



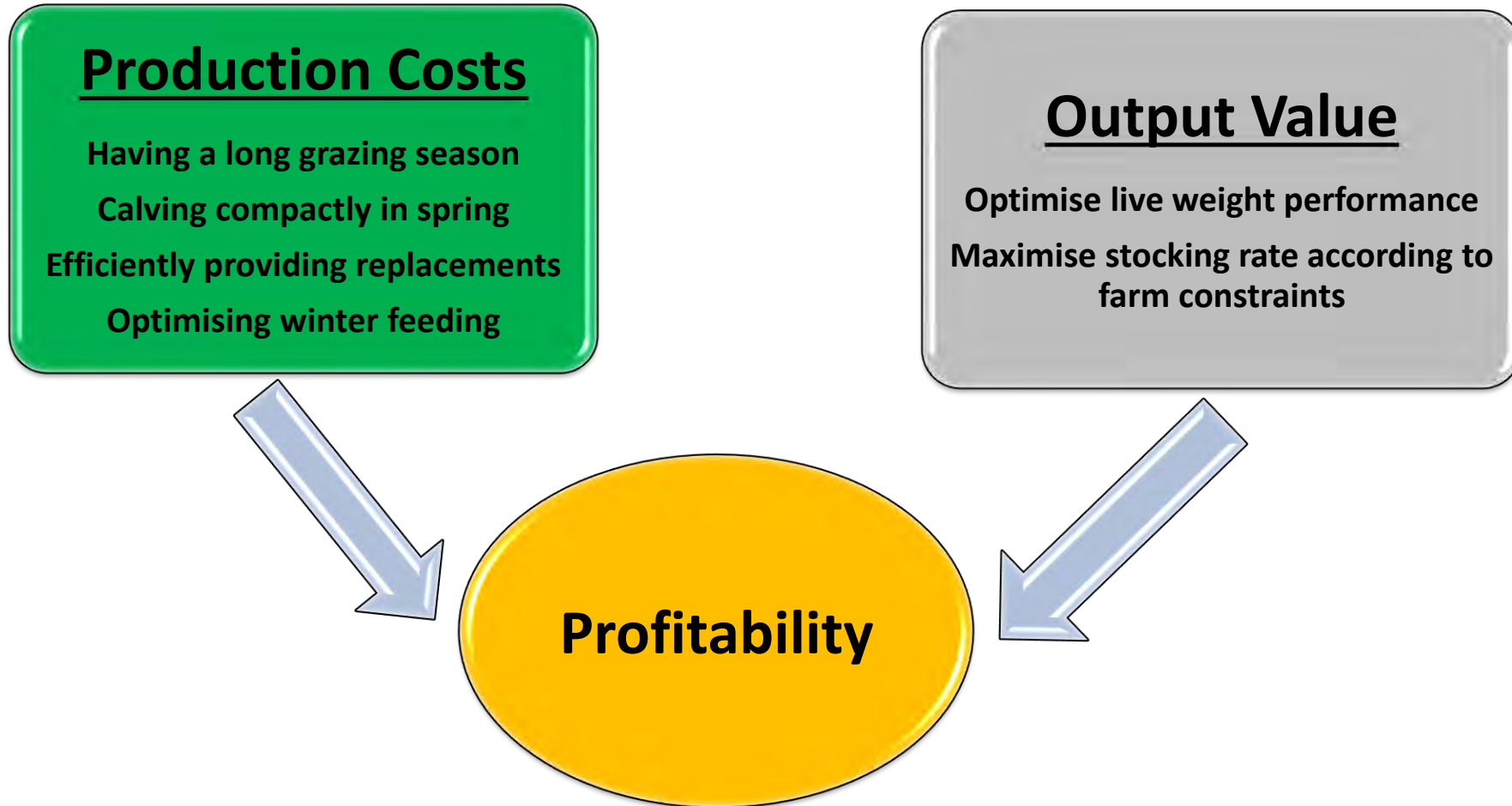
Assessing the potential to improve key profit drivers on beef farms

