

Farm systems to enhance profit and protect the environment

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DairyNZ 

Financially-robust dairy businesses

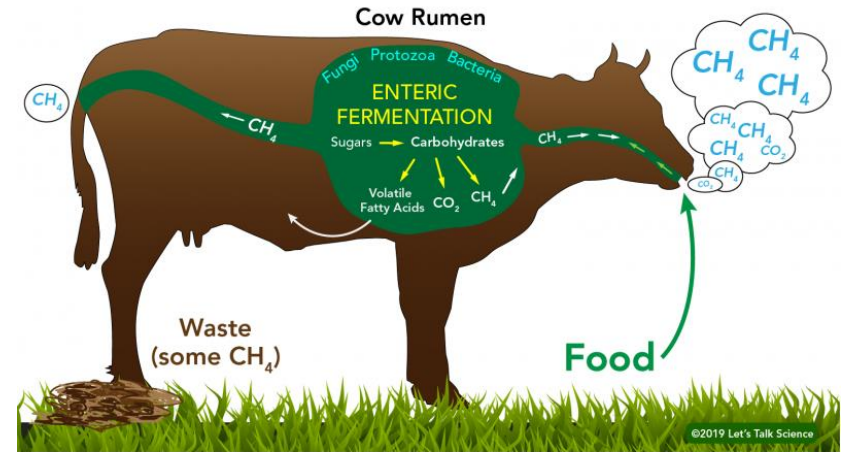
Key Attributes

- High pasture harvest
- Effective cost control
 - Low reliance on supplementary feed
- Disciplined use of capital

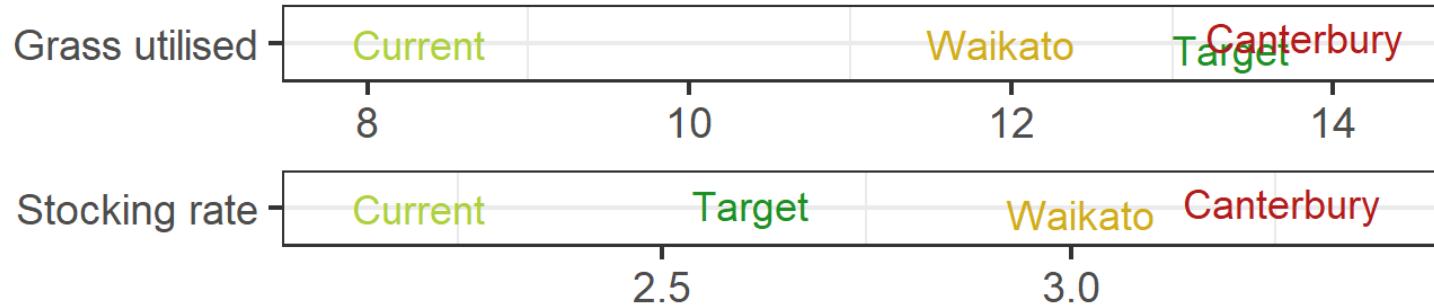


Neal and Roche (2020)

