zero: Project Objective



To efficiently capture data from all NIBL FQAS farms to determine net greenhouse gas emissions produced from routine farm activities and in return highlight areas where changes can be made that, when implemented, will reduce net emissions.



## APHIS DATA



Department of  
Agriculture, Environment  
and Rural Affairs  
[www.daera-ni.gov.uk](http://www.daera-ni.gov.uk)

Animal  
Data

Animal  
Data

Carbon  
footprint

LMC  
Livestock & Meat Commission

FARM  
QUALITY  
ASSURED  
NORTHERN IRELAND

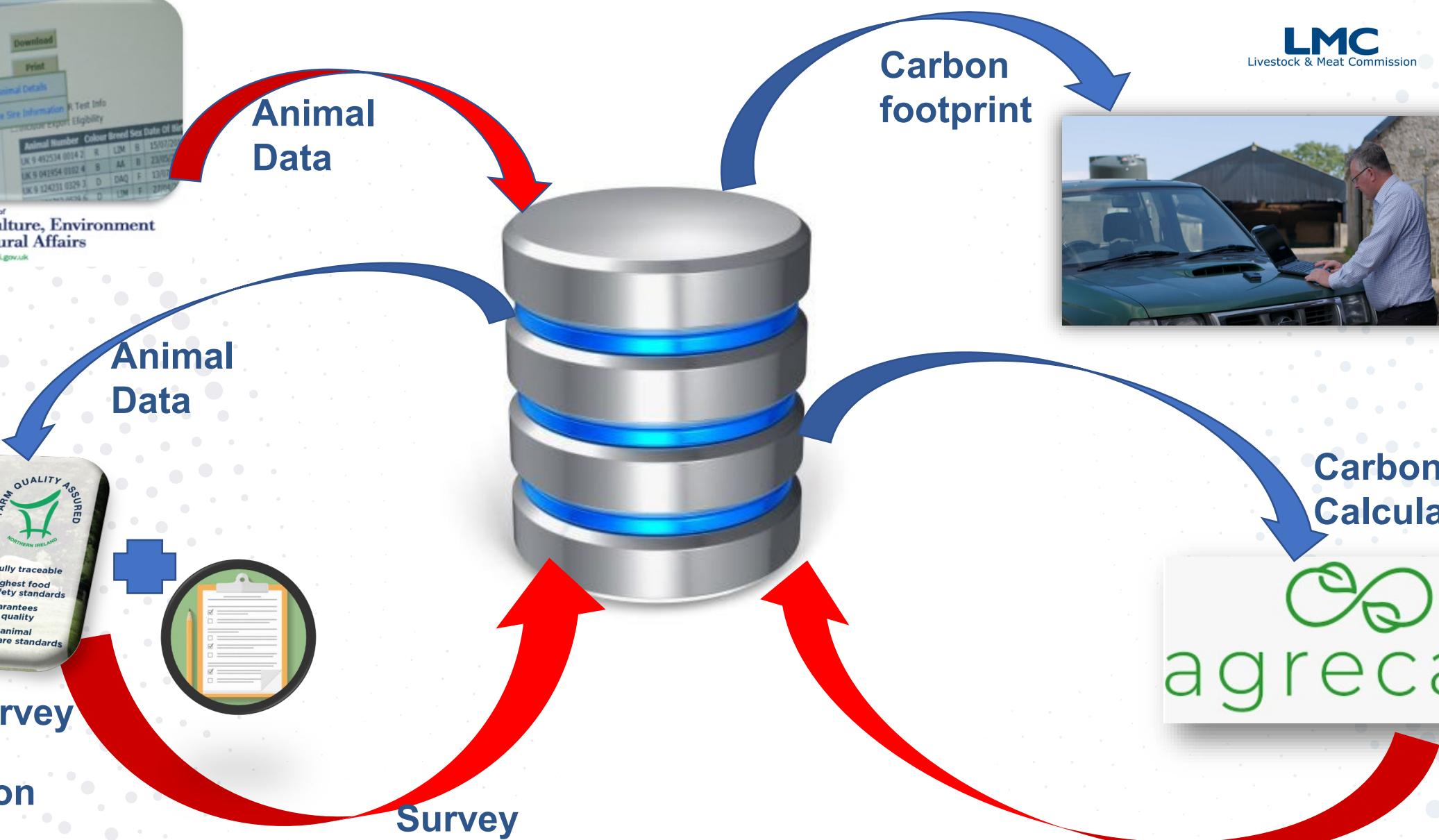


Carbon  
Calculator



Farm Survey  
at FQAS  
Inspection

Survey  
Data





# Journey of Improvement

- Once a baseline is established the journey of improvement will continue.
- This scale of operation is unique in the UK.
- Assisting industry (and Government) to meet the challenges ahead whilst learning where improvements can be made.



# NI Standards go beyond GHGs

NIBL FQAS Standards are much broader and seek to protect & enhance:

- Biodiversity
- Water Quality
- Air Quality
- Soil Health
- Animal Health
- .....and the Climate!



# Economic Sustainability varies along the supply chain



- Economic sustainability involves using the assorted assets of the company (in this case, the farm business) efficiently to allow it to continue functioning profitably over time.
- **Farm Business Income for upland Cattle and Sheep farms in 2021 was -£8,430 when direct payments were removed.**
- Beef & Sheep farming in NI is not always profitable and therefore farmers here receive income support **in return for providing public goods.**



# Social Sustainability & Employment Law

- Whilst primary producers of food tend to work in small family run farm businesses the food processing sector represents the largest manufacturing employer in Northern Ireland.
- Each employee is protected by stringent EU regulations governing the rights of employees. This includes health and safety regulations, working time regulations, statutory sick pay, paid holiday and the living wage.
- These rights are afforded to UK citizens however this legislation does not apply to all countries around the world. Working conditions and ethics in some businesses are extremely poor.
- Food produced under FQAS guarantees that the product has been produced to these standards. The same cannot be guaranteed for imported produce.



# Social Sustainability Summary

- Social sustainability is about the wellbeing of people and communities.
- It is about a thriving community with equitable policies and diverse populations working and living together.
- Purchasing FQAS products helps to fuel social sustainability by giving back to rural communities and supporting a production base that is governed by strict policies that protect the interests of the people that work in Northern Ireland.



# Conclusion

- The 3 pillars of sustainability are all important.
- NI Agriculture must strike a balance between efficient food production and meeting the climate change targets.
- FQAS contributes to food sustainability by delivering a minimum standard of production based on these 3 pillars. Buying local is a sustainable choice.
- The FQAS logo lets consumers know that food has been produced to designated standards in Northern Ireland.
- Northern Ireland has government policies in place that contribute to sustainability and these will continue to evolve.
- Production of food in Northern Ireland is done responsibly and recognises the need for efficient and profitable food businesses that complement the natural environment and deliver benefits for people and their communities.