Teagasc Beef Conference 2022

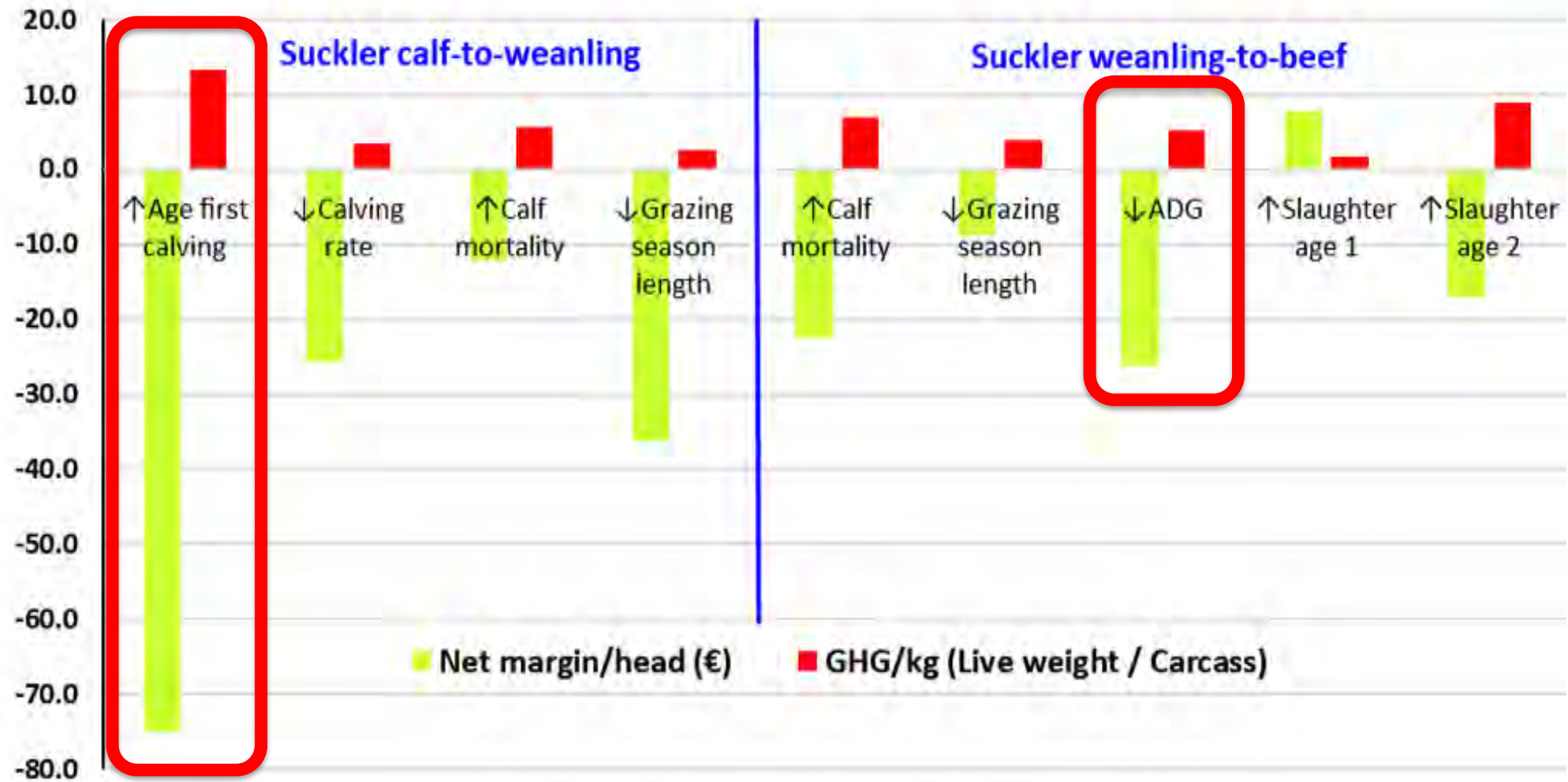
Paul Crosson
Teagasc Grange

13 December 2022

Profit Drivers

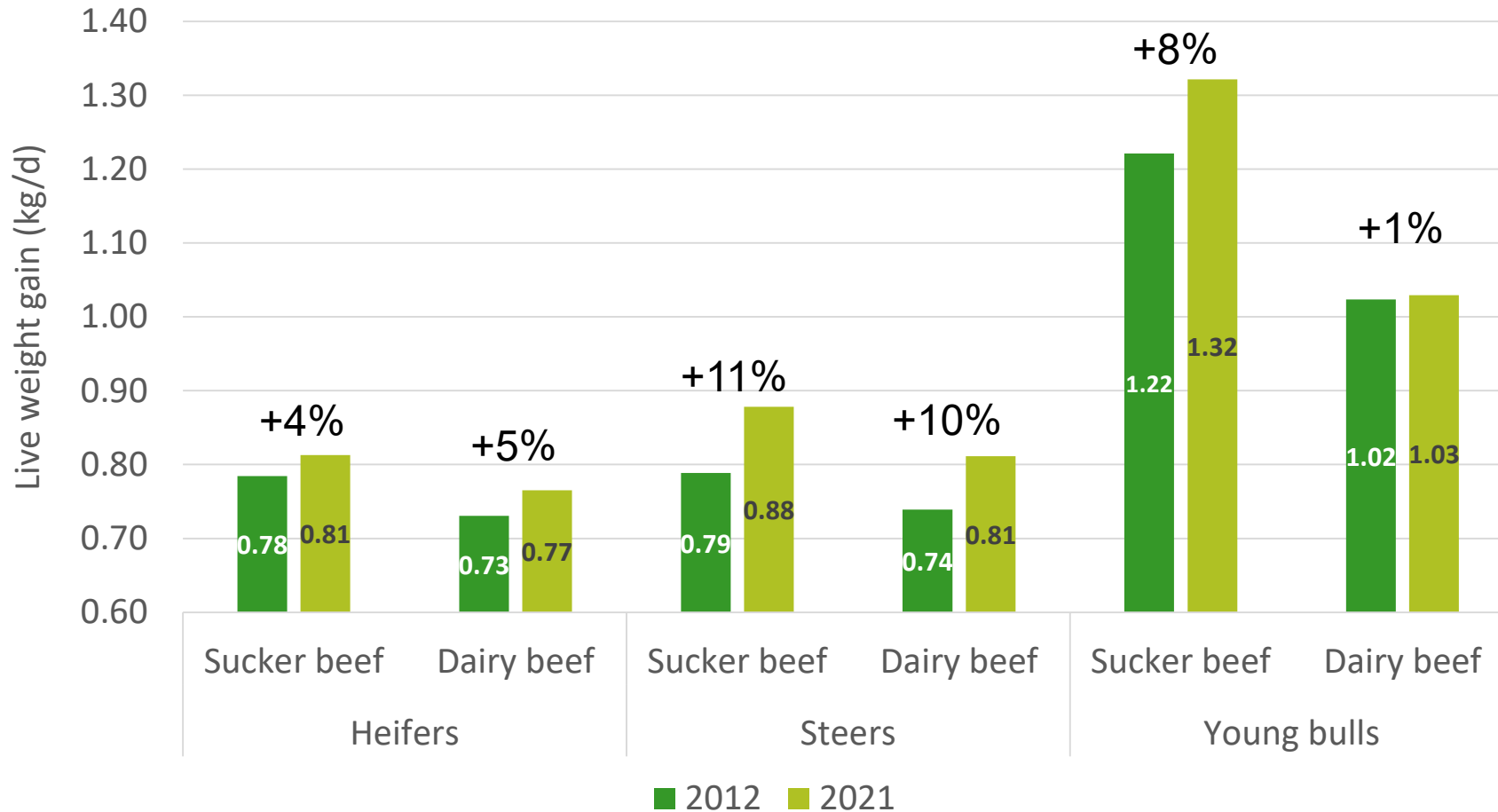