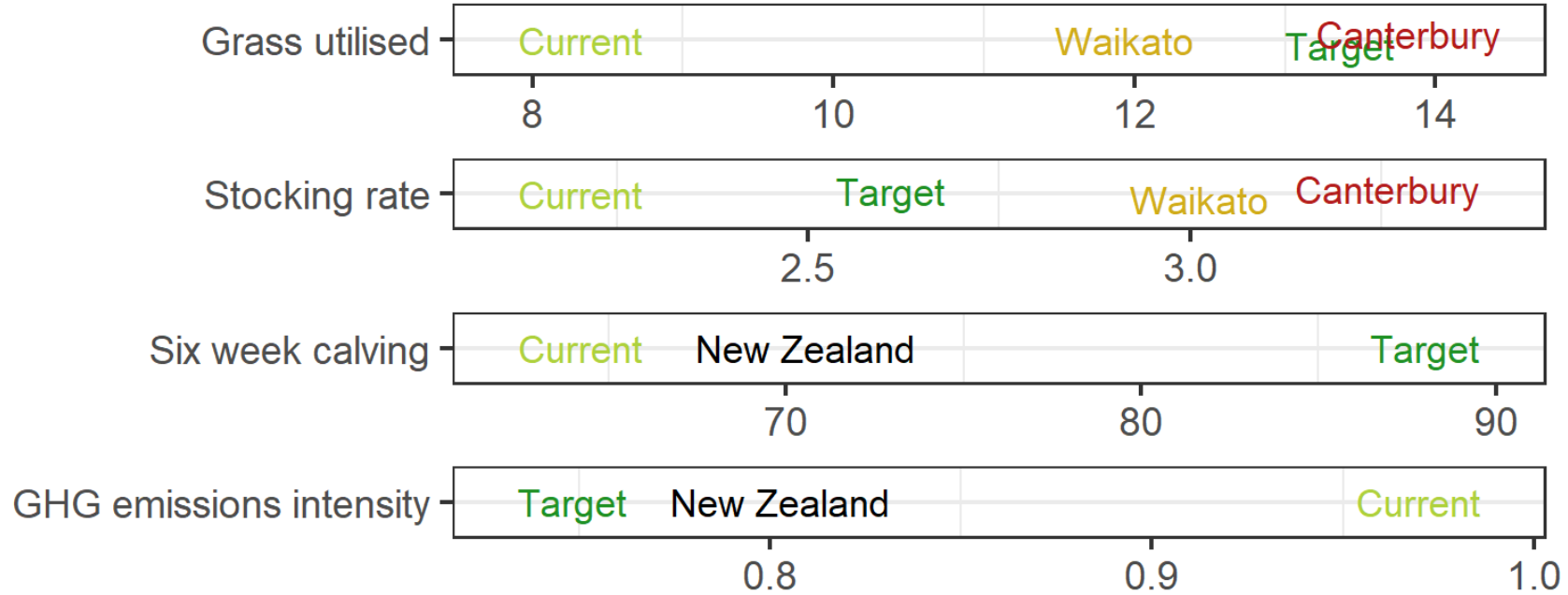
What has changed?



