



Slaughter age of beef cattle:

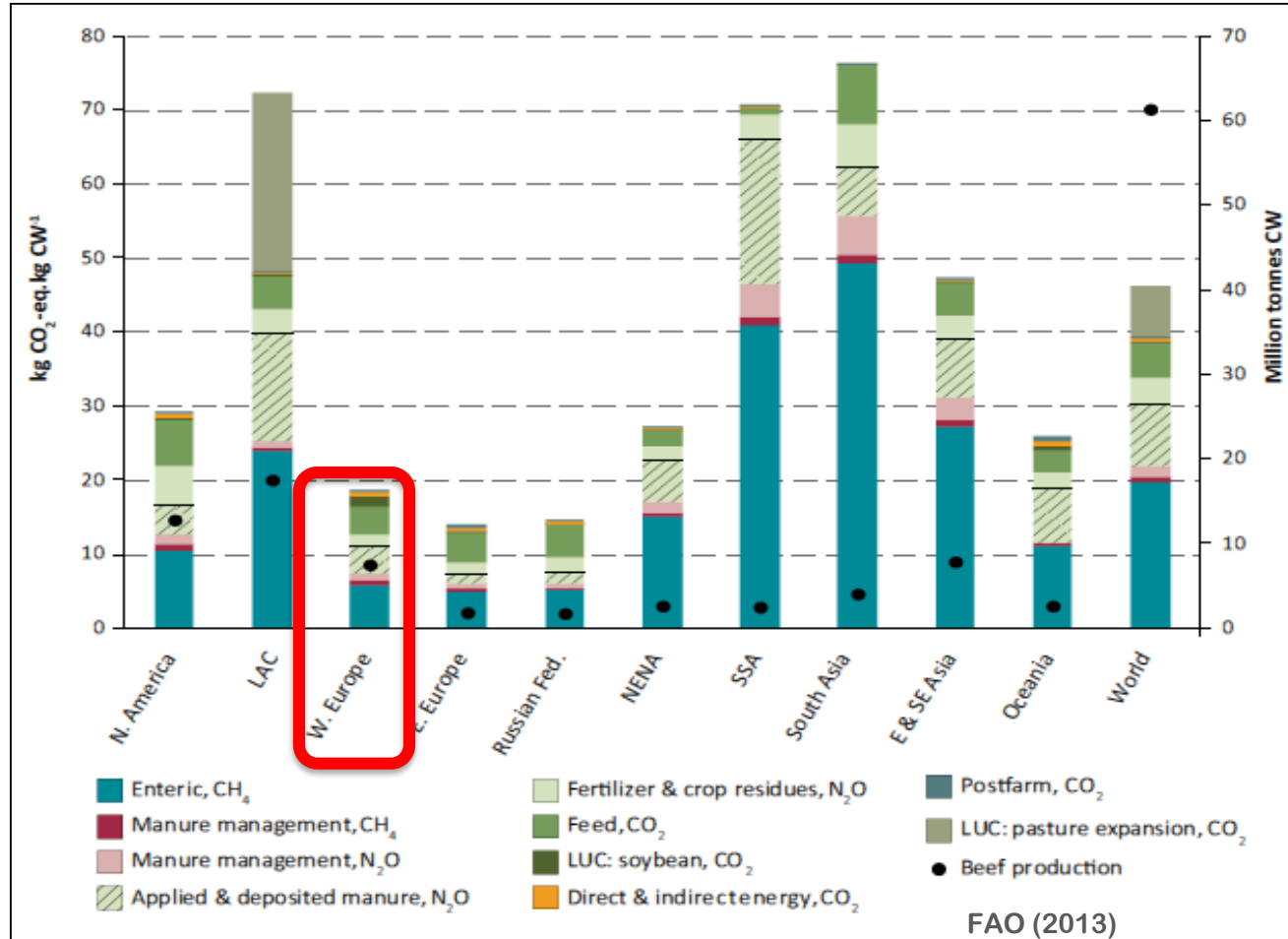
*Where are we now?
Implications for GHG emissions*