Animal-level profit drivers for beef systems



Source: Teagasc Grange

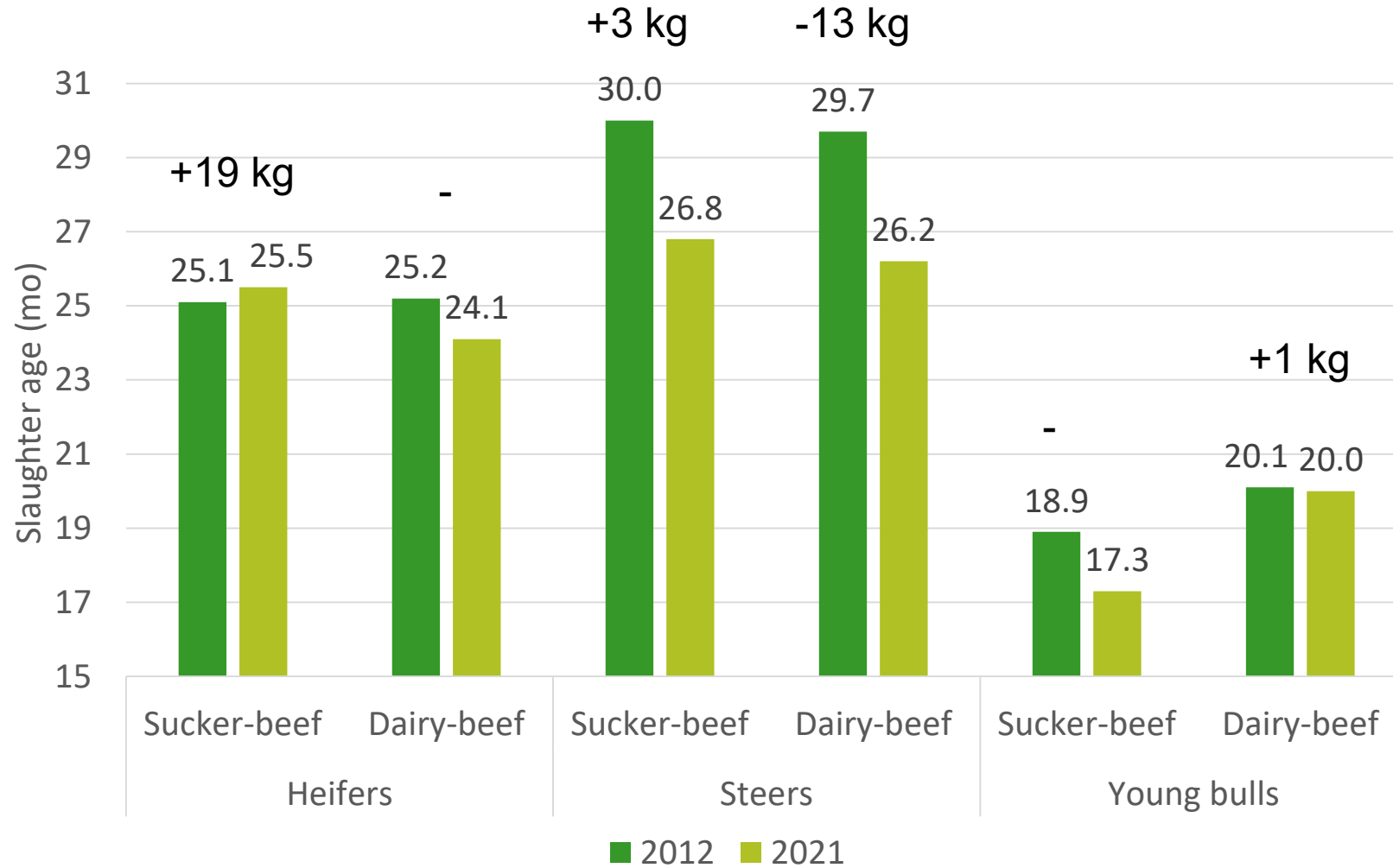
Comparison in live weight gain, 2012-2021



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)

