

# Beef Carbon Reduction scheme

What, Why and How?



***March/April 2024***

# Tonight's Programme

- What & Why
- How to achieve
  - Ages & Stages
  - Grassland Management
  - Benchmarking
- How to apply
- Questions & Answers



# What & Why....

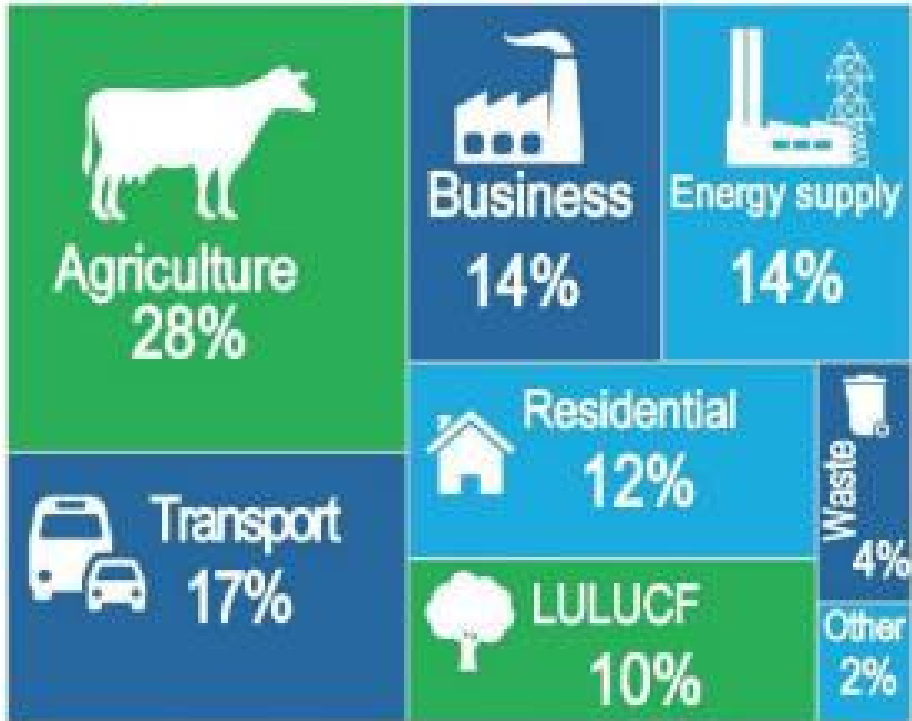


# Why?

- The Climate Change Act (Northern Ireland) 2022 sets emissions reduction targets that Northern Ireland must comply with legally, including achieving Net Zero emissions by 2050.

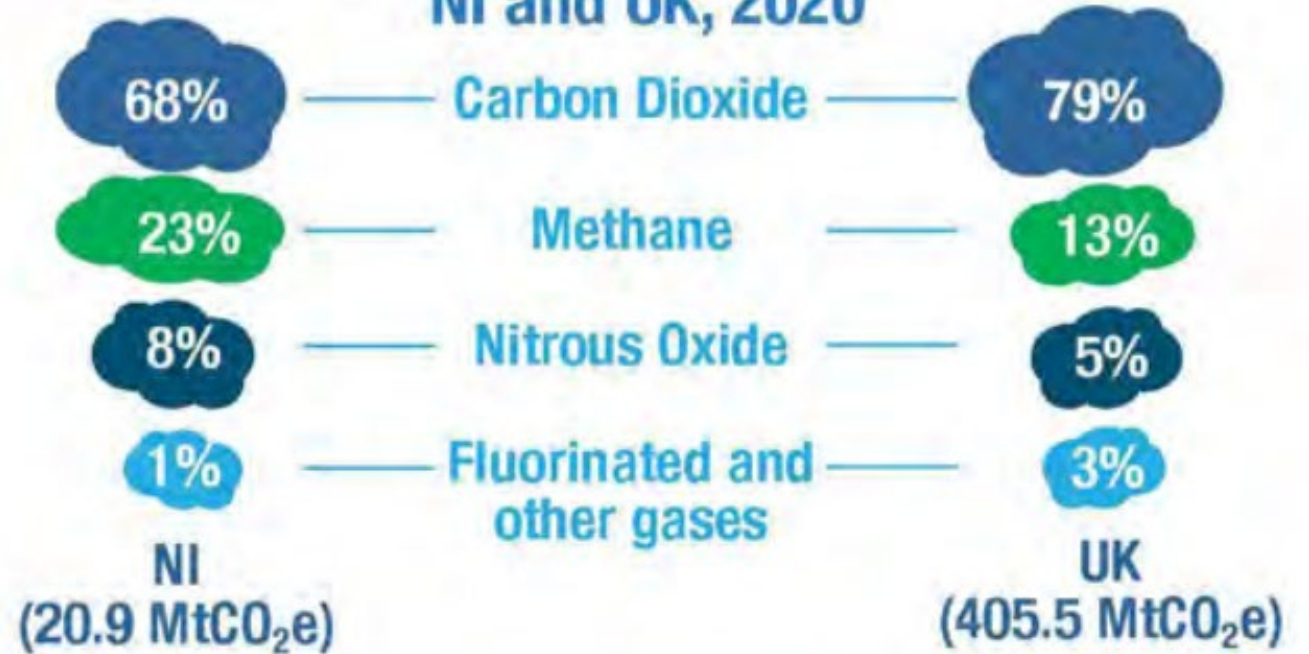
# Why?