Paul Crosson, Mark McGee and E. G. O'Riordan
Teagasc Grange

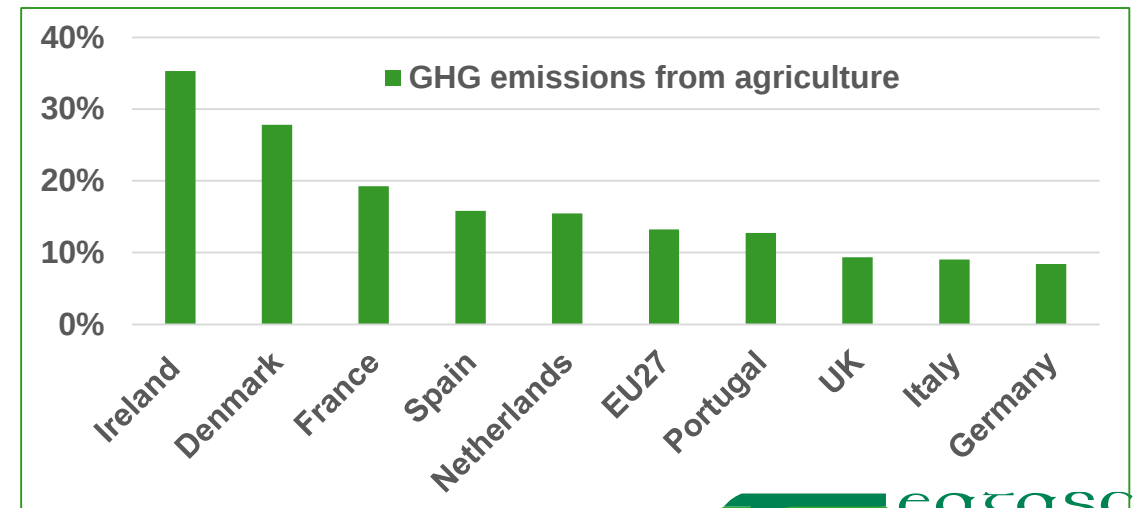
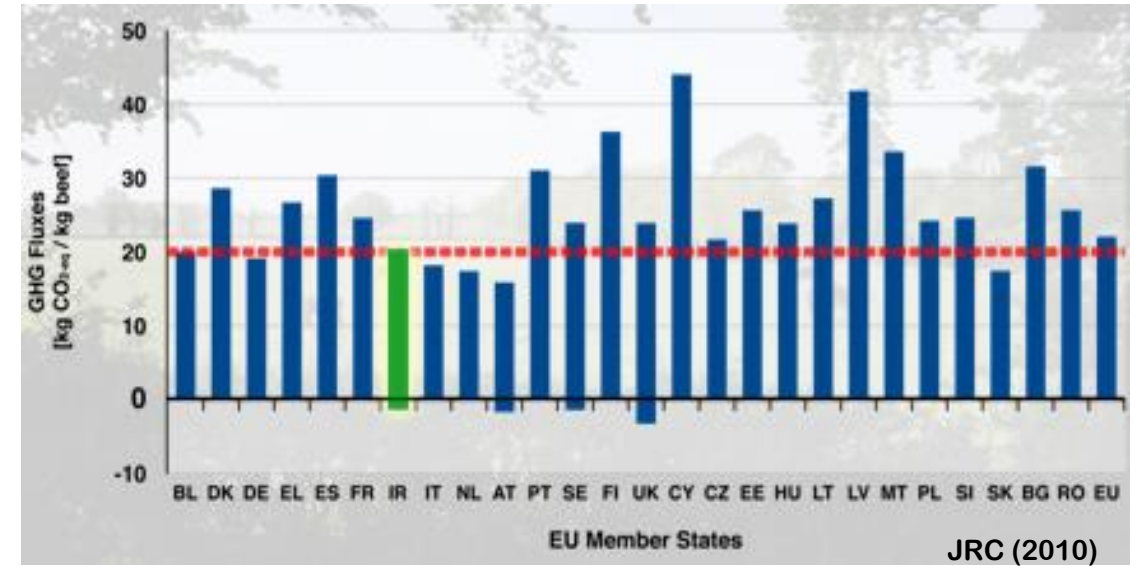
Signpost General Assembly
15 December 2021