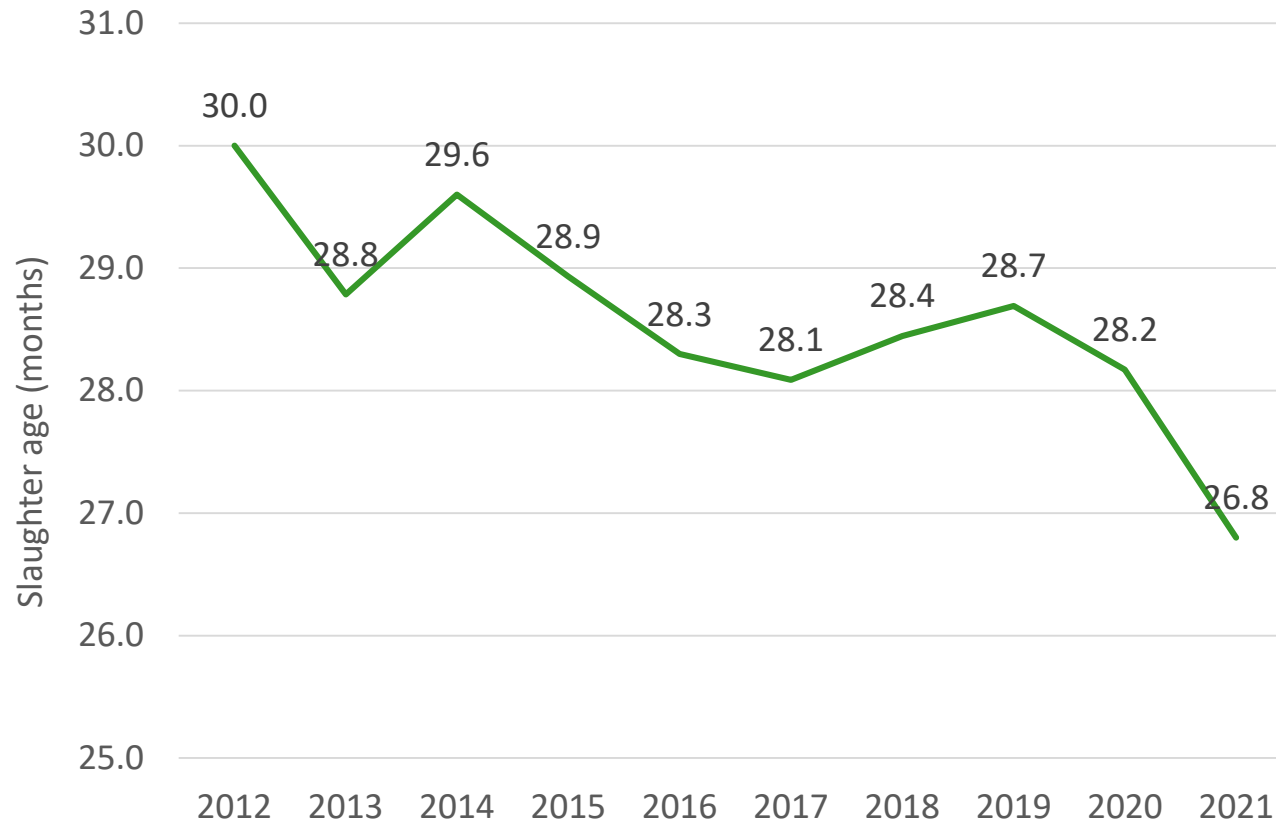
Comparison in slaughter age, 2012-2021



Implications

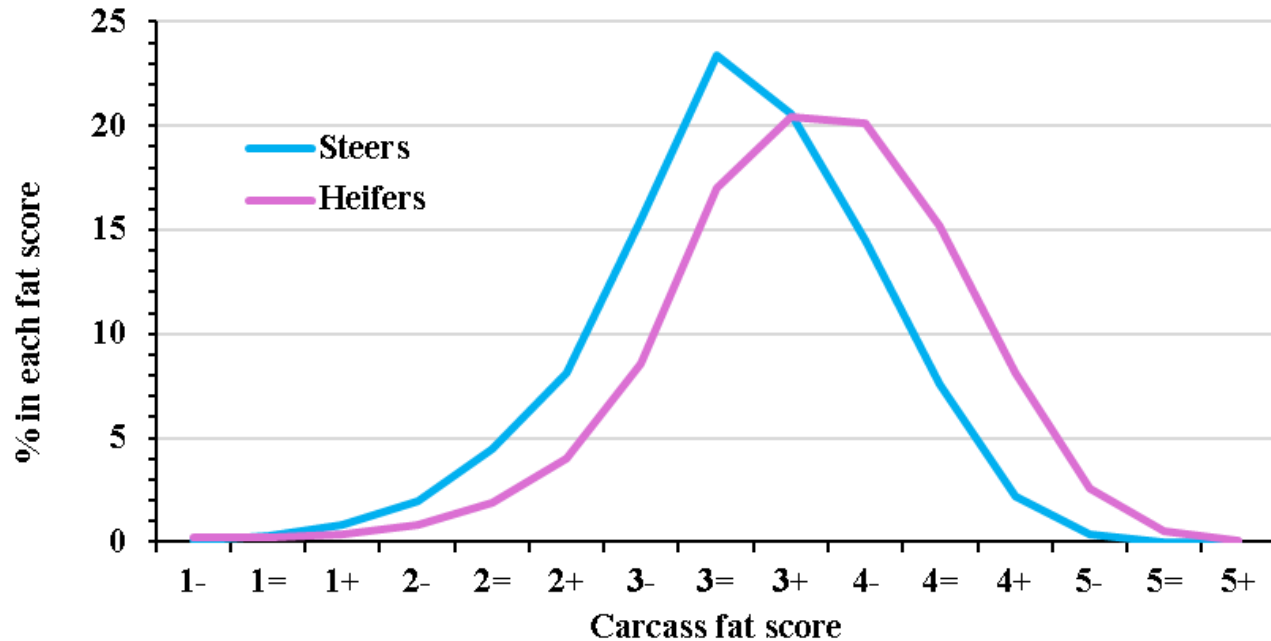
- Less feed
- Facilities savings
- Labour savings
- Lower GHG emissions
- Higher profit