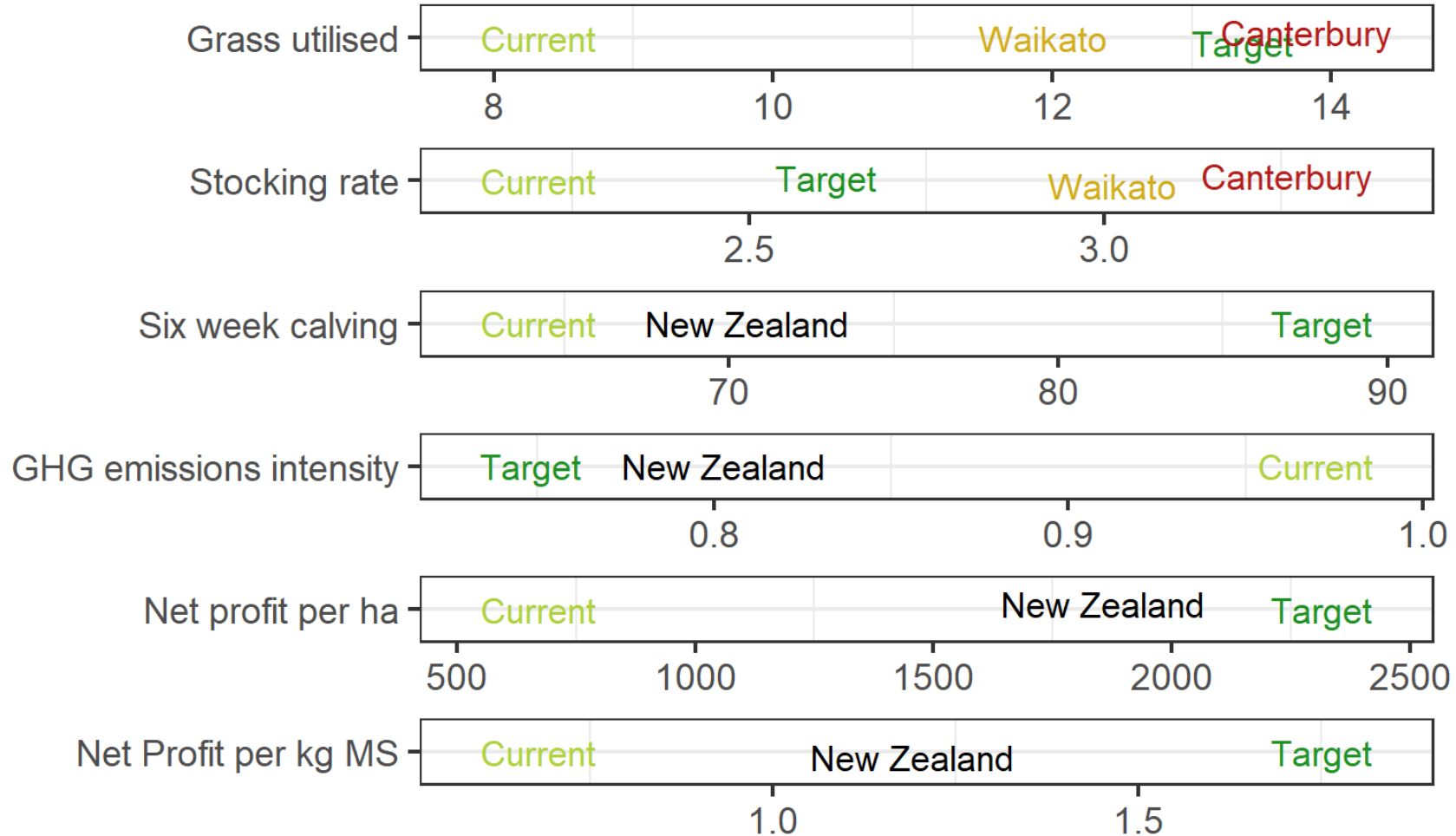
NZ vs Ireland



NZ vs Ireland



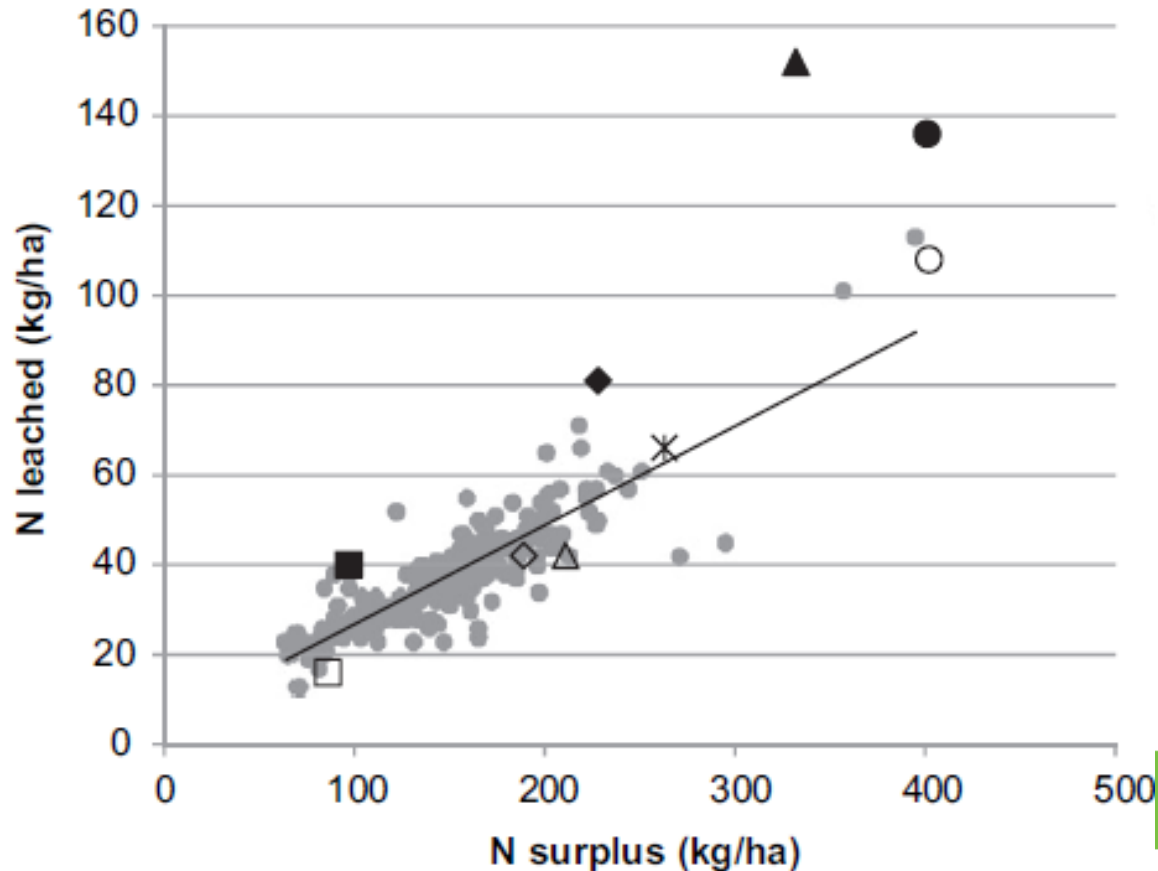
NZ vs Ireland



Know your numbers

- “Step Change” Regional Events
- Get familiar with key numbers
 - Profit
 - N Surplus
 - Feed eaten -> Methane (CH₄)
- Discuss and Consider actions

