

The image is a composite background. On the left, a close-up shows a hand holding a large, dense bundle of bright green grass. On the right, a dark-colored cow stands in a green field under a blue sky with light clouds. A yellow ear tag with the number '0148' is visible on the cow's ear. A horizontal bar with segments of green, yellow, and brown is positioned above the main text.

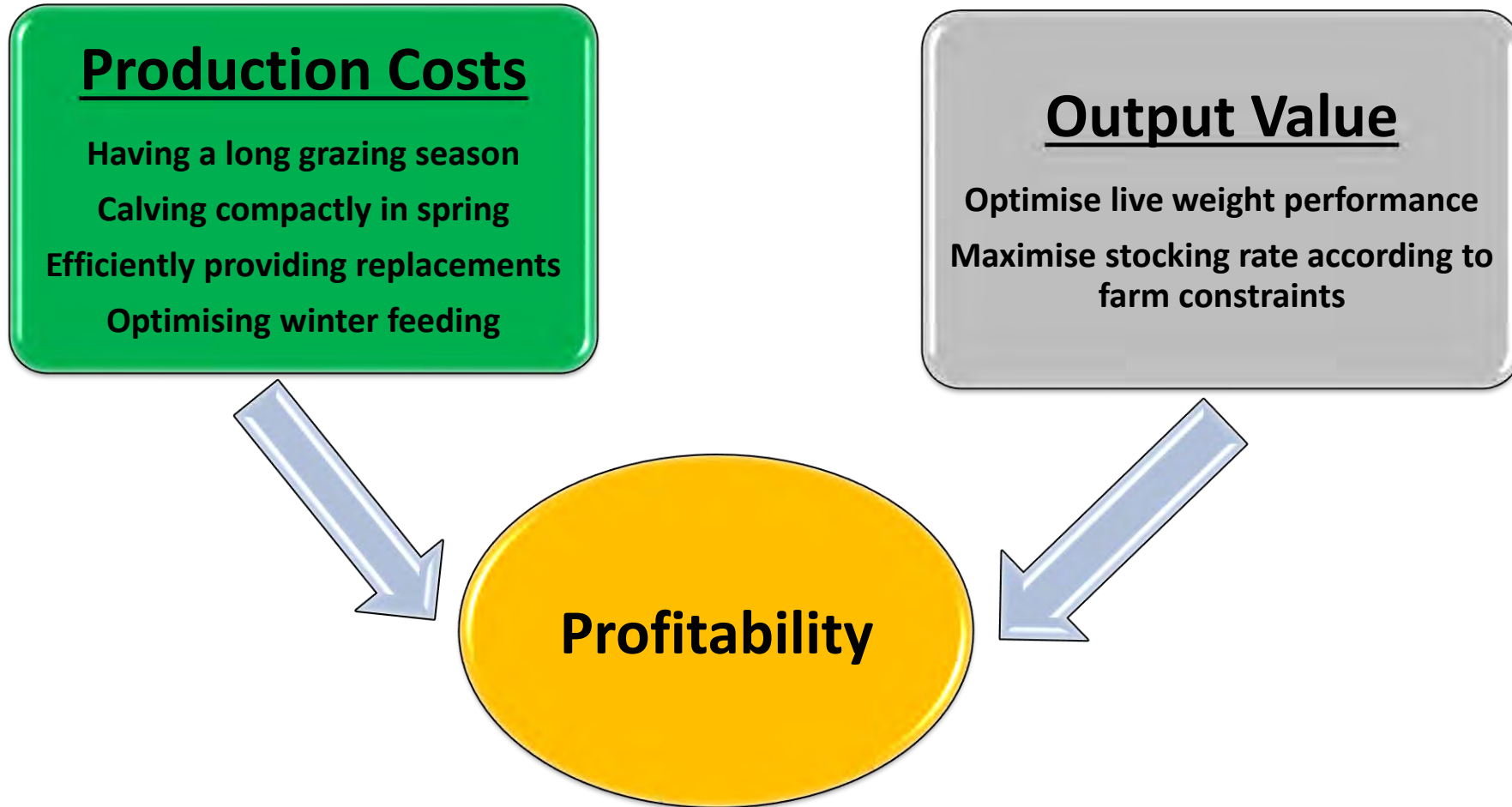
Assessing the potential to improve key profit drivers on beef farms