Agriculture was the largest emitting sector of NI greenhouse gas emissions in 2021



\*Other consists of Public and Industrial processes

Composition of greenhouse gas emissions (%), NI and UK, 2020



# What?

- The Vision of the new Farm Support and Development Programme is for an agricultural industry which

- pursues increased productivity,
- is environmentally sustainable,
- displays improved resilience and
- operates within an effective functioning supply chain

- Beef Sustainability Package
  - improve productivity, reduce greenhouse gas emissions and lower environmental footprint



- The BEEF CARBON REDUCTION scheme
  - Encourage the slaughter of cattle at an earlier age to improve the profitability, productivity and environmental sustainability of Northern Ireland beef production
  - Reduce Green House Gas (GHG) emissions and the carbon footprint of beef production

- Suckler Cow Scheme\*

\* Subject to Ministerial approval and passing of appropriate legislation

# BCR Scheme Yearly Targets

Year of Measure	Maximum age at slaughter
1 – 2024	30 months
2 – 2025	28 months
3 – 2026	27 months
4 – 2027	26 months

AIM - Encourage improvements in **productivity** and **environmental performance** to increase profitability and reduce emissions and reduce the carbon footprint of the whole farm.

# BCR - Dates & Timelines

- Scheme launched 1 January 2024
- Each Scheme year runs from 1 January to 31 December
- Payment rate set at £75 per eligible animal from 1 April 2024
- Phased payments on introduction:
  - January 2024 - £20 per eligible animal
  - February 2024 - £40 per eligible animal
  - March 2024 - £60 per eligible animal
- A NI level quantitative limit of 352,000 animals slaughtered has been set. If this limit is exceeded, the number of eligible animals a farm business receives payment for, will be reduced.

# BCR Scheme Eligibility Requirements

- Must have claimed, and be eligible for payment of, BPS (2024) or FSTP(from 2025)
- Born in Northern Ireland & registered on NIFAIS.
- Slaughtered in Northern Ireland **or** sent for direct slaughter from Northern Ireland.
- Clean beef animals – bull, heifer or steer.
- Slaughtered wholly (or mainly) for human consumption at an approved abattoir.
- Must **not** have been purchased by DAERA for disease control purposes e.g. TB compensation.
- **Retention period** – payment will be given to the farm business that owned the animal for at least 60 days (continuous) within the last 100 days prior to slaughter date.

# How to Achieve

- Ages & Stages
  - Setting and meeting targets



# Suckler bred March born – Steers and Heifers

<i>Stage of production</i>	<b>24 month Steer</b>		<b>24 month Heifer</b>	
	<i>Average Daily Gain (kg/day)</i>	<i>Liveweight (kg)</i>	<i>Average Daily Gain (kg/day)</i>	<i>Liveweight</i>
<b>Birth</b>	-	40	-	40
<b>Weaning</b>	1.20	315	1.10	295
<b>End of 1<sup>st</sup> winter housing</b>	0.60	410	0.60	385
<b>End of 2<sup>nd</sup> grazing season</b>	0.90	570	0.80	530
<b>2<sup>nd</sup> winter &amp; Finishing period</b>	1.00	730	0.90	655
<b>Carcase weights (kg)</b>		380 - 400kg		340 – 360kg

# Early maturing March/April born (Dairy calf to beef)

<i>Stage of production</i>	<b>24 month Steer</b>		<b>24 month Heifer</b>	
	<i>Average Daily Gain (kg/day)</i>	<i>Liveweight (kg)</i>	<i>Average Daily Gain (kg/day)</i>	<i>Liveweight</i>
<b>Birth</b>	-	40	-	40
<b>Weaning</b>	0.80	90	0.80	90
<b>End of 1<sup>st</sup> grazing season</b>	0.90	235	0.80	225
<b>End of 1<sup>st</sup> winter housing</b>	0.60	325	0.60	315
<b>End of 2<sup>nd</sup> grazing season</b>	0.90	490	0.80	460
<b>2<sup>nd</sup> winter &amp; Finishing period</b>	1.00	650	0.85	600
<b>Carcase weights (kg)</b>		330 - 340		310 - 320

# Final finishing period targets

Targets for the finishing period

- Depends on sex of cattle (e.g. steers vs heifers)
- Depends on breed of cattle
  - Dairy bred will have lower carcass weights
- Assess cattle regularly both visually and weighing

## Steers & Heifers



20 – 30 day warm up



60 - 70 day feed period



- >1.3kgs DLWG for steers
- >1.2kgs DLWG for heifers
- Market specs for conformation and fat cover