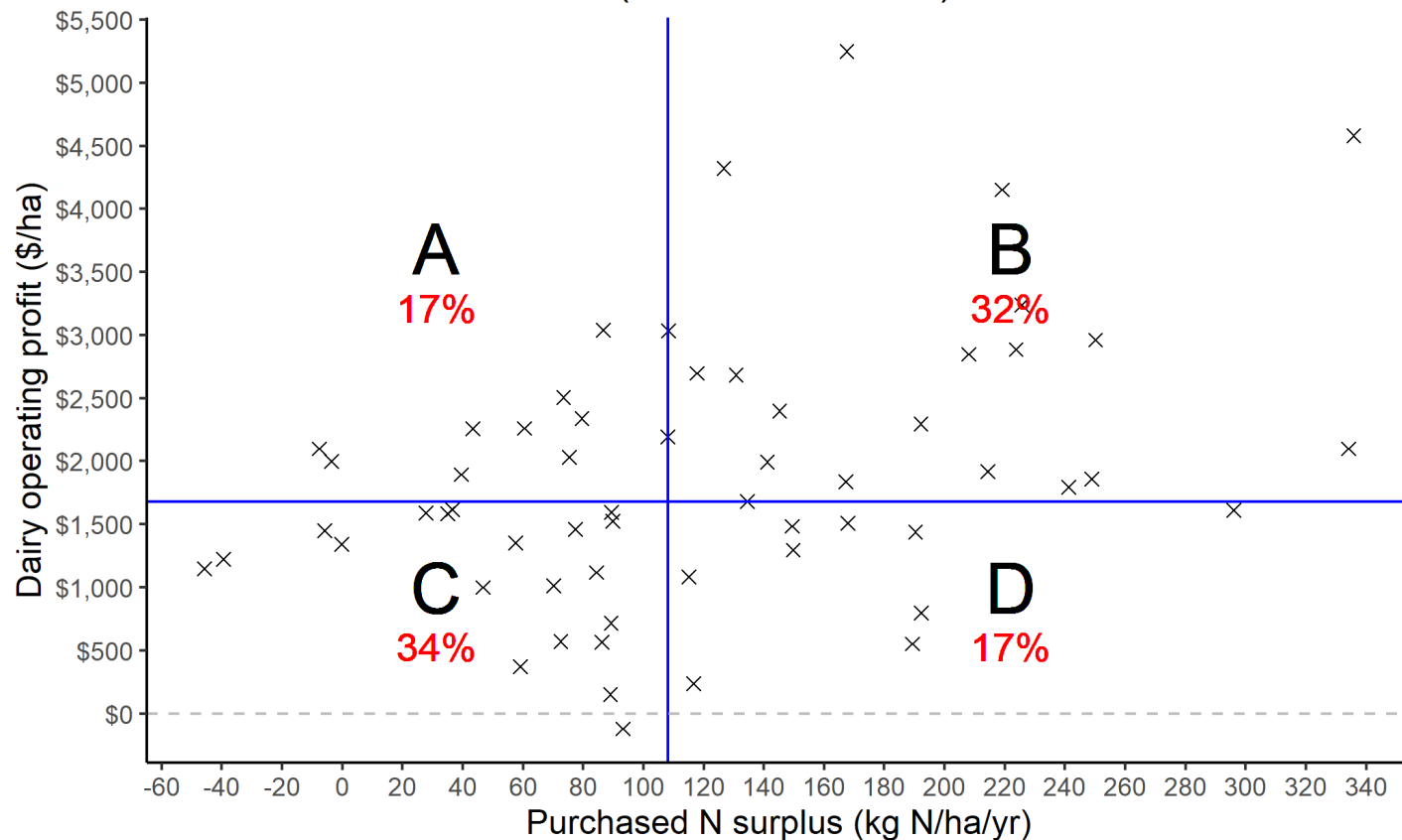
N loss to water, related to N surplus



Beukes et al.
(2014)