Teagasc Beef Conference 2022

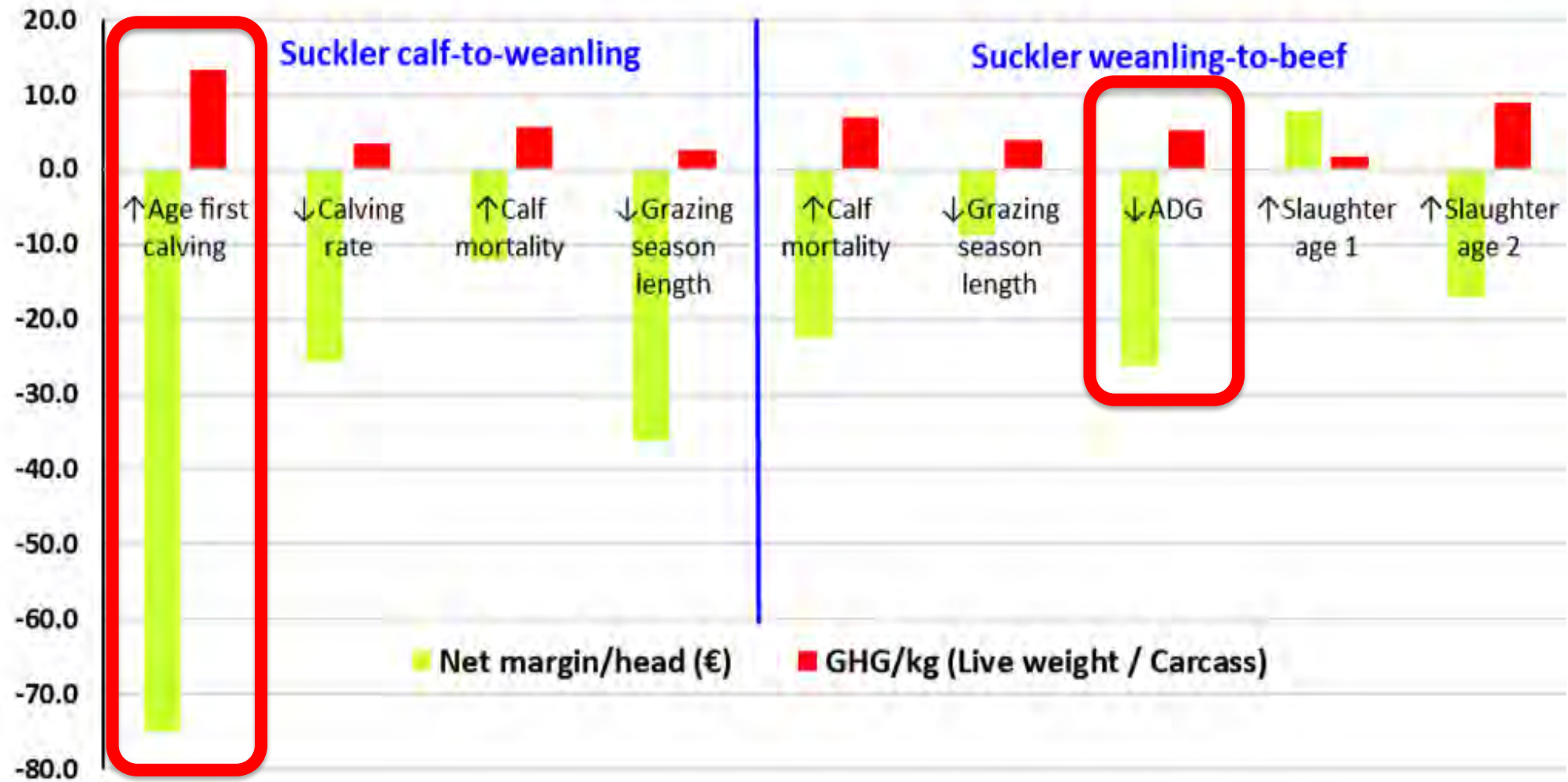
Paul Crosson
Teagasc Grange

13 December 2022

Profit Drivers

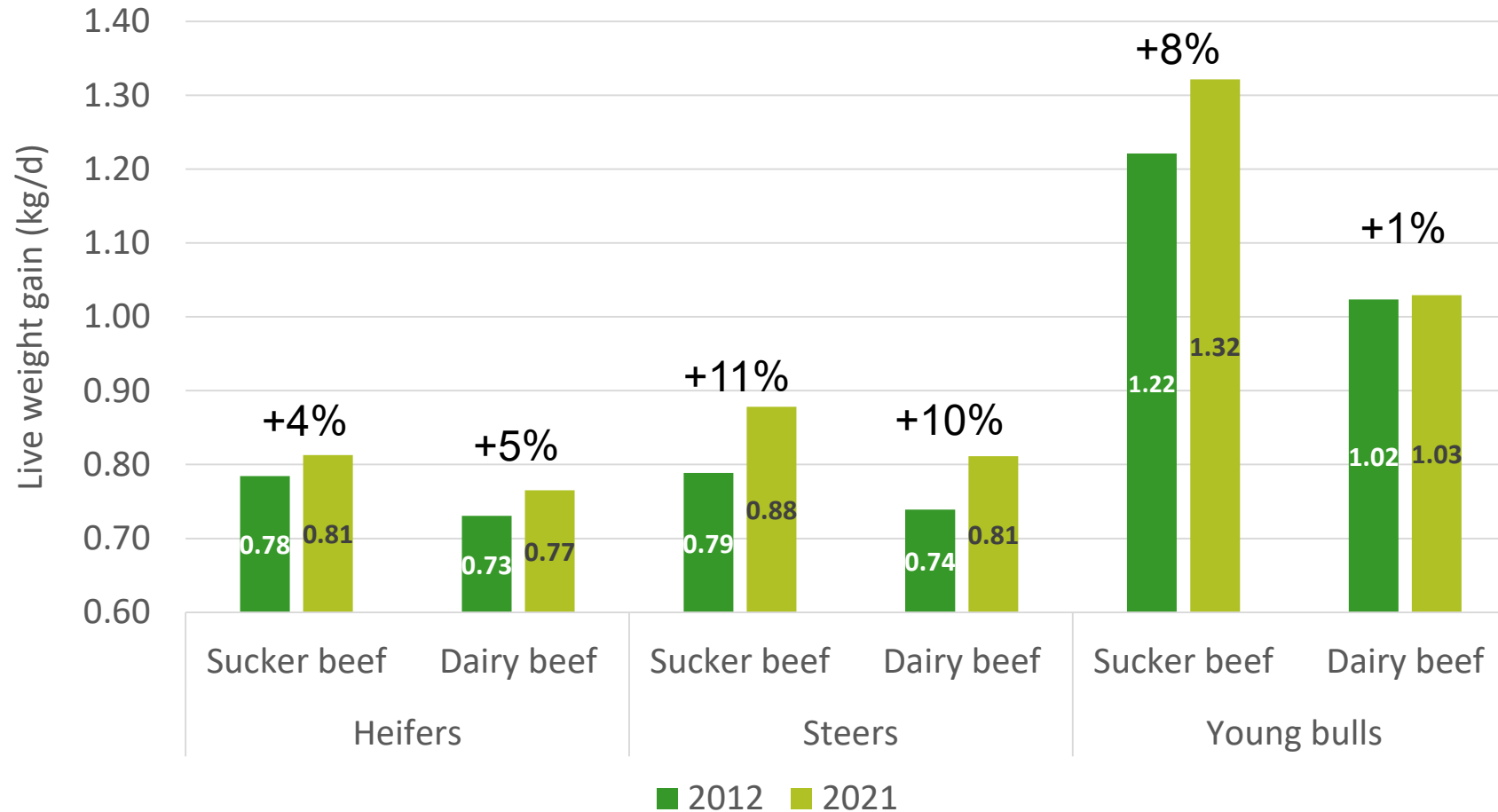


Animal-level profit drivers for beef systems



Source: Teagasc Grange

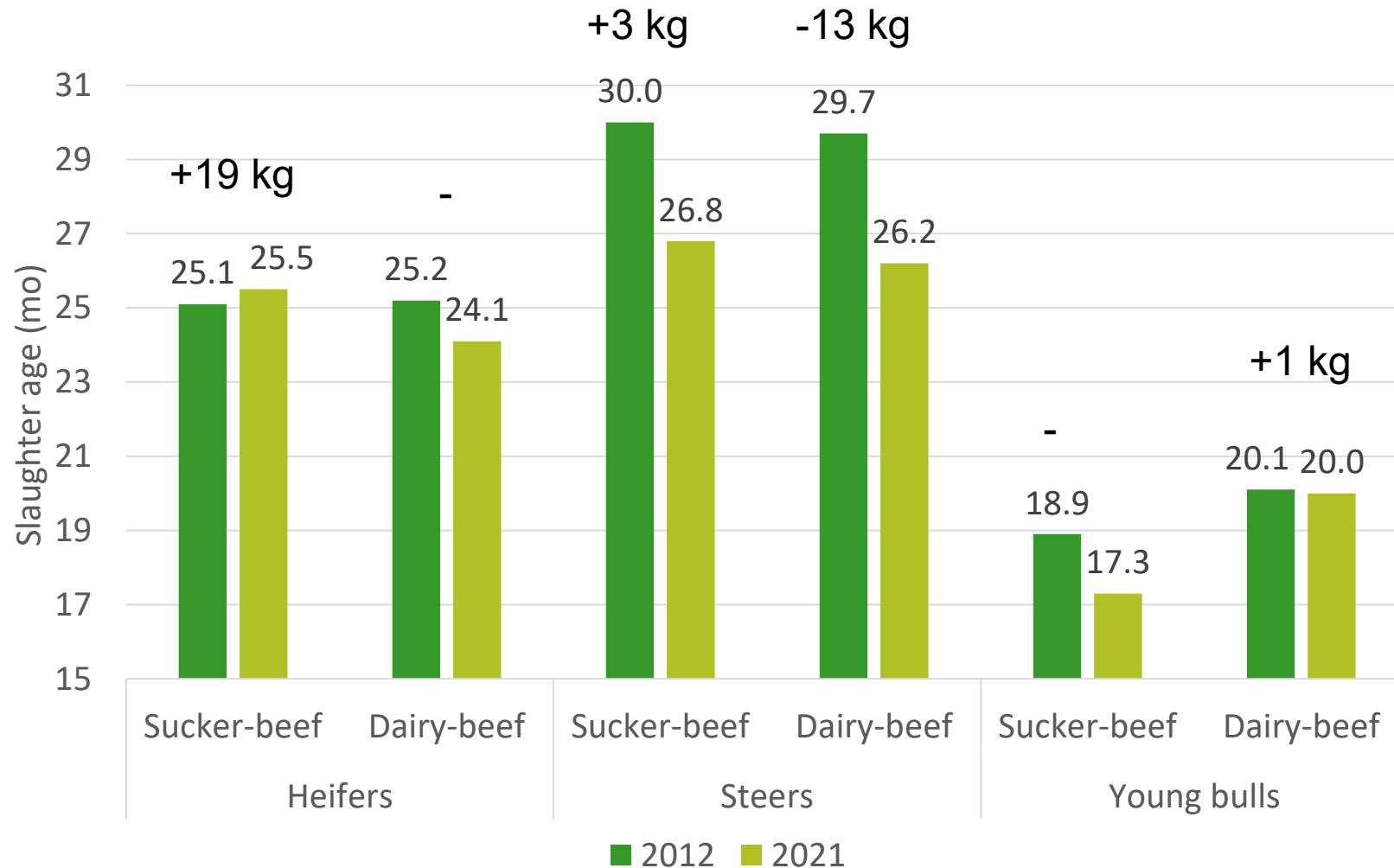
Comparison in live weight gain, 2012-2021



Key drivers

- Carcass specs (QPS, 2009)
- Herd health (AHI, 2009)
- Genetics (Eurostar reviews, 2012, 2015; BDGP, 2016)
- Advisory and KT (BETTER beef, 2009; KT schemes)
- Producer standards (Bord Bia SBLAS, 2017)