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



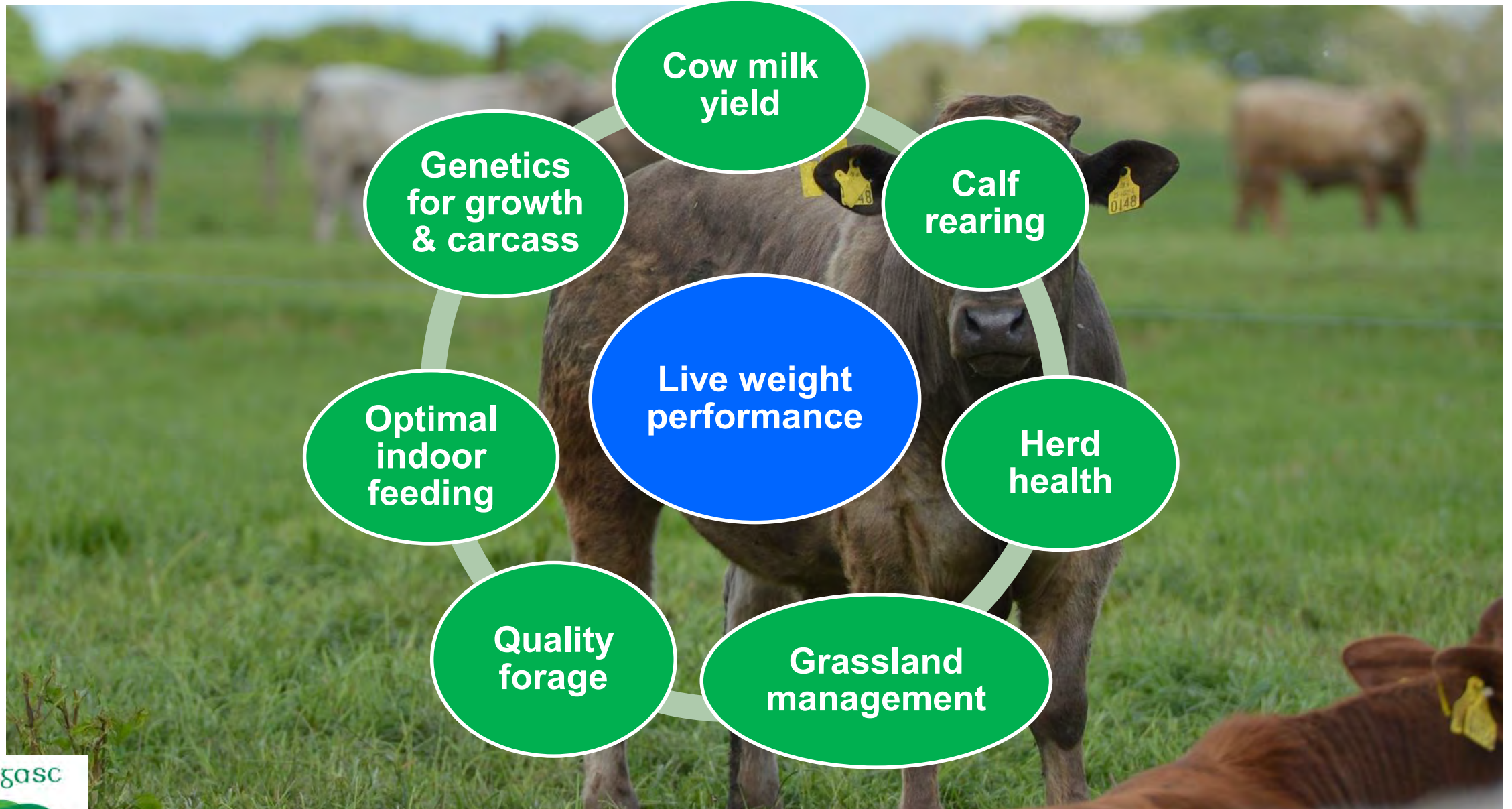
- **≥3-** 84% of heifers, 70% of steers
- **≥4-** 47% of heifers, 25% of steers