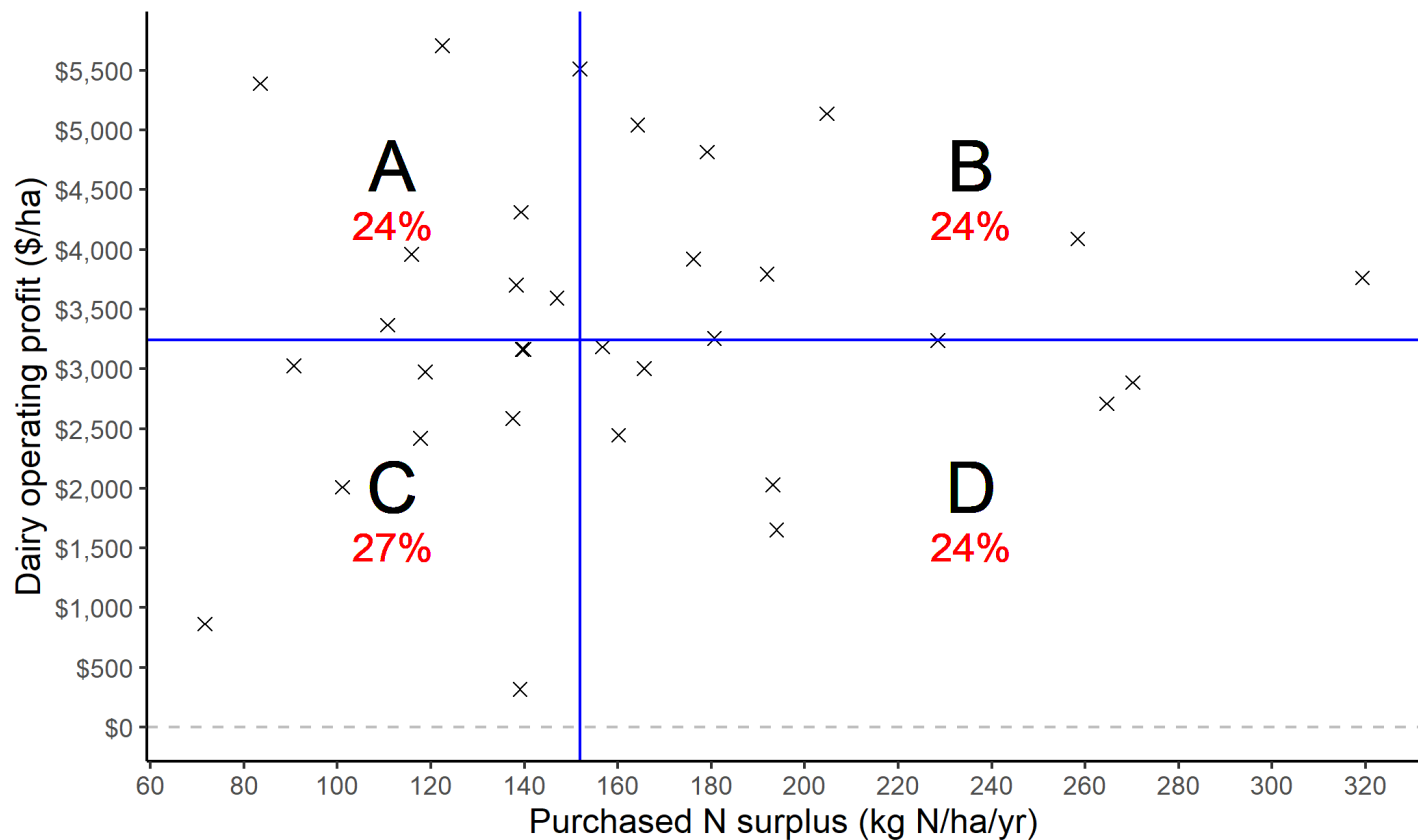
Opportunities: N surplus and profit

Operating profit vs purchased N surplus
(Waikato 2018-19)

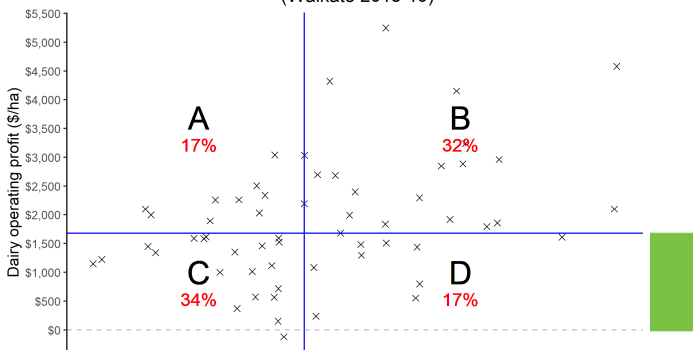