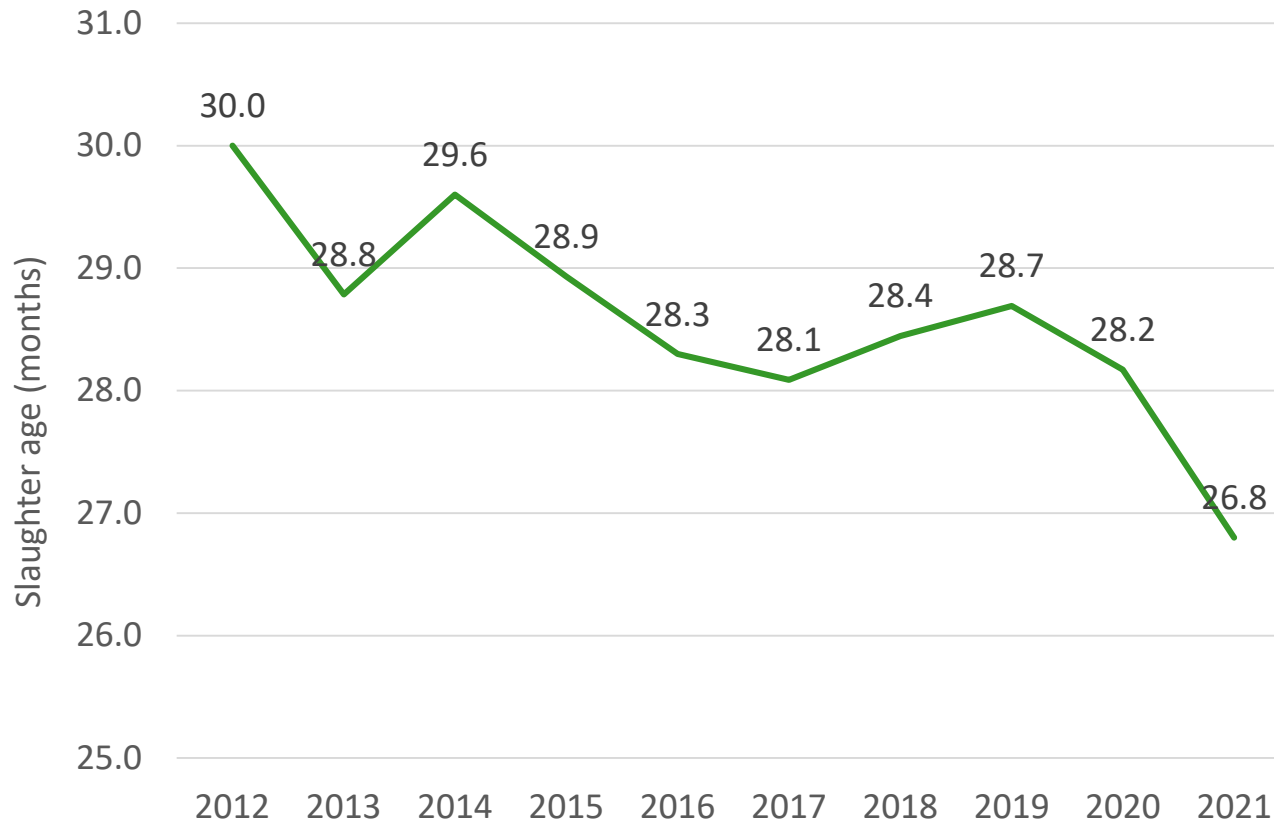
Comparison in slaughter age, 2012-2021



Implications

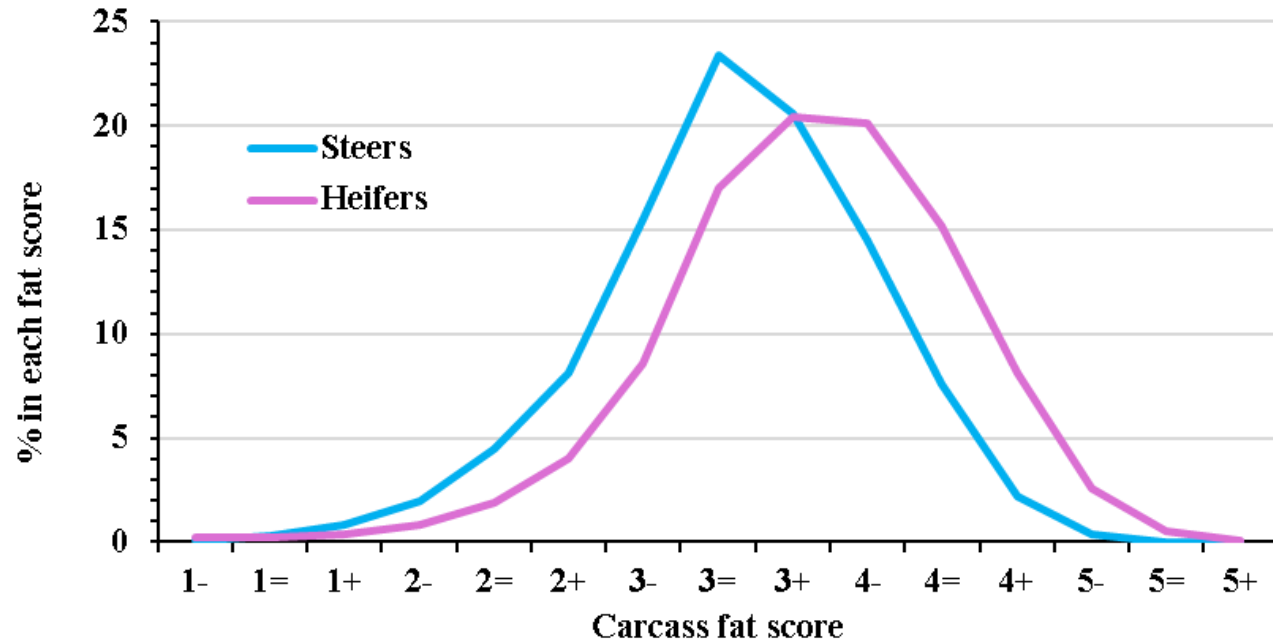
- Less feed
- Facilities savings
- Labour savings
- Lower GHG emissions
- Higher profit

Example of progress – suckler steers



- Slaughtered 98 days earlier
- Similar carcass weight (+3 kg)
- Similar carcass grade (R=3=)
- GHG emissions saving of ~42 kt CO₂e
- At current feed costs, saving of ~€25 m