International benchmarks for beef emissions

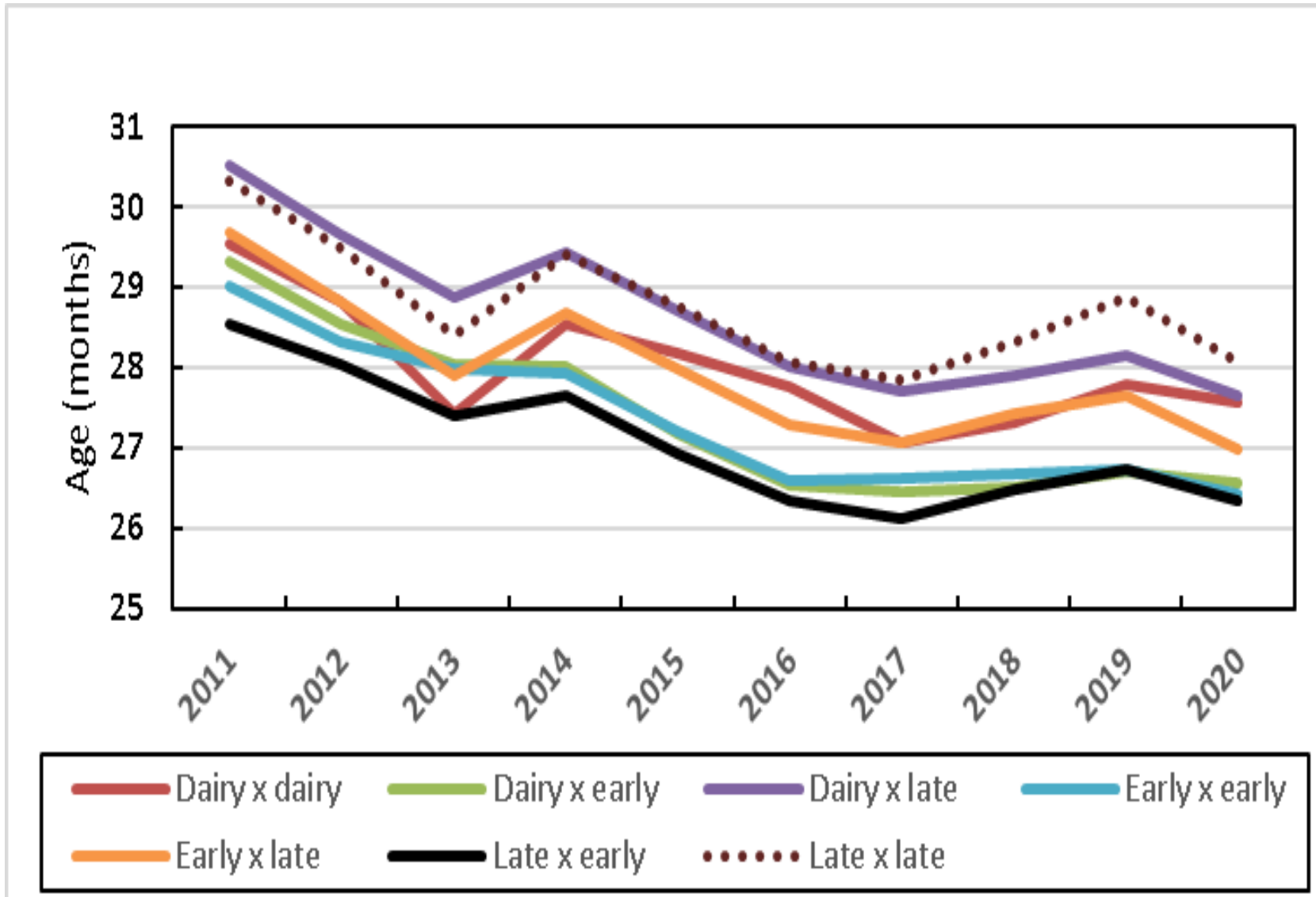
Global comparison



