



Farming Energy

Nuffield

- NZ needs to double power supply
- Land use change – water/GHG/\$\$
- Options
 - Biofuels
 - Biodigestors
 - Wind
 - Solar