Opportunities: N surplus and profit

Operating profit vs purchased N surplus
(Canterbury 2018-19)



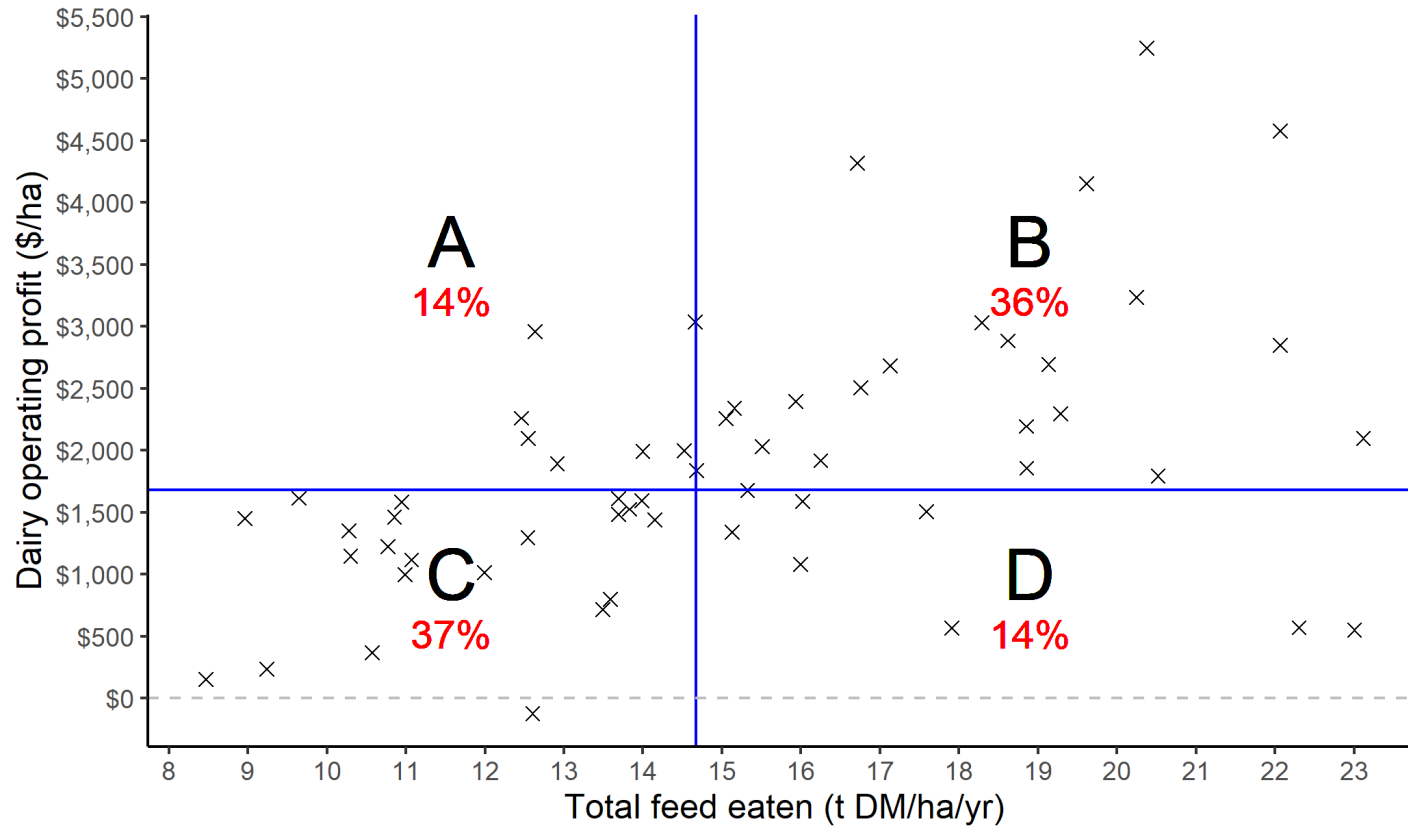
Operating profit vs purchased N surplus
(Waikato 2018-19)