Effect of finishing duration

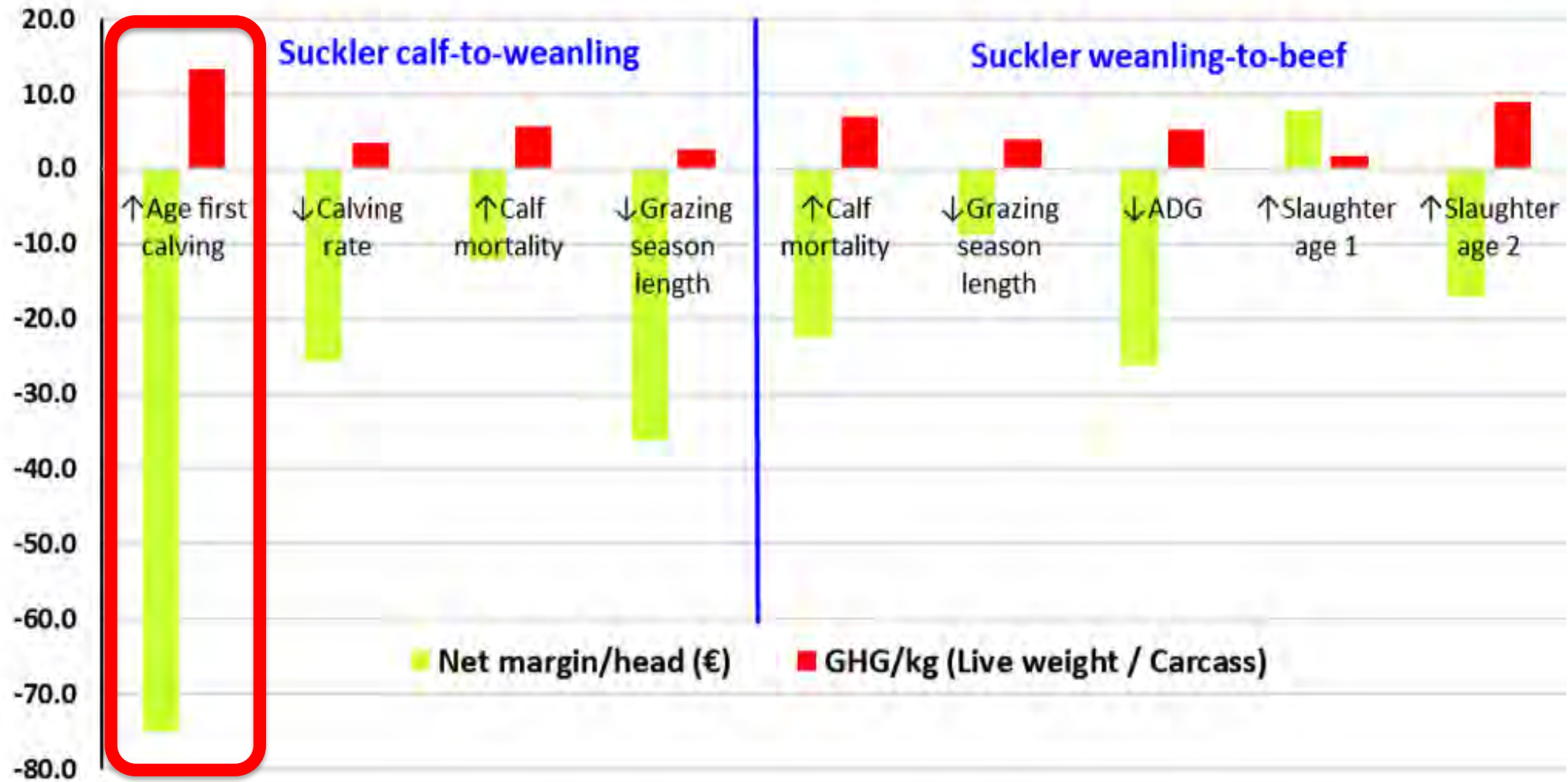
Finishing period	0-12 weeks	12-23 weeks	Diff
ADG (kg/day)	1.42	1.16	-19%
Carc. gain (kg/day)	1.04	0.84	-19%
Fat score	3= (/3+)	3+ (/4-)	
Con intake (kg DM)	10.2	11.2	10%
Feed efficiency (DMI/Gain)			
Live weight	7.2	9.9	-38%
Carcass weight	9.9	13.6	-38%