European comparison



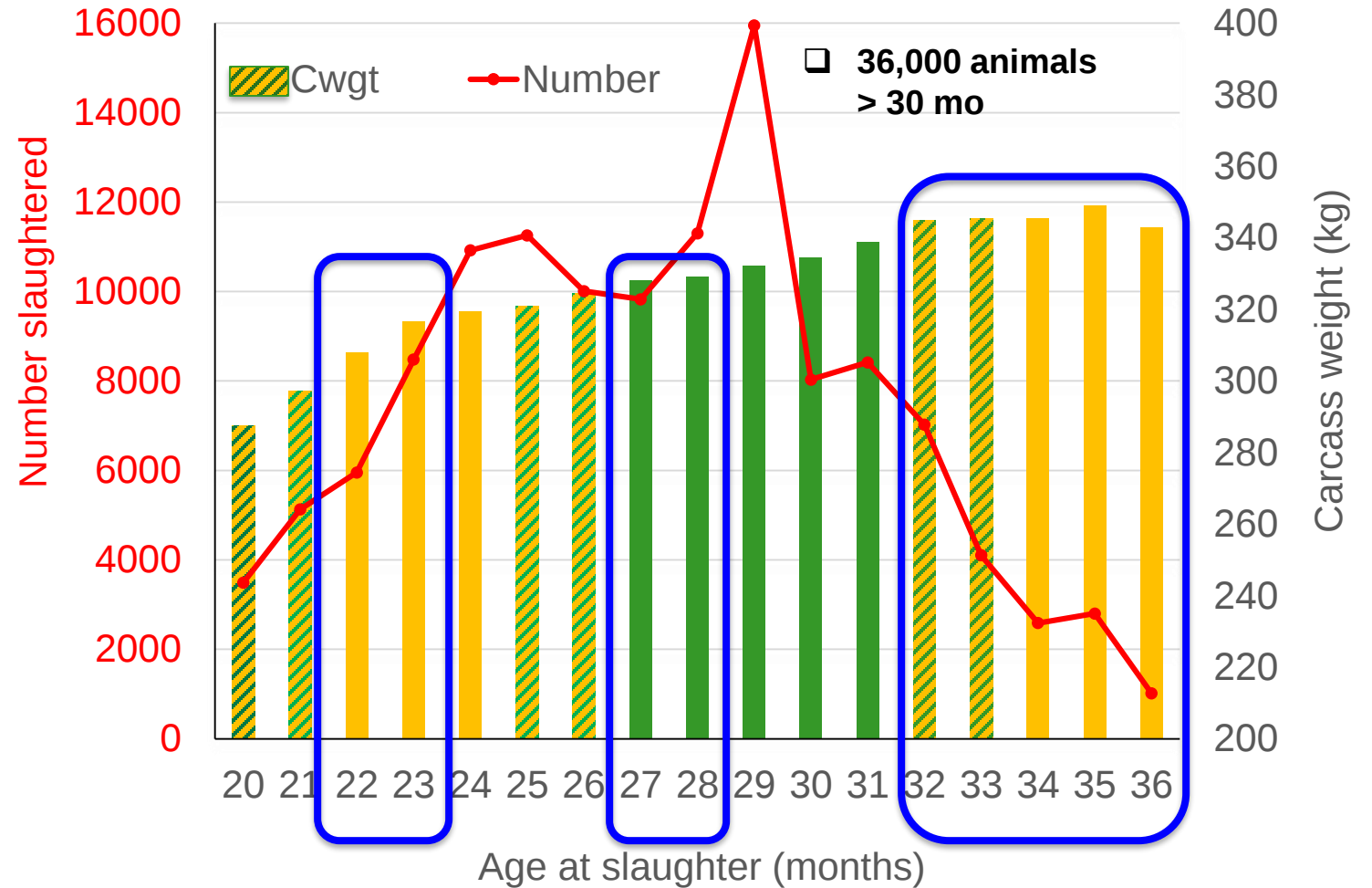
Steer age at slaughter (2011–2020)