N Mitigations

Opportunities: Feed eaten (Methane) and profit

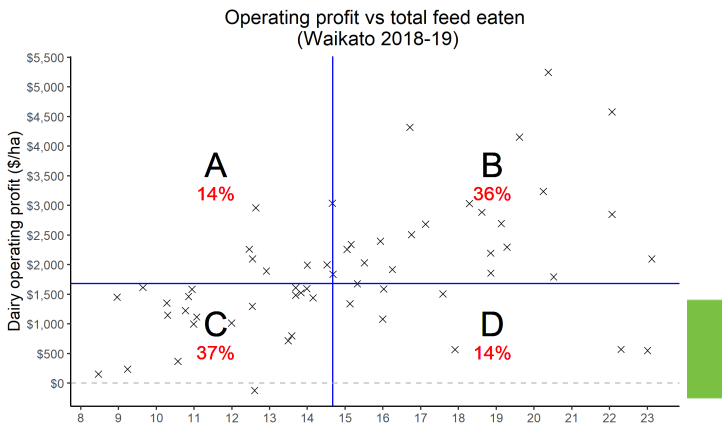
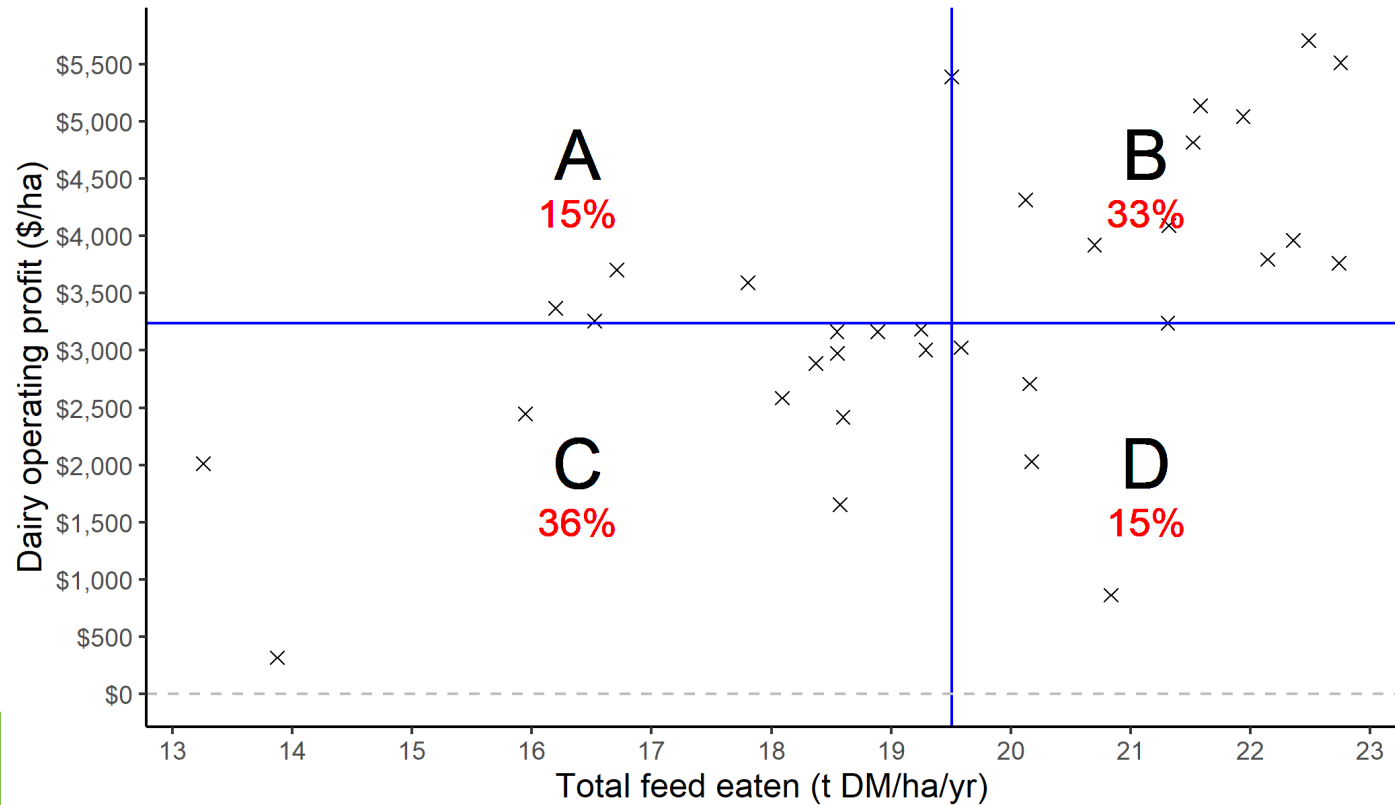
Operating profit vs total feed eaten
(Waikato 2018-19)



n = 59

Opportunities: Feed eaten (Methane) and profit

Operating profit vs total feed eaten
(Canterbury 2018-19)



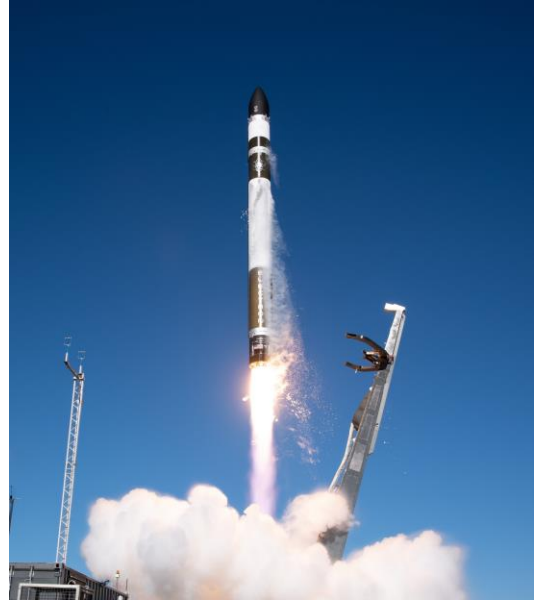
CH₄ Mitigations

Customer demand reflected in processor schemes

- \$0.10; Environment, Animals, People, and Co-op & Prosperity + Milk quality Excellence
- Environment, 3 out of 4
 - Purchased N Surplus < 138 kg/ha
 - 80% farm grown feed

Research

- Not starting from scratch...
- National + International collaborations
- Adapting emerging solutions
 - E.g. On farm delivery of inhibitors, Early life interventions



The most efficient grass producer...



Final

49.0

rynz

The most efficient grass producer...



Just beat the TMR and Alternatives?



Final 49.0

Conclusions

- Basics of financially robust businesses haven't changed
- Know your numbers
- Think about your options
- Keep up with the science-backed mitigations
 - More options should be coming