Potential for further progress



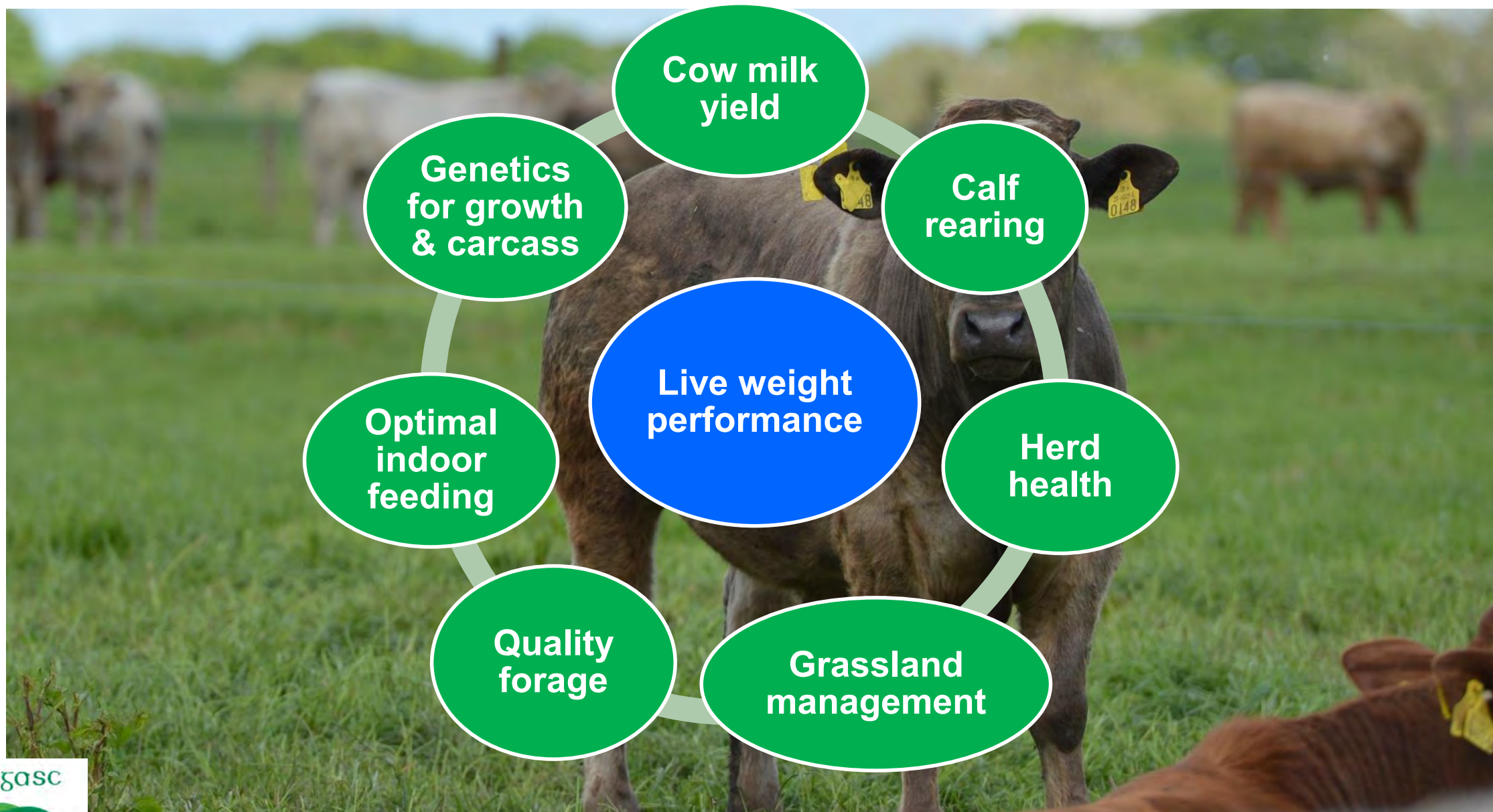
- **≥3-** 84% of heifers, 70% of steers
- **≥4-** 47% of heifers, 25% of steers

Effect of finishing duration

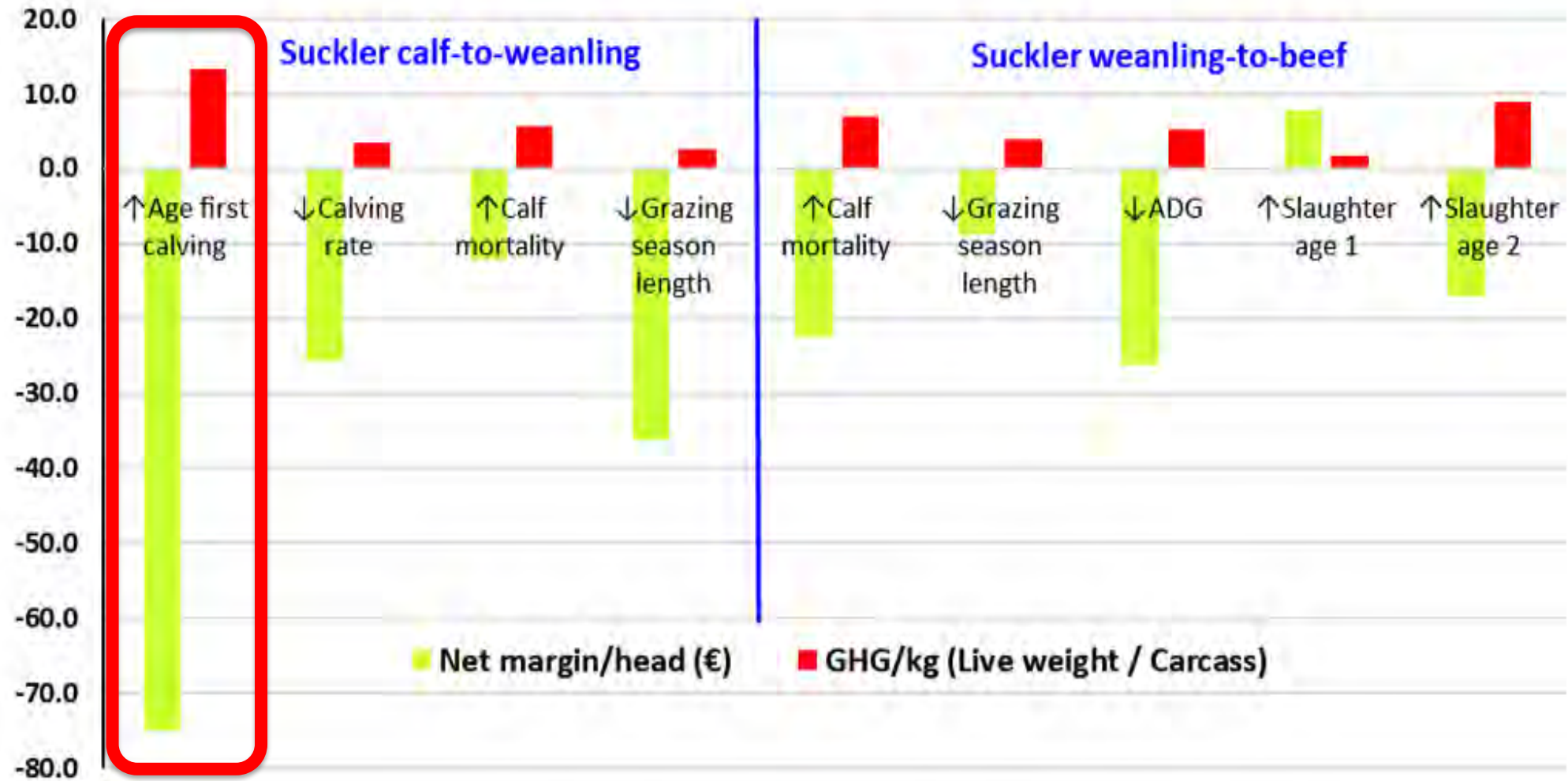
Finishing period	0-12 weeks	12-23 weeks	Diff
ADG (kg/day)	1.42	1.16	-19%
Carc. gain (kg/day)	1.04	0.84	-19%
Fat score	3= (/3+)	3+ (/4-)	
Con intake (kg DM)	10.2	11.2	10%
Feed efficiency (DMI/Gain)			
Live weight	7.2	9.9	-38%
Carcass weight	9.9	13.6	-38%

Source: Teagasc Grange

Achieving target live weight gain

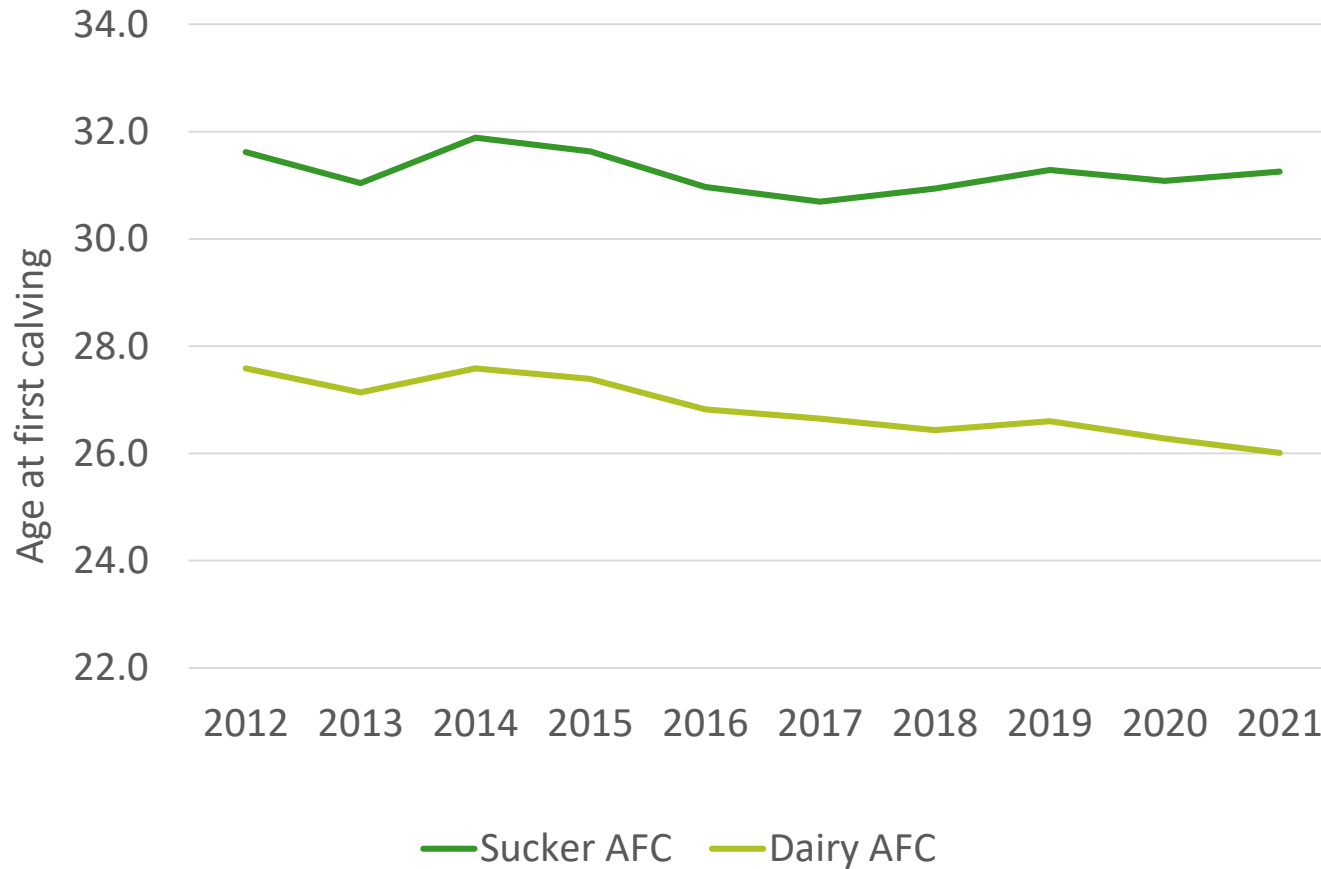


Profit drivers for beef systems



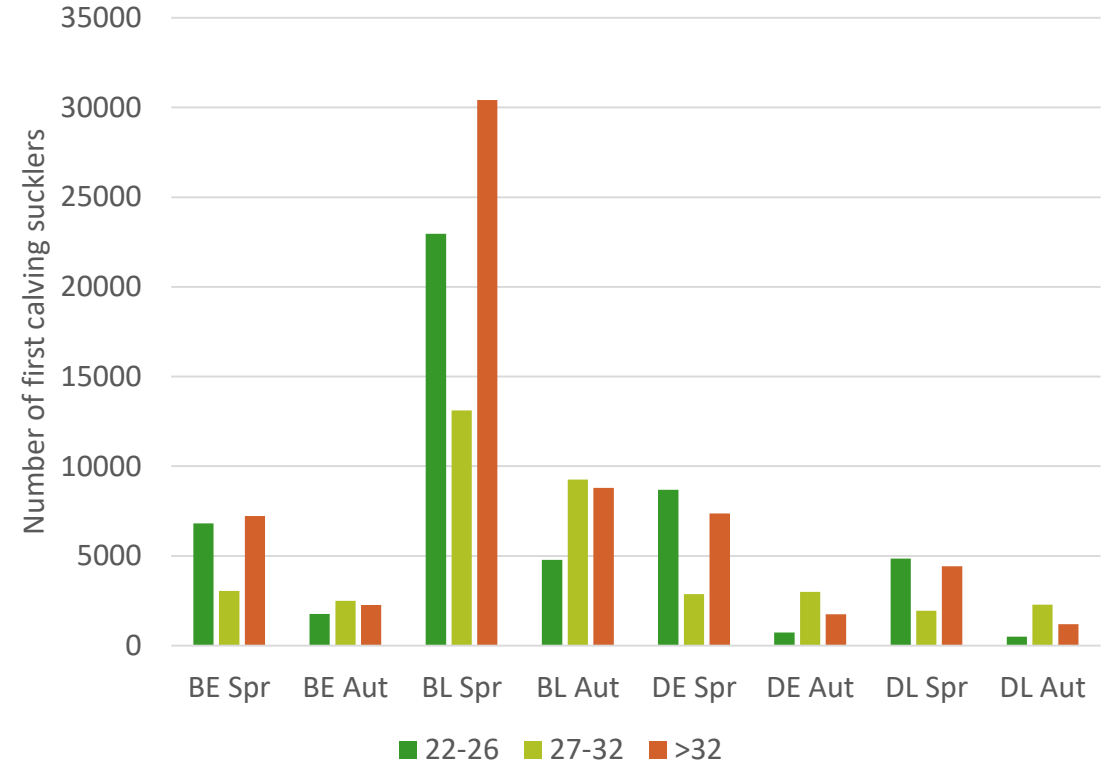
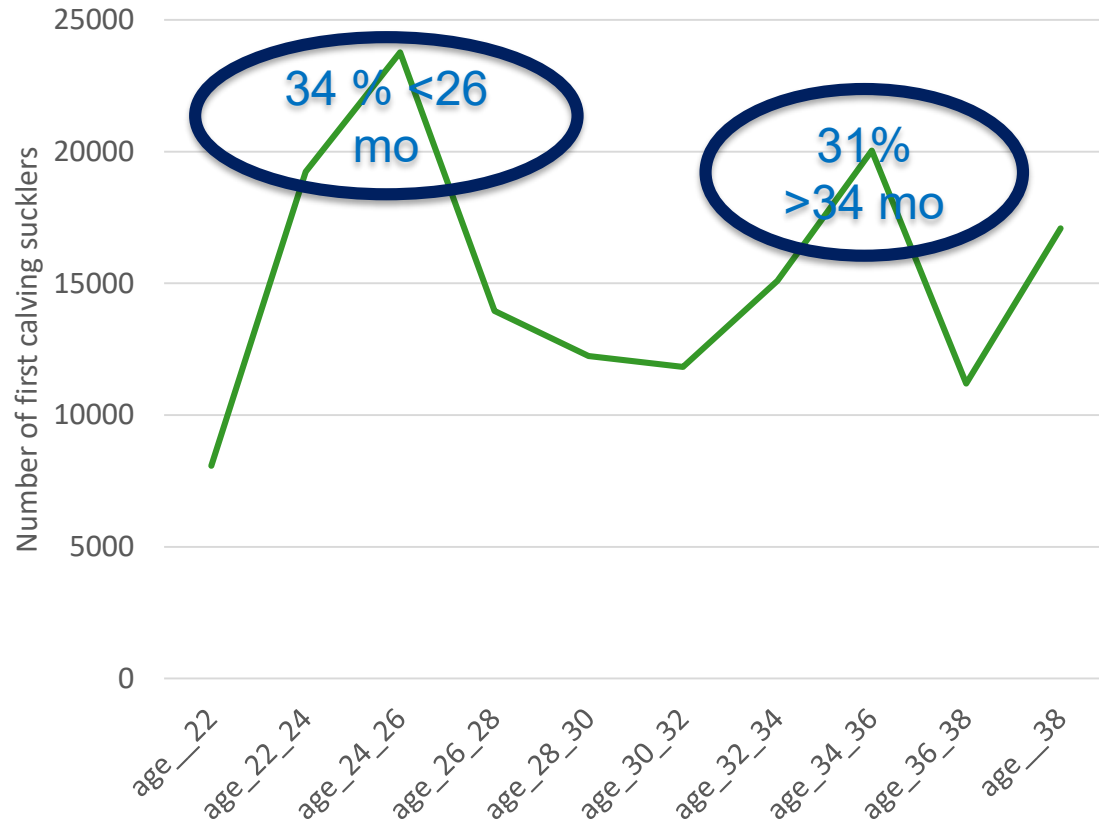
Source: Teagasc Grange

Ten-year trend in age at first calving



- Little change in age at first calving for sucklers
- 31.6 months in 2012, 31.3 months in 2021

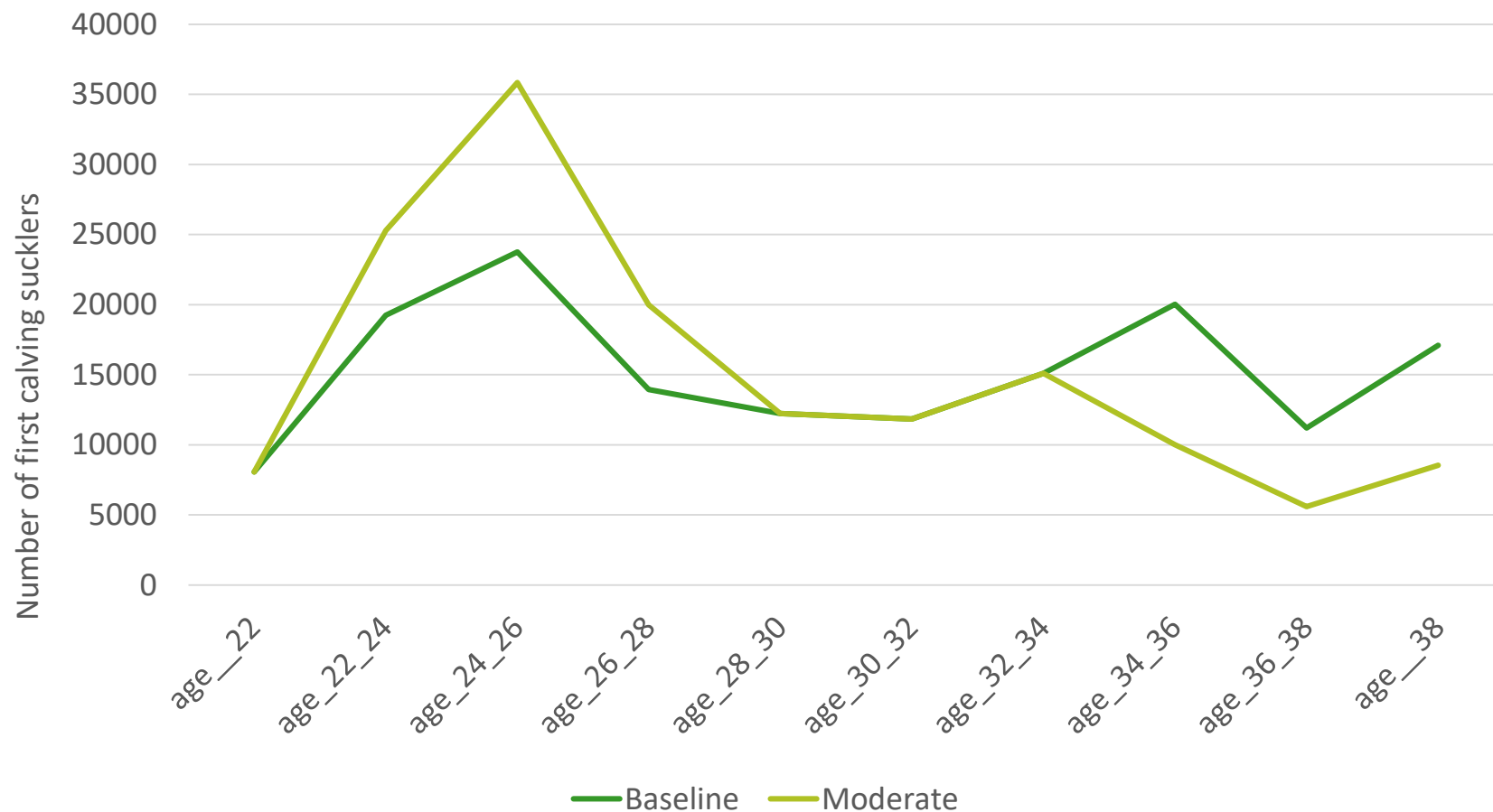
Age at first calving, 2021



- Average age at first calving of 31.3 months
- Peak in numbers calving around 2-years of age and 3-years of age

Potential impact of reducing age at first calving

- Move 50% of 3-year old calvers to 2-year old calving system (24,162 suckler heifers calving 12 months earlier)



- Average moves from 30.2 months to 28.2 months of age
- Reduces GHG emissions by ~50 kt CO₂e
- Reduces feed costs by ~€400/head

Summary

- Objective of beef systems is to maximise live weight performance at least cost
- Requires high merit beef genetics, quality grazed pasture and winter feed, excellent animal health and high standards in animal husbandry
- Excellent progress in live weight gain – average reduction in 65 days to slaughter for steers and heifers, 21 days for bulls
- Substantial feed costs savings, reduction in labour and less GHG emissions
- Less progress is evident for age at first calving; however, substantial potential to make gains

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