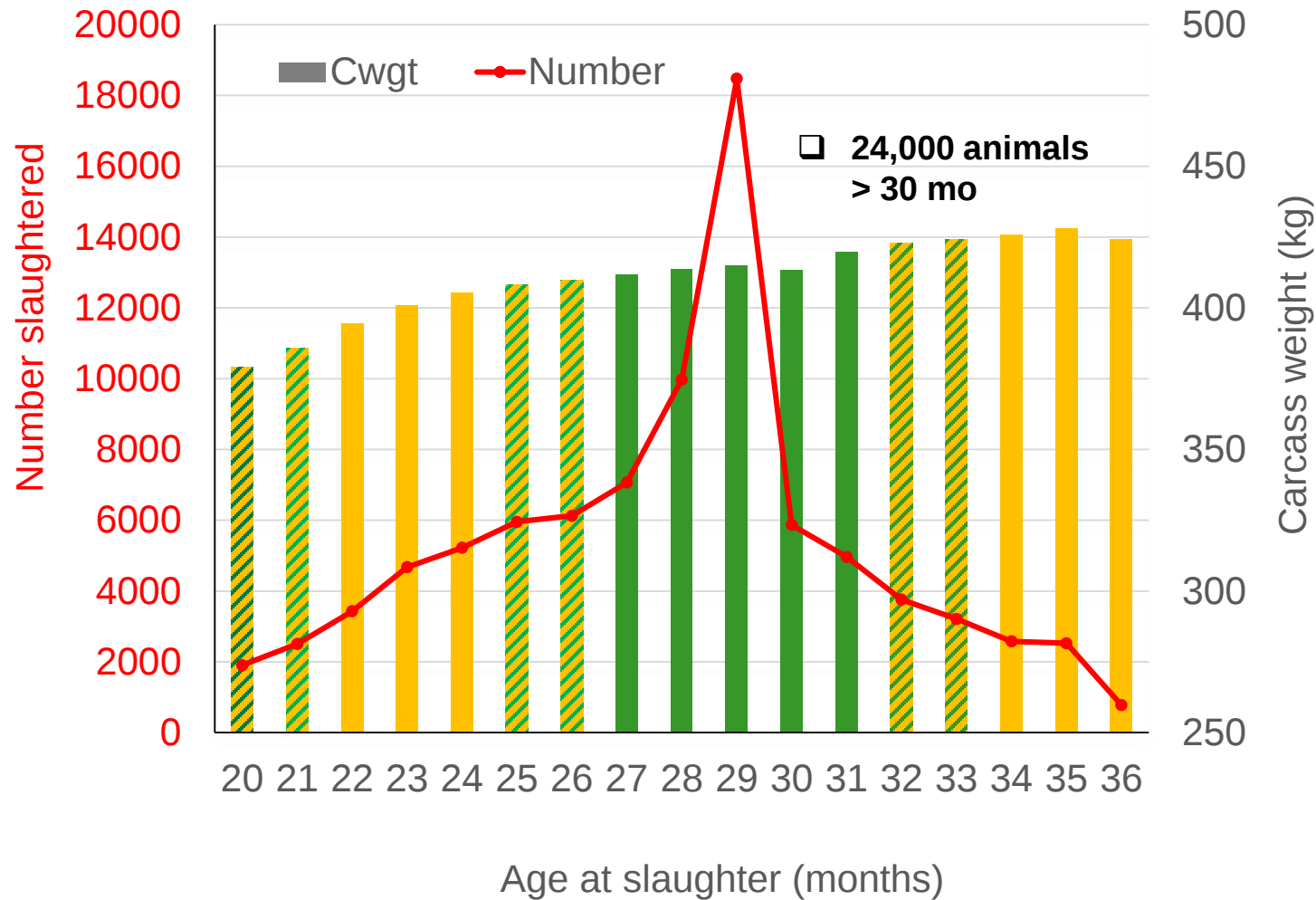
Heifer age at slaughter: not as much

Implications - national slaughter profile, Fr steers

- ❑ Spring born, Friesian steers
- ❑ Slaughtered in 2020
- ❑ Average slaughter age, 27.6 mo
 - ✓ 60 days earlier than 2011
- ❑ Carcass weight, 325 kg
 - ✓ No change since 2011
- ❑ Carcass grade, O-3=
 - ✓ Small drop in conformation score