Source: Teagasc Grange

Achieving target live weight gain

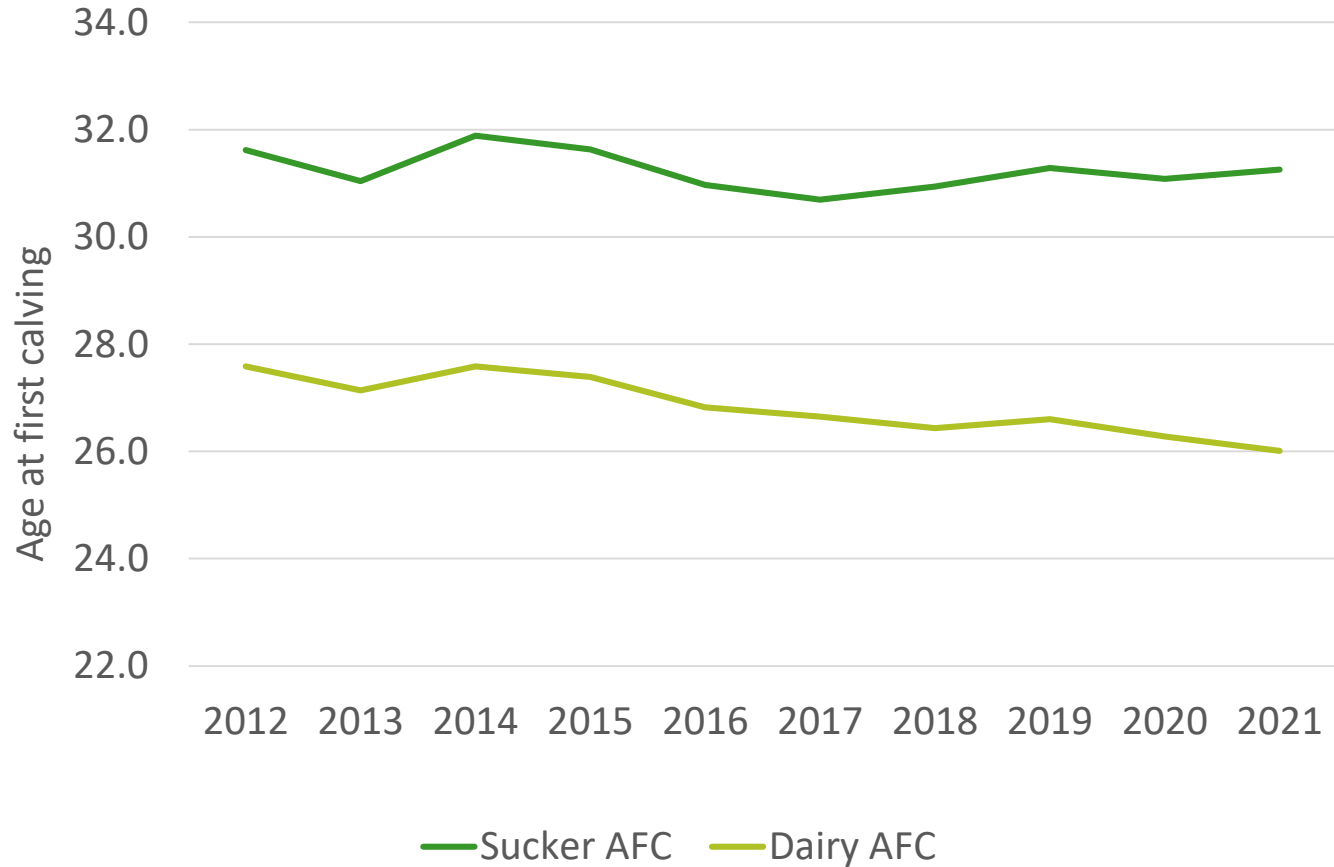


Profit drivers for beef systems



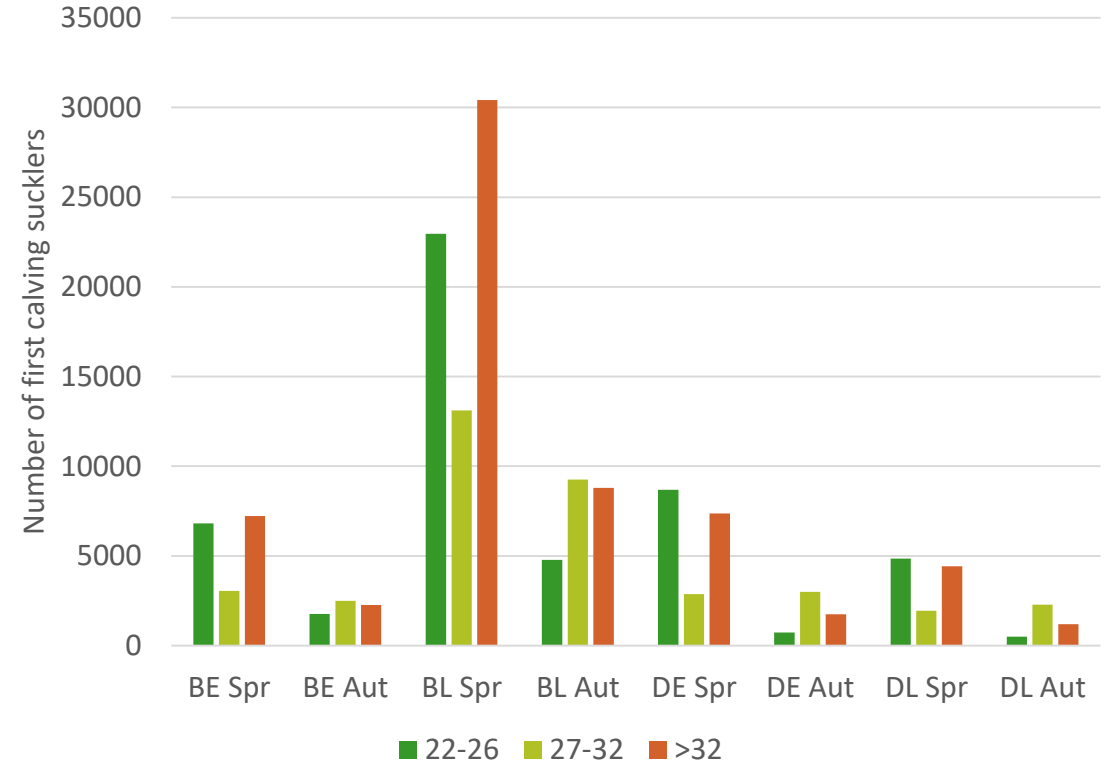
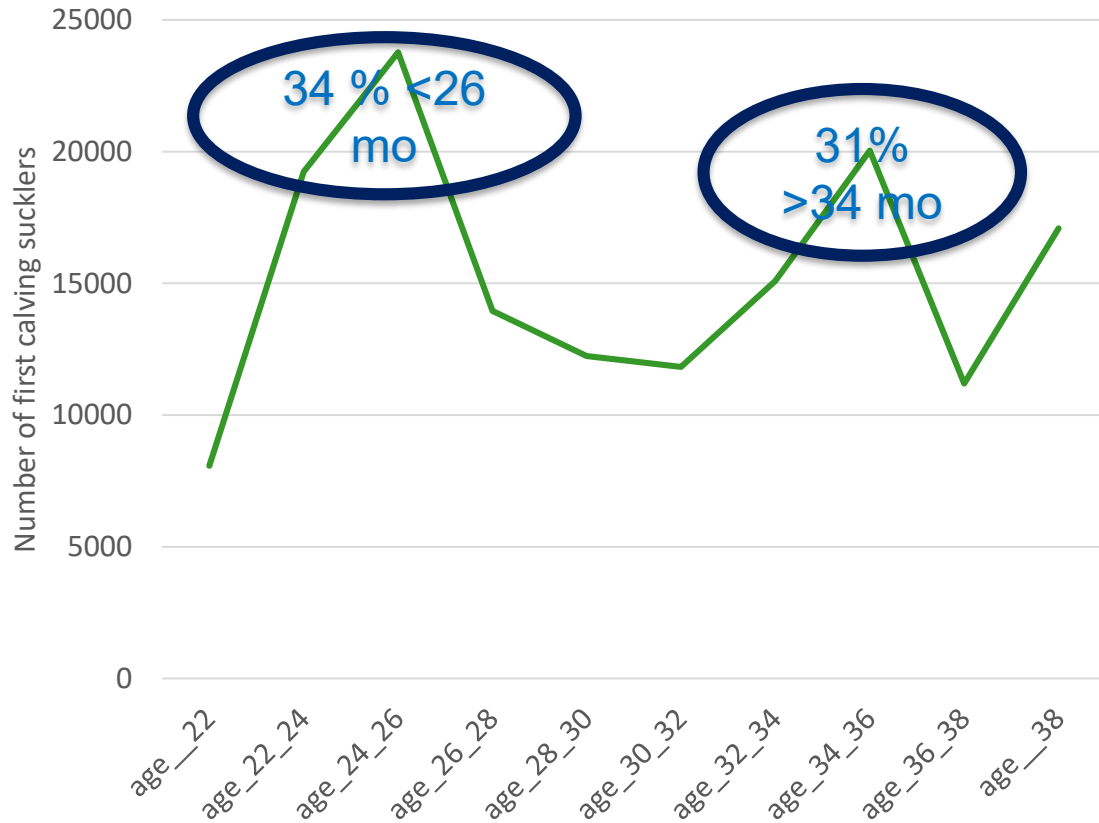
Source: Teagasc Grange

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

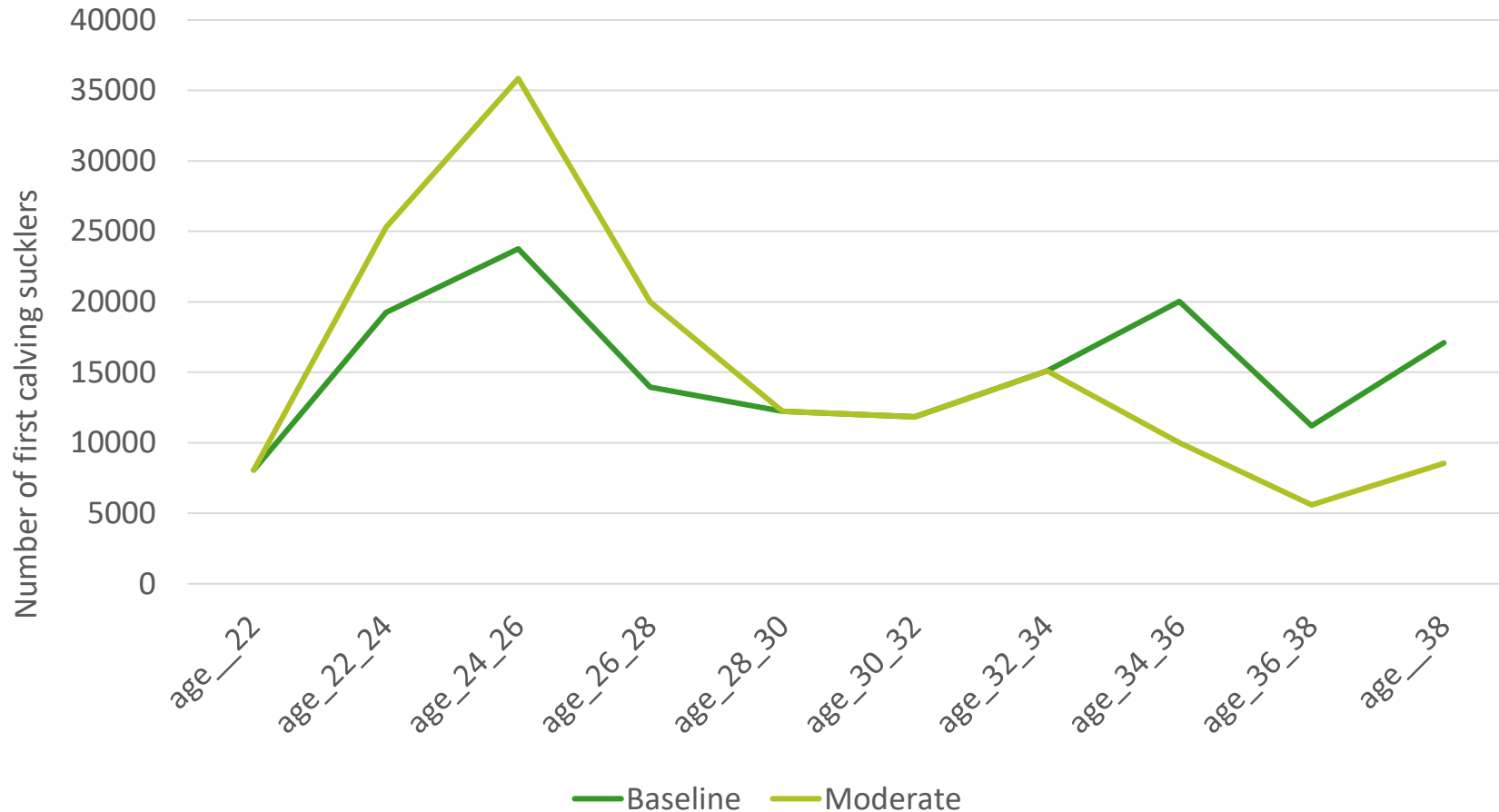
Age at first calving, 2021



- 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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