



Irish Beef Farming: Rising to the Climate Challenge

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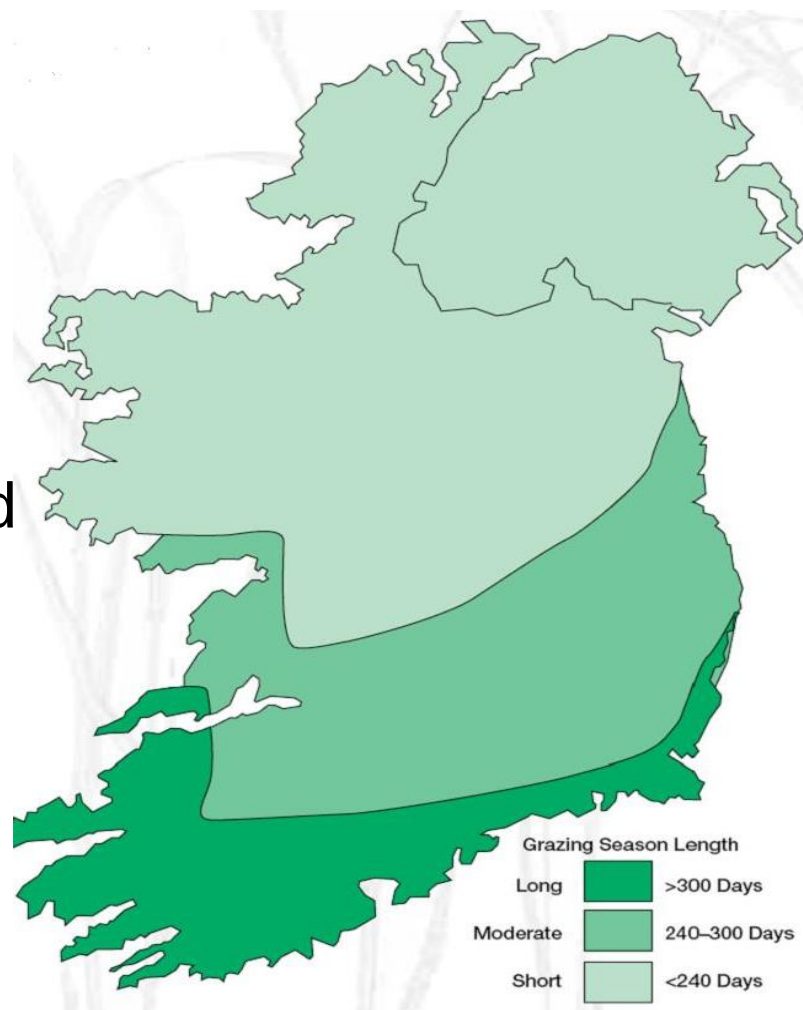
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3rd LIFE Beef Carbon Farmer Network, 4th May, 2021

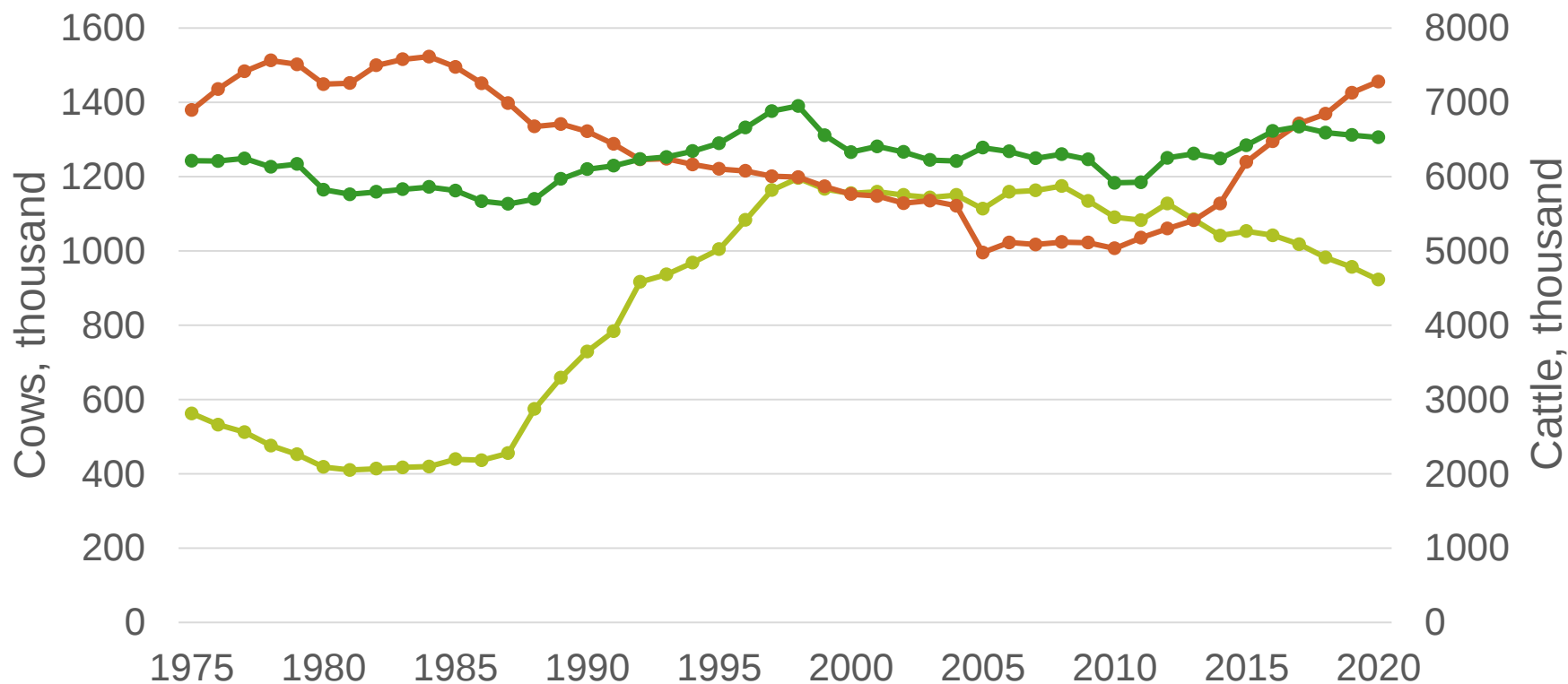
Introduction

- Ireland is covered in the largest proportion of grassland in Europe
 - 4.5 million hectares
 - 90% of agricultural area
- Most farmers operate grass-based production systems
 - Temperate climate (high rainfall)
 - Long grass growing season
 - Nutritious and cost effective feed



Irish Cattle Population

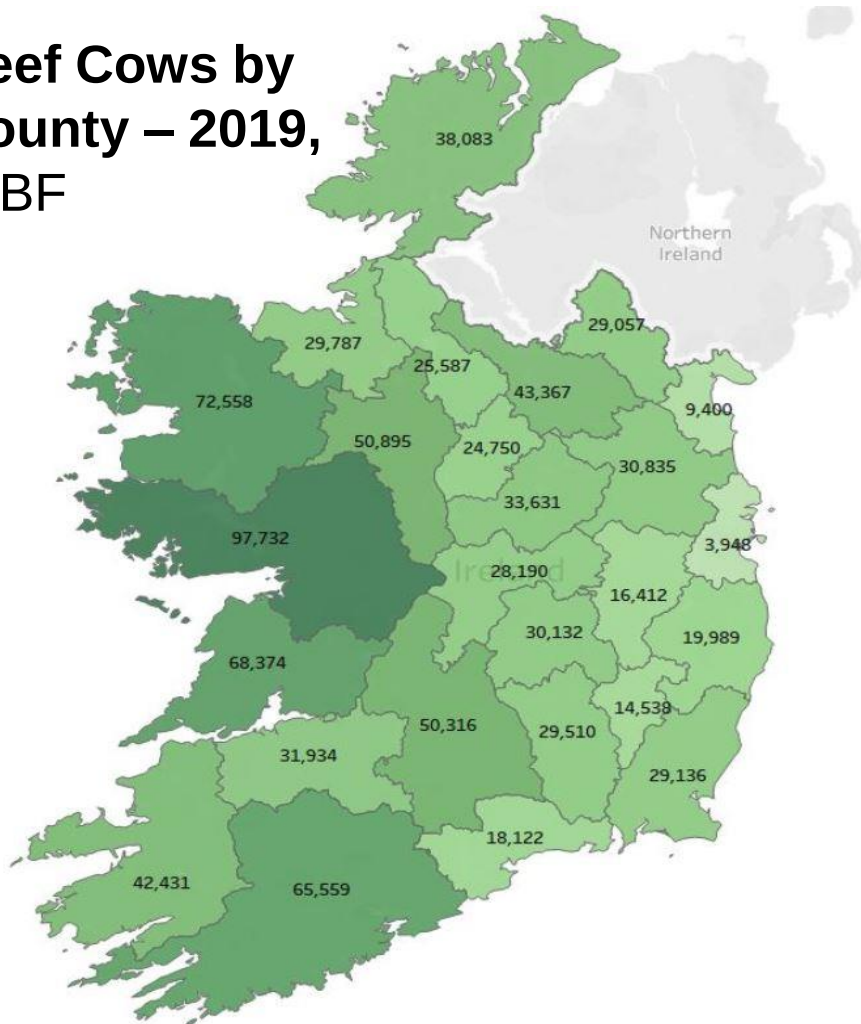
— Beef Cows — Dairy Cows — Total Cattle



Source: CSO

Irish Cattle Population

Beef Cows by County – 2019, ICBF



Irish Beef Carbon Demo farms

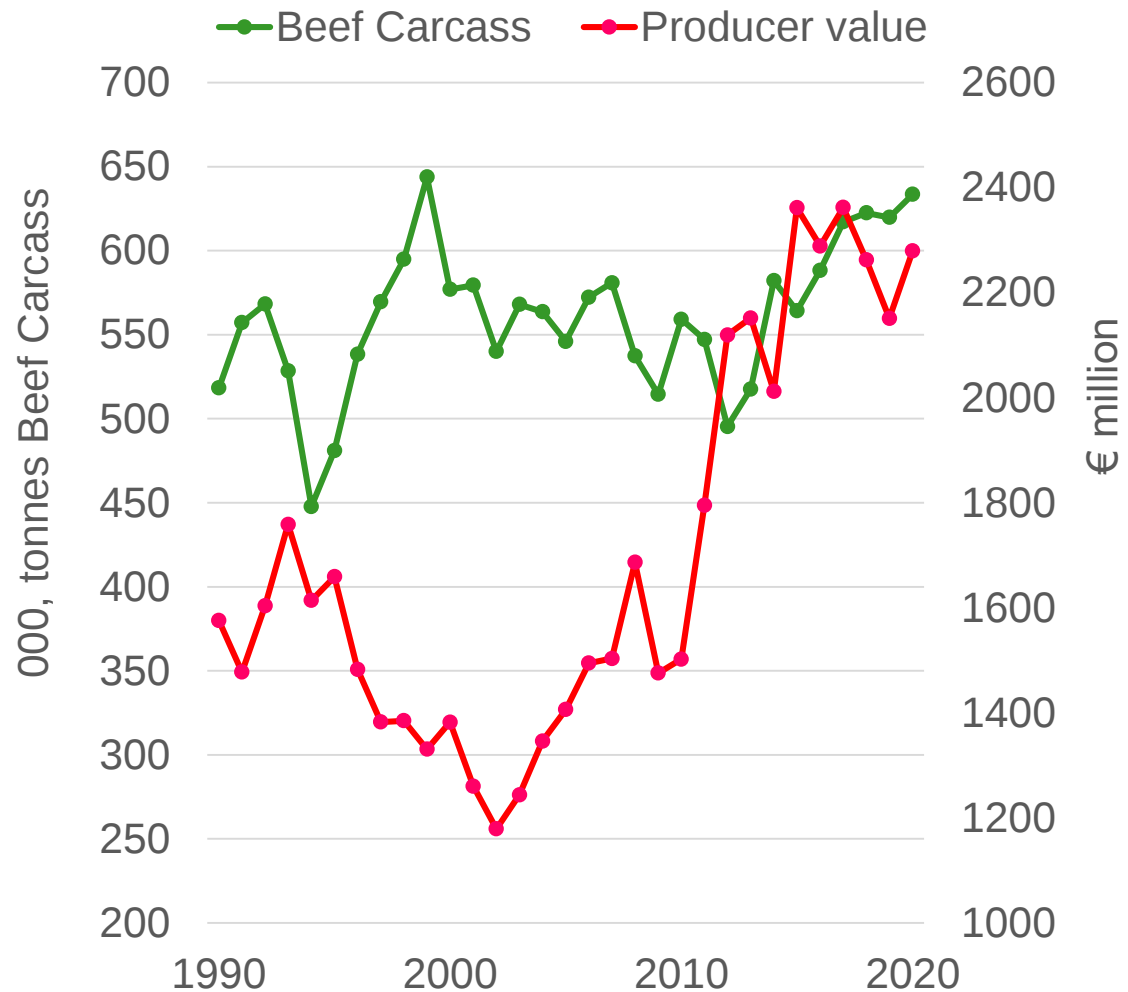
Beef Farming in Ireland

- ~75% of farmers stock beef cattle
 - 100,000 farms
- Part-time & full-time operators
 - 40% specialist producers work off-farm
- Principal beef farming systems
 - Suckler beef → Mainly “Continental” – Limousin, Charolais
 - Dairy calf to beef
 - » Friesian Dam x Dairy or Beef Sire
 - » Growing share of beef production



Irish Beef Production

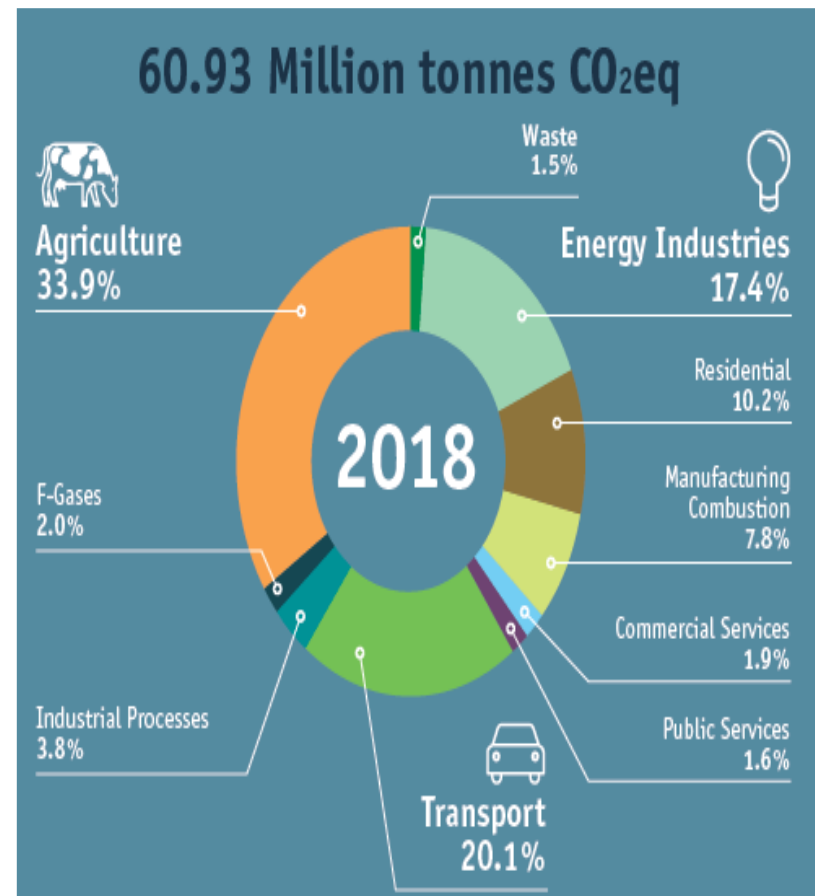
- Export oriented sector
 - Self-sufficiency $\approx$ 680%
 - 90% of beef sold abroad
 - $\sim$ 50% goes to UK market
- Reliant on supports
- Multiplier effect
 - €1 of direct payments supports €4 of output



Source: CSO

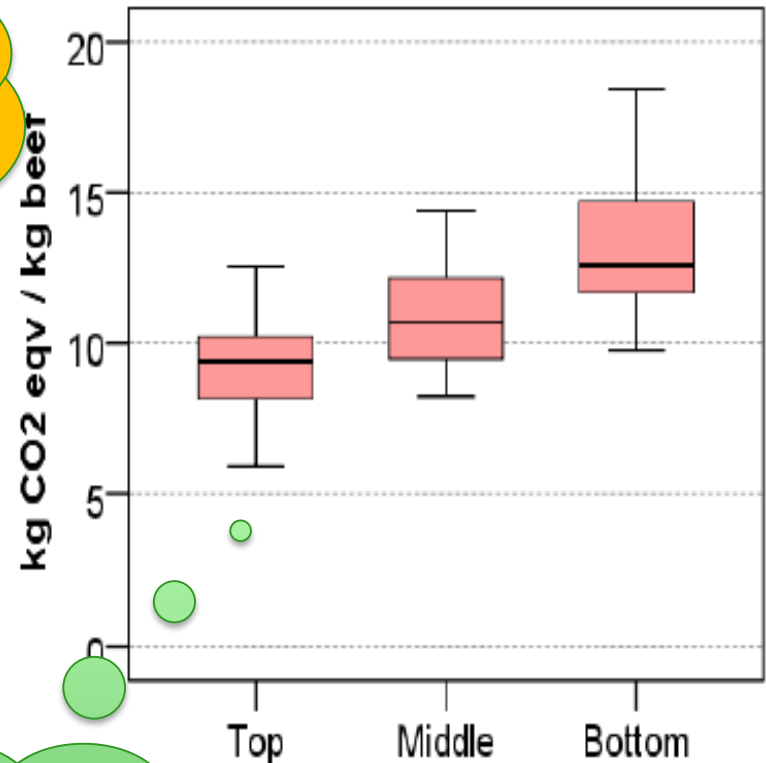
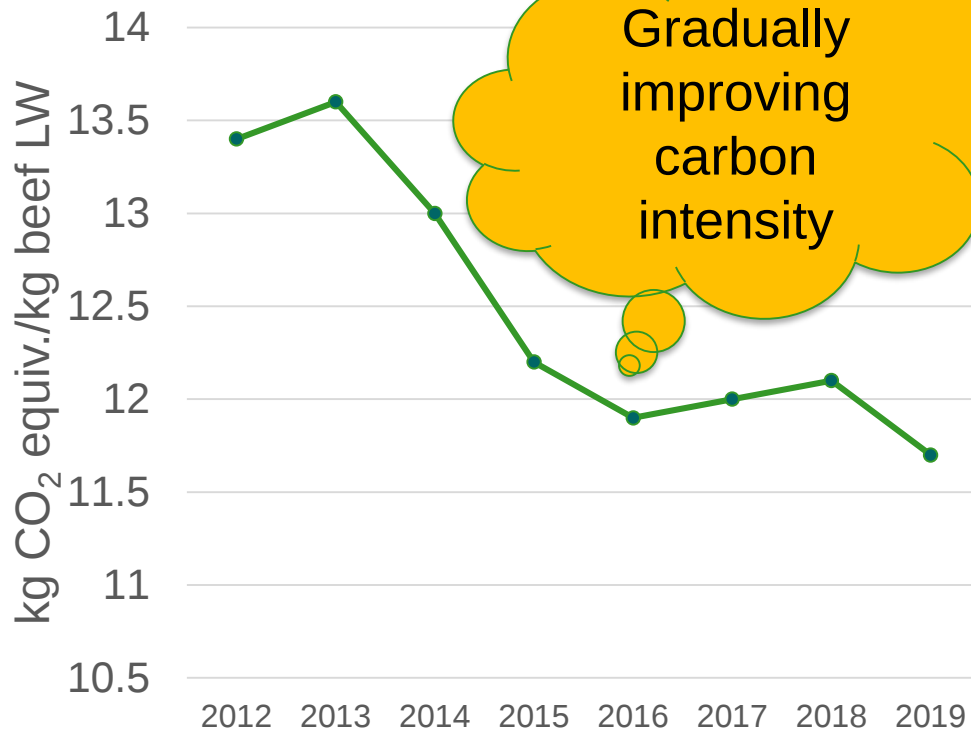
Irish Cattle and Climate Change

- Cattle farms emit methane, nitrous oxide and carbon (CO₂)
 - Gases converted to CO₂ equiv.
 - Methane = 25, Nitrous oxide = 298
- Beef production key source of carbon emissions
 - ≈18% of Irish total
 - EU agriculture ≈ 10%
- Climate Change Bill 2021
 - Carbon emissions: -7%/year
 - Climate neutral by 2050



Source: Irish EPA

Carbon Intensity of Beef - Agricultural Sources

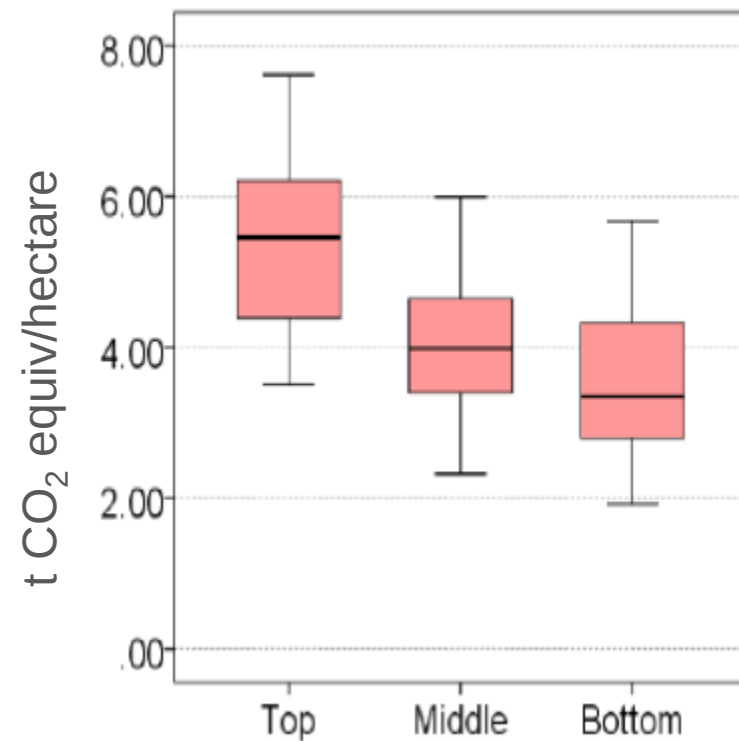
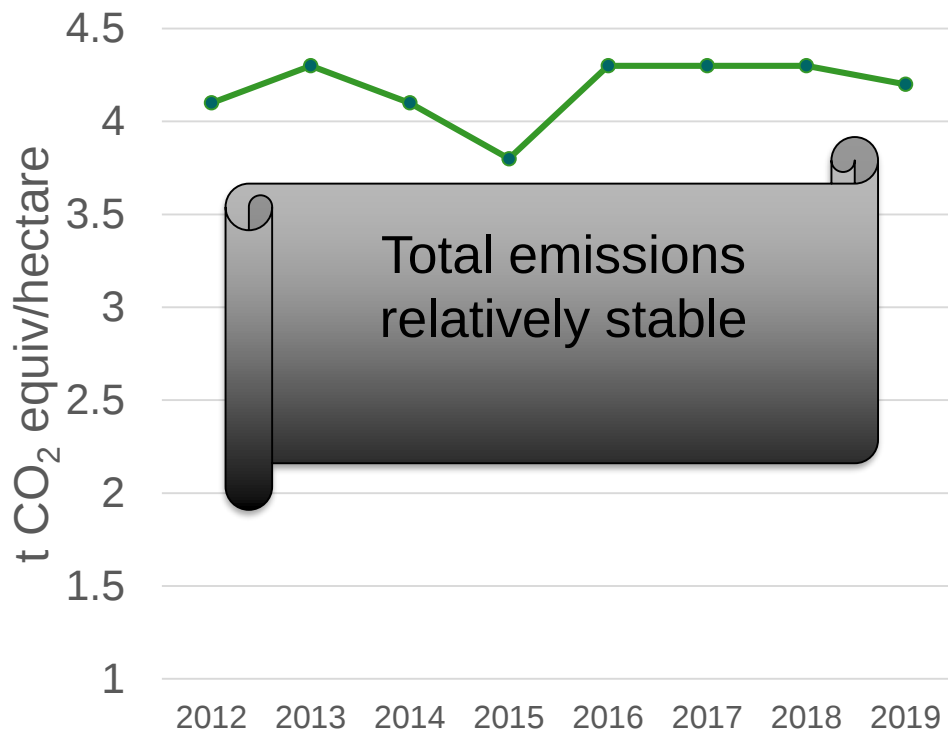


Source: NFS
sustainability report

Greater income
– Lower carbon
intensity

Farm Income

Carbon Emissions from Beef Farmland - Agricultural Sources



Source: NFS sustainability report

Farm Income



Irish Beef Carbon Action Plan



- Implement proven low carbon farming technologies
 - Stabilized Urea & Trailing shoe
- Increase organic carbon (sequestration) in soils and woody vegetation e.g., hedgerows
- Accelerate improvements in technical efficiency and productivity



Thanks for Watching



Questions?

Acknowledgements
EU LIFE 14 programme
(Climate Change Mitigation)