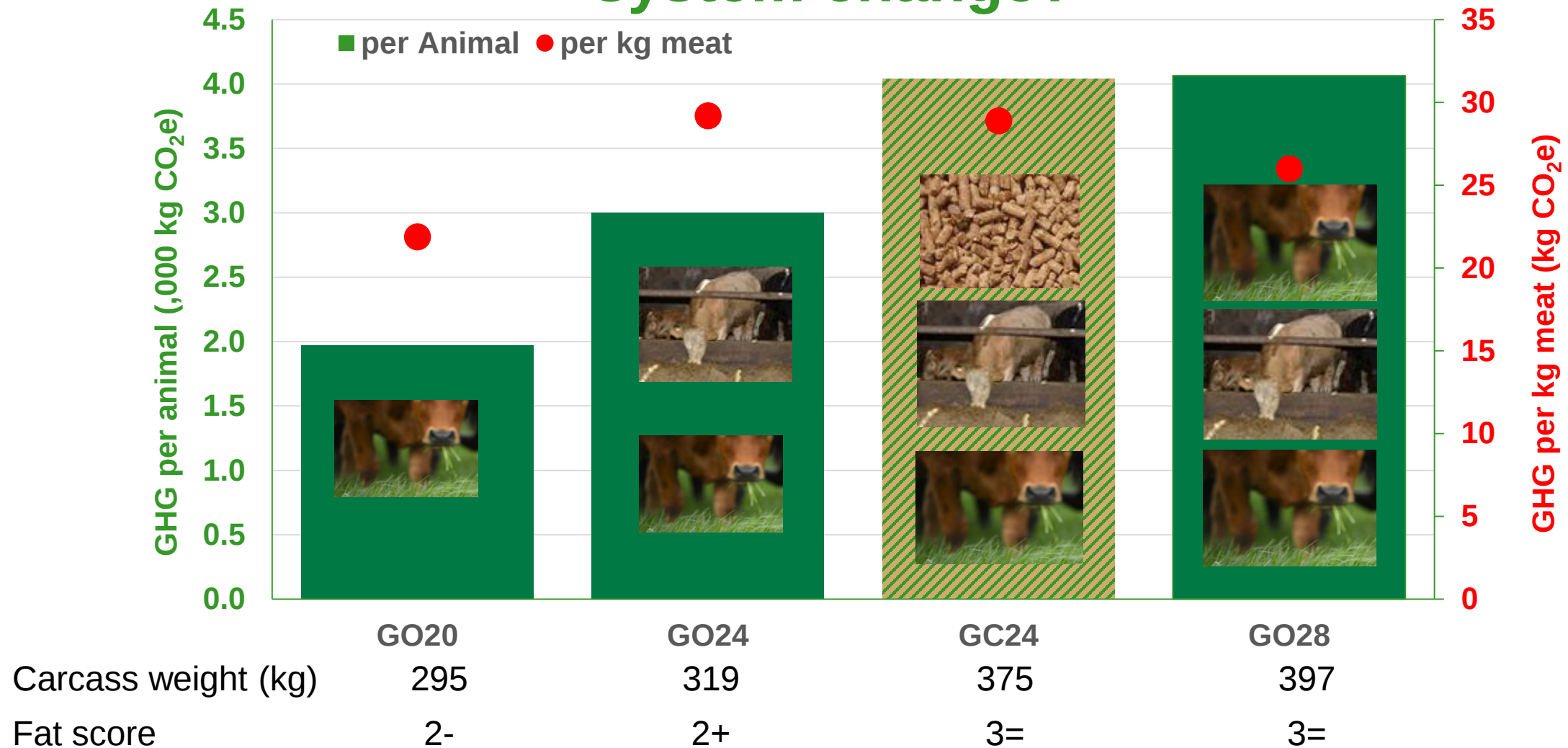


National slaughter profile, suckler steers



- ❑ Spring born, Suckler steers
- ❑ Slaughtered in 2020
- ❑ Average slaughter age, 28.8 mo
 - ✓ 45 days earlier than 2011
- ❑ Carcass weight, 407 kg
 - ✓ 11 kg heavier since 2011
- ❑ Carcass grade, R+3=
 - ✓ Small increase in conformation and slight decrease in fat

Implications for (late-maturing) weanling to beef: system change?

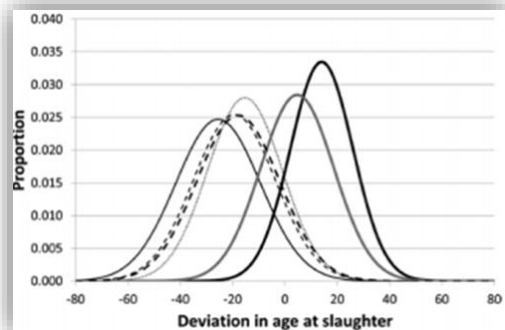


Source: Herron et al., 2021

Efficient reduction in slaughter ages



Management



Genetics

Sustainable
reduction in
slaughter
age

- ☐ Biosecurity
- ☐ Diagnostics
- ☐ Vaccination

Health

Rapid Communication: Large exploitable genetic variability exists to shorten age at slaughter in cattle¹

D. P. Berry,^{*2} A. R. Cromie,[†] and M. M. Judge^{*}

^{*}Teagasc, Animal & Grassland Research and Innovation Centre, Moorepark, Fermoy, Co. Cork, Ireland; and [†]Irish Cattle Breeding Federation, Highfield House, Bandon, Co. Cork, Ireland



Summary message

- Agriculture has been set a reduction target of 5 to 7 Mt CO₂e by 2030
- Increase farm efficiency is the most effective approach to reduce emissions
- Reducing slaughter age:
 - potential to reduce emissions by 0.3 to 0.5 Mt CO₂e
 - However, concentrate feeding tends to offset some of these reductions
 - Sustainable reductions require higher levels of management, good herd health and genetic improvement



Thank you