# How to achieve targets

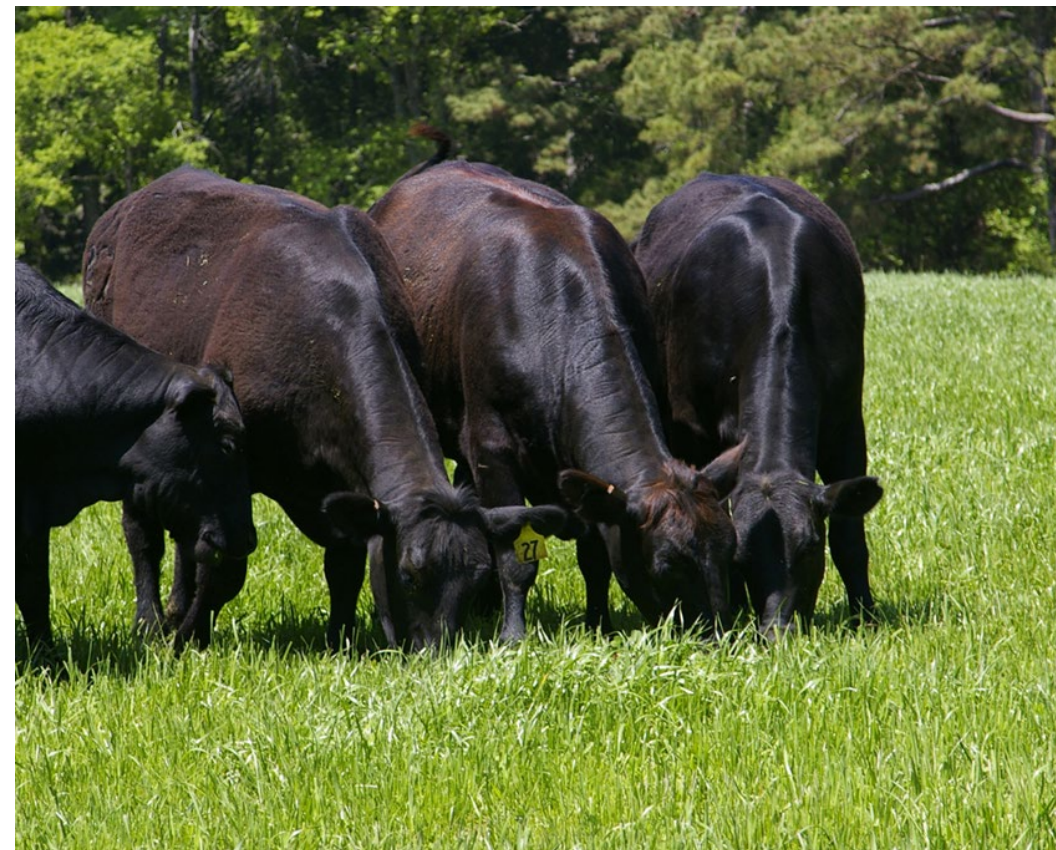
*Ask yourself the following questions?*

- Correct finishing system?
- Correct finishing period?
- Arrival/adaption period?
  - Animal Health plan?
- Balanced & consistent diet?
- Accessibility to clean fresh water?
  - Housing environment?



# How to Achieve

Grassland Management  
**Beef from Grass**



# Performance from Grass and Silage

- Achieve the Beef Carbon Reduction Scheme and finish cattle on time/target.
- Maximise cattle growth from grass and forage- minimise concentrates
- Reduce overall emissions from the Beef enterprise

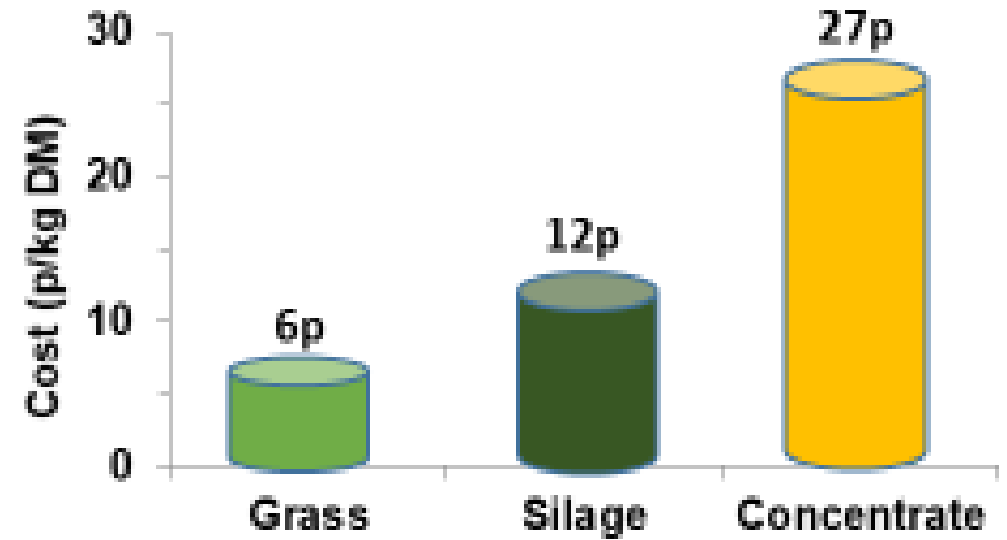


Fig 1: Cost of individual feedstuffs

Fig: 1

Grass is typically 4-5 times cheaper than concentrates, while grass is half as cheap as silage.

# What influences animal performance at grass?

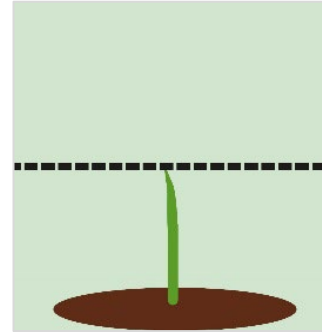
Grass is a good energy source which can support high levels of performance, however quality is dependent on:

- Stage of growth
- Stage in the season
- Sward composition

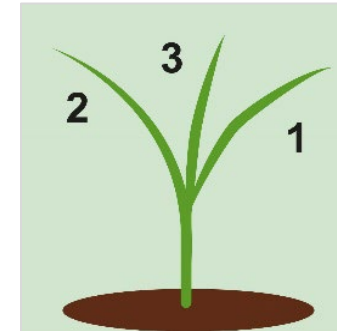
Target grazing at:

- 3 leaf stage
- In at 10 cm & out at 4 cm
- In at 3000 kg DM & out at 1600 kg DM

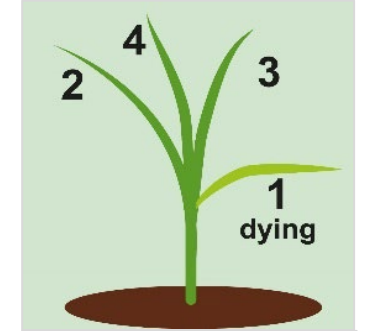
**Post-grazing**  
1600 - 1800 kg  
DM/ha



**Pre-grazing**  
3000 - 3300 kg  
DM/ha



**Remove**  
>3500 kg DM/ha



# Growing and maintaining the correct grass on the farm

## Perennial Ryegrass are still the most important grasses

*Highest feed value*

*Most responsive to fertiliser & long growing season*

*Persistent and resilient under good management*

*Easy to ensile*

## Weed grasses are less productive and responsive

*Invade the sward under poor management & nutrition*

## Soil Analysis is vital - pH Phosphate (P) Potash (K)

*At Ph 5.0 only 53 % of N fertiliser is available*

## Soil Nutrient Health Scheme- Providing valuable results.

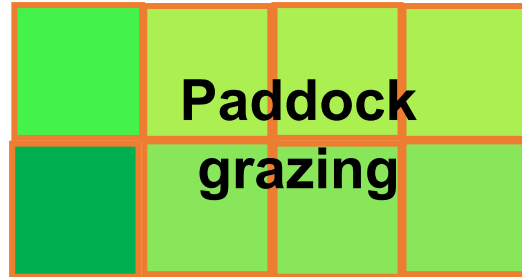
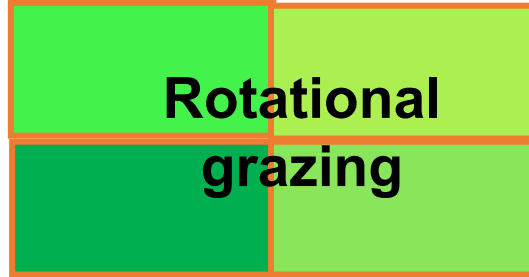
*Phased approach to sampling N.Ireland in 4 zones.*

The table below demonstrates the difference between various grass species, in terms of quality and energy content. It highlights the value of encouraging perennial ryegrasses in swards.

Grass Species	Average D value	Average ME (MJ/kg DM)
Perennial Ryegrass	73%	11.7
Timothy	68%	10.9
Smooth Meadow Grass	61%	9.8
Red Fescue	61%	9.8
Creeping Bent	58%	9.3

Source: SRDP Farm Advisory Service

# Grazing strategies adopted on beef farms



Grazing System	Annual Yield (t DM/ha)	Utilisation (%)	Usable yield (t DM/ha)	% increase
Set stocking	8.5	50	4.3	
Rotational	10.2	65	6.6	56%
Paddock	10.2	80	8.2	92%

**Small investment in water troughs, electric wiring & posts and labour gives a high return on investment**

# Importance of silage quality

- Cutting date has the greatest influence on silage quality

Source: AFBI Hillsborough

A general guide to the optimum input of concentrates for various types of finishing cattle (1 kg per day)

	Silage Quality		
	Very Good	Average	Poor
First cut taken	Before 25 <sup>th</sup> May	1 – 10 June	After Mid-June
Regrowth taken	6 – 7 weeks	8 – 10 weeks	Over 10 weeks
Average D value	Over 70	62 - 68	Less than 62
Heavy steers of high growth potential	3.0 kg	6.0 kg	7.5 kg
Heifers of high growth potential	2.2 kg	4.5 kg	6.0 kg



# Potential of Clover Swards

- White clover has higher digestibility, protein and mineral content than grass-only swards
- Newer more productive varieties developed over last 20 year
  - *Improved Spring growth*
  - *Better persistence and resilience*
  - *More productive*
- A grass clover sward fertilised with 50kg N/ha containing 10 – 20% clover can achieve a similar output of beef when compared to a grass only sward receiving 180 - 200kg N/ha
- High intakes on grass clover Swards and improved performance of up to 10 % higher DLWG.



# Summary

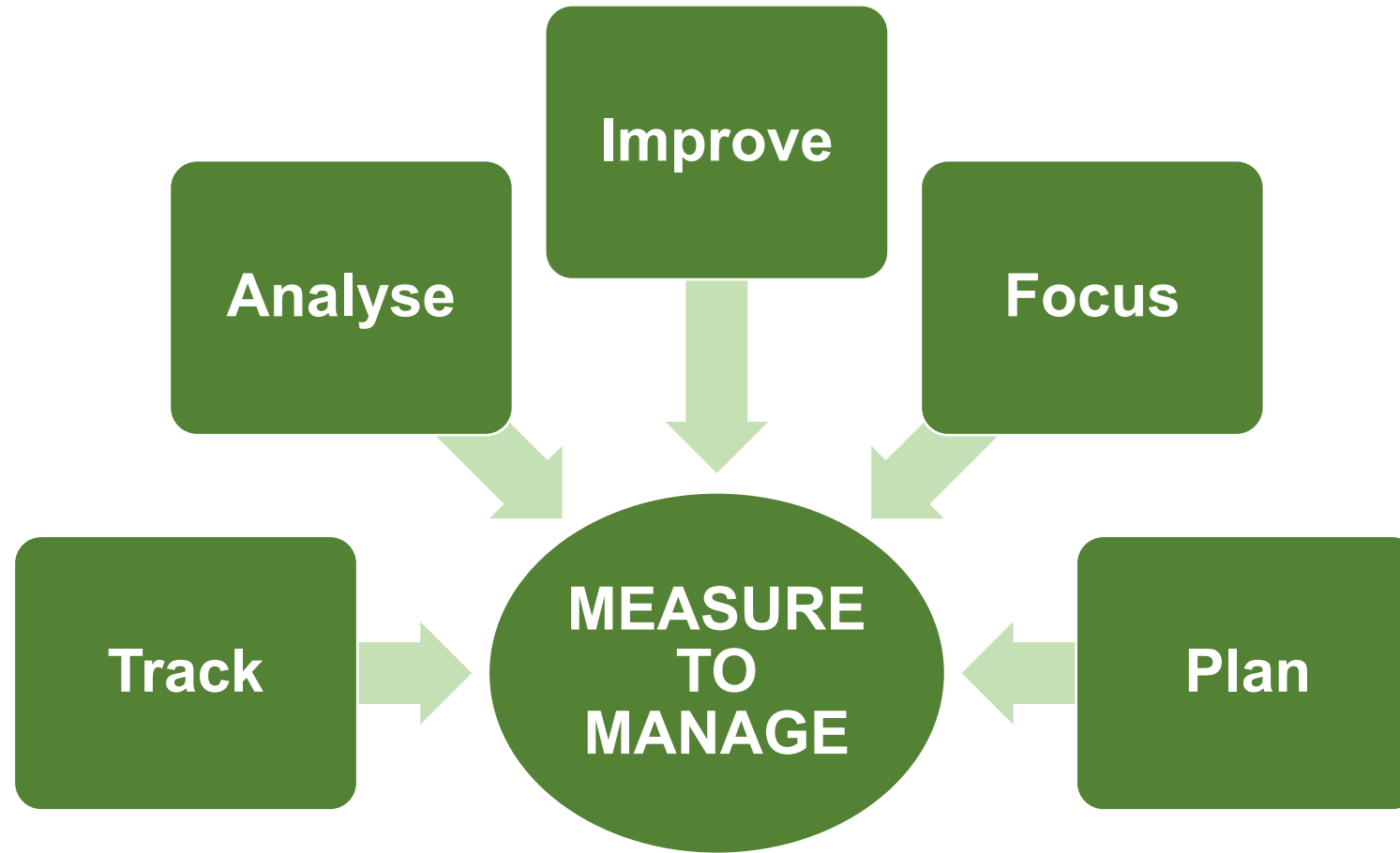
- Provide good leafy perennial ryegrass grass throughout the grazing season.
- Consider grass white clover introduction if reseeding
- Aim to make good silage 70 D value +
- Weigh cattle regularly to see if they are on target
- Make efficient use of slurry via Nutrient plan and apply via LESSE
- Examine best additional methods to reduce the Carbon Footprint.

# How to Achieve

- Benchmarking
  - Ensuring Financial Sustainability



# What can a benchmark do for you?



# What do the figures tell us?

- Businesses are ranked by gross margin to give Top 25% and Bottom 25%
- Focus is placed on the following key metrics:
  - Slaughter age
  - Carcase weight
  - DLWG
  - Feed costs

# Analysis of slaughter age and carcass weight and DLWG of steers

	Average age of slaughter of steers (months)	Average carcass weight of steers (kg)	Average DLWG of steers (kg)
Top 25%	22.2	355	0.91
Bottom 25%	22.5	354	0.88
Average	22.8	362	0.89
% difference Bottom 25% v Top 25%	+1%	-	-3%

# Analysis of feed costs

	Concentrate costs per animal (£)	Total amount of concentrate fed/animal (kgs)
Top 25%	233	780
Bottom 25%	379	1056
Average	299	894
% difference Bottom 25% v Top 25%	+62%	+35%



Data from AFBI BovIS

Average carcass weight (kg) of steers slaughtered 2023					Average carcass weight (kg) of heifers slaughtered 2023				
Dairy Bred	2023 - Age in Months				Dairy Bred	2023 - Age in Months			
Breed	24-25	26-27	28-30	30+	Breed	24-25	26-27	28-30	30+
CH	376.4	380.4	384.2	382.1	CH	333.5	337.5	342.5	347.5
AA	302	308	307	310	AA	307	310	310	310
CH	398.8	402.9	408.9	409.6	CH	310	310	310	310

8 Kg difference

10.8 Kg difference

Beef bred	2023 - Age in Months			
Breed	24-25	26-27	28-30	30+
CH	398.8	402.9	408.9	409.6
DAQ	390.6	386.6	385.8	401.7
LIM	389.7	395.3	399.1	398.9
BB	389.3	390.7	391.2	390.4
SIM	375.4	377.2	382.7	372.4
AA	361.8	363.4	361.6	369.4
HER	353.7	362.6	369.3	368.1

Beef bred	2023 - Age in Months			
Breed	24-25	26-27	28-30	30+
CH	352	356	360	365
LIM	336	341	347	351
BB	336	332	339	336
DAQ	335	341	348	349
SIM	324	325	331	341
AA	313	316	318	324
HER	304	313	312	326

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...Across all age ranges and sire breeds,  
suckler bred steers finish 25-30kg heavier  
than dairy bred

- Across all age ranges, suckler bred heifers finish 15-20 kg heavier than dairy bred beef heifers
- From 22 months on, there is no meaningful difference in average slaughter weight at any given age for any breed

# BovIS online tools

*The BovIS online tools can help you meet BCR targets through:*

- The online carcass benchmarking tool
  - Review cattle slaughtered and see if they have achieved the targets
- The online growth rate calculator
  - manage dairy origin beef to ensure they are growing adequately
  - compares the actual weight of cattle in your herd to a target
  - provides target growth rates and dietary advice to meet these targets

*The BovIS tools are available free of charge through your government gateway account. Ask your CAFRE advisor for more details*

# BovIS online carcass benchmarking

- Review your cattle slaughtered and get a break down of the carcass characteristics of your cattle
- Options to benchmark against producers of similar cattle, different time frames or different breeds

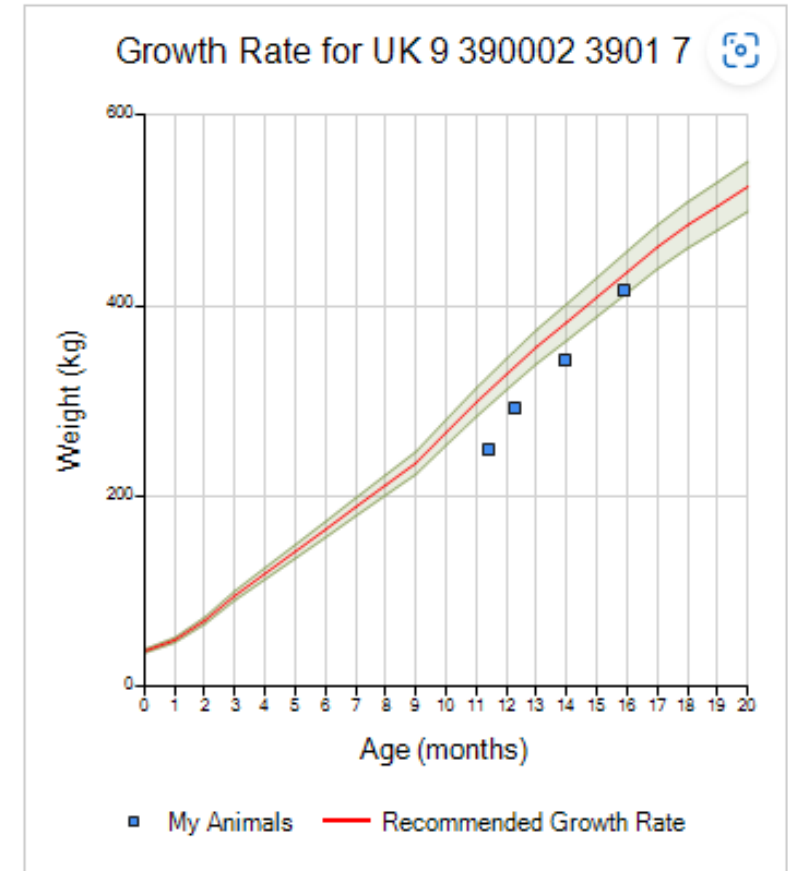
## Summary of Your Performance

	Animal count	Weight (kg)	Fatness	Conformation	Age (mths)	Carcase gain (kg/day)	In spec (%)
Pure Dairy	18	360	3+	O-	25.6	0.46	11.1
Native Sire x Dairy	13	371	3=	O+	23.2	0.52	15.4
Continental Sire x Dairy	26	447	3=	R+	27.3	0.54	2.1
Pure Continental	14	340	3+	R-	28.6	0.53	73.0

# BovIS online growth rate calculator

- Select the desired age at slaughter for your dairy origin beef
- Enter the weight of the animal and date of weighing to generate a target growth rate for an individual or group of cattle
- Enter your silage quality to get tailored dietary advice to achieve growth targets

*The BovIS tools are available free of charge through your government gateway account. Ask your CAFRE advisor for more details*



# Summary

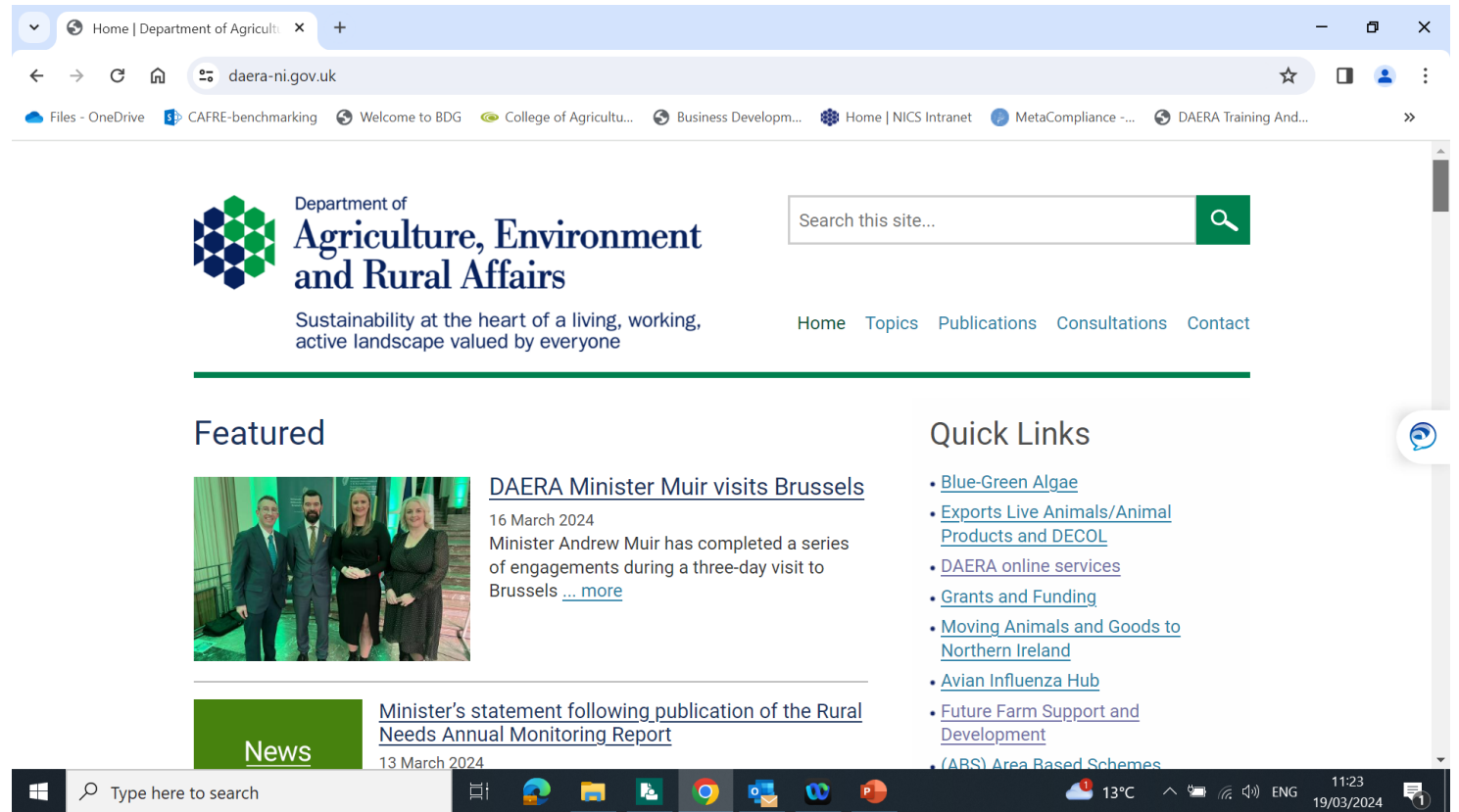
- Slaughter weights and age are all below 24 months, on average.
- DLWG's don't vary across Top and Bottom 25% - it's the "*HOW*" they are achieved that makes the difference.
- The Bottom 25% farms are spending more on feed to achieve a similar performance to the Top 25%.
- Efficient productivity in agriculture is closely linked to carbon efficiency within your farm business therefore managing age at slaughter is a critical element of this.

# BCR – Scheme Admin

- Farm Businesses only need to ‘opt-in’ once during lifetime of the scheme. No need for an annual claim.
- Can opt-in at any time in the scheme year – no application period.
- Simple tick box process to opt-in.
- You **CAN’T** opt in in 2025 for the 2024 scheme year.
- No need for farm businesses to submit any data to The Department as the data is already held on NIFAIS to determine eligibility.
- Knowledge interventions will be provided to enable farmers achieve high husbandry standards to meet scheme conditions.

# How to Apply

- DAERA website
  - Click and collect!
- [www.daera-ni.gov.uk](http://www.daera-ni.gov.uk)
- As an individual or agent



**Thank-you for coming**

**Any Questions?**

## Beef Sustainability Package

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# Beef Sustainability Package

The Beef Sustainability Package will aim to help ensure the future viability of the beef sector, by helping the sector to keep pace with competitors, improve profitability, resilience and importantly reduce greenhouse gas (GHG) emissions.

It comprises the following two measures which together seek to improve productivity and reduce emissions from older non-breeding animals:

- Beef Carbon Reduction (BCR) scheme - open now
- Suckler Cow scheme - In Development

Information and guidance on BCR scheme [available here](#)

To access the scheme, please sign in below.

### Before You Start


You will be asked to sign in using your GOV.UK Government Gateway or Northern Ireland Identity Assurance (NIDA) details

If you do not have sign in details for either of these identity providers then you will have the option to register.

[Sign in / Register >](#)

## Welcome to Beef Sustainability Package


Choose a service to access Beef Sustainability Package



**NIDA Sign in / register**

Sign in using the Northern Ireland Civil Service Identity Assurance (NIDA) provided by nidirect.  
[Find out more](#)

For advice on logging in via nidirect contact:  
**0300 200 7868** or [nida@nidirect.gov.uk](mailto:nida@nidirect.gov.uk)






**GG Sign in / register**

Sign in using your DAERA online services Government Gateway account.  
[Find out more](#)

For advice on logging in via Government Gateway contact: **0300 200 7848**

## Notices

-  Welcome to Online Services [Click here for more details.](#)
-  DAERA Direct Identity Verification Appointments [Click here for more details.](#)
-  Nifais Online replacing Aphis Online [Click here for more details.](#)

## Further information

For more information on the applications within **Beef Sustainability Package**, email your local **DAERA Direct Regional Office** [or](#) telephone **0300 200 7840**

### More information

Visit [nidirect](#)  
Visit [daera-ni.gov.uk](http://daera-ni.gov.uk)

### Contact DAERA

DAERA Online Services Helpline: **0300 200 7840**  
(Monday to Friday, 9.00am - 5.00pm)

Beef Sustainability Package DETAIL Farms  
(699999)

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# Beef Sustainability Package

## Beef Carbon Reduction scheme

To be eligible, a farm business must have claimed for, and be eligible for payment of:

- the Basic Payment Scheme (in 2024); or
- the new Farm Sustainability Payment from 2025 onwards.

**Opt in >**

There are 326 days remaining to opt in to the Beef Carbon Reduction scheme for 2024

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Beef Carbon Reduction scheme

# Declaration

 You are completing this declaration on behalf of all members of this business.

You are only required to opt in once for this scheme - you will not be required to opt in every year.

## You must agree to the following

\* I have read and confirm that I understand and agree to the [terms and conditions](#)

Submit



## Beef Carbon Reduction Scheme - Terms and Conditions

Topics: [Future Farm Support and Development](#) , [Grants and Funding](#) , [Livestock Farming](#) , [Advice and guidance](#) , [Area-based schemes 2024](#)

The information below is the Terms & Conditions that have been set out for the Beef Carbon Reduction Scheme

### Terms and Conditions of Beef Carbon Reduction Scheme



DAERA PRIVACY NOTICE

DAERA takes data protection, freedom of information and environmental information issues seriously. It takes care to ensure that any personal information supplied to it is dealt with in a way which complies with the requirements of the Data Protection Act 2018 and the General Data Protection Regulation effective from 25 May 2018. This means that any

### Related articles

- [Area-based Schemes - Scheme Details](#)
- [Area-based Schemes Review of Decisions Procedure](#)
- [Biodiversity Checklist](#)
- [Common Health Entry Document Operator Portal \(CHOP\) Registration Process](#)
- [DAERA Digital datasets available for download](#)
- [DAERA Map Viewers](#)
- [Development Plan Evidence Guides](#)
- [Entitlements and Transfers](#)

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## Beef Carbon Reduction scheme

# Confirmation

Thank you, you have successfully opted in to the Beef Carbon Reduction scheme. You will receive an email shortly with a link to a message with your confirmation.

[View summary details](#)

### One more thing ....

If you as an applicant, or agent on behalf of applicants, wish to help DAERA comply with Section 75 NI Act (1998), [please complete an equality monitoring survey \(opens in new tab\)](#).

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Beef Carbon Reduction scheme

# Summary details for 2024

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**Scheme Year**      2024

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Beef Carbon Reduction scheme

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# Summary details for 2024

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## Beef Carbon Reduction scheme History

### DETAIL Farms (699999)

Person	Type	Status	Date
A.N. Other (123456)	Agent	OPTED IN	22 February 2024 @ 10:05
A.N. Other (123456)	Agent	OPTED OUT	22 February 2024 @ 10:05
A.N. Other (123456)	Agent	OPTED IN	16 February 2024 @ 14:34

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## Beef Carbon Reduction scheme

# Summary details for 2024

**Business** DETAIL Farms (699999)

**Opt in status** **OPTED IN**  
You opted in on 19 February 2024

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**Scheme Year** 2024

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Beef Carbon Reduction scheme

## Confirmation

**Do you wish to opt out of the Beef Carbon Reduction scheme?**

Yes

No

If you choose to opt out you will not be eligible for a payment for the current scheme year and subsequent years. You can choose to opt in again, however you will only receive a payment from the year in which you have opted back in.

**Continue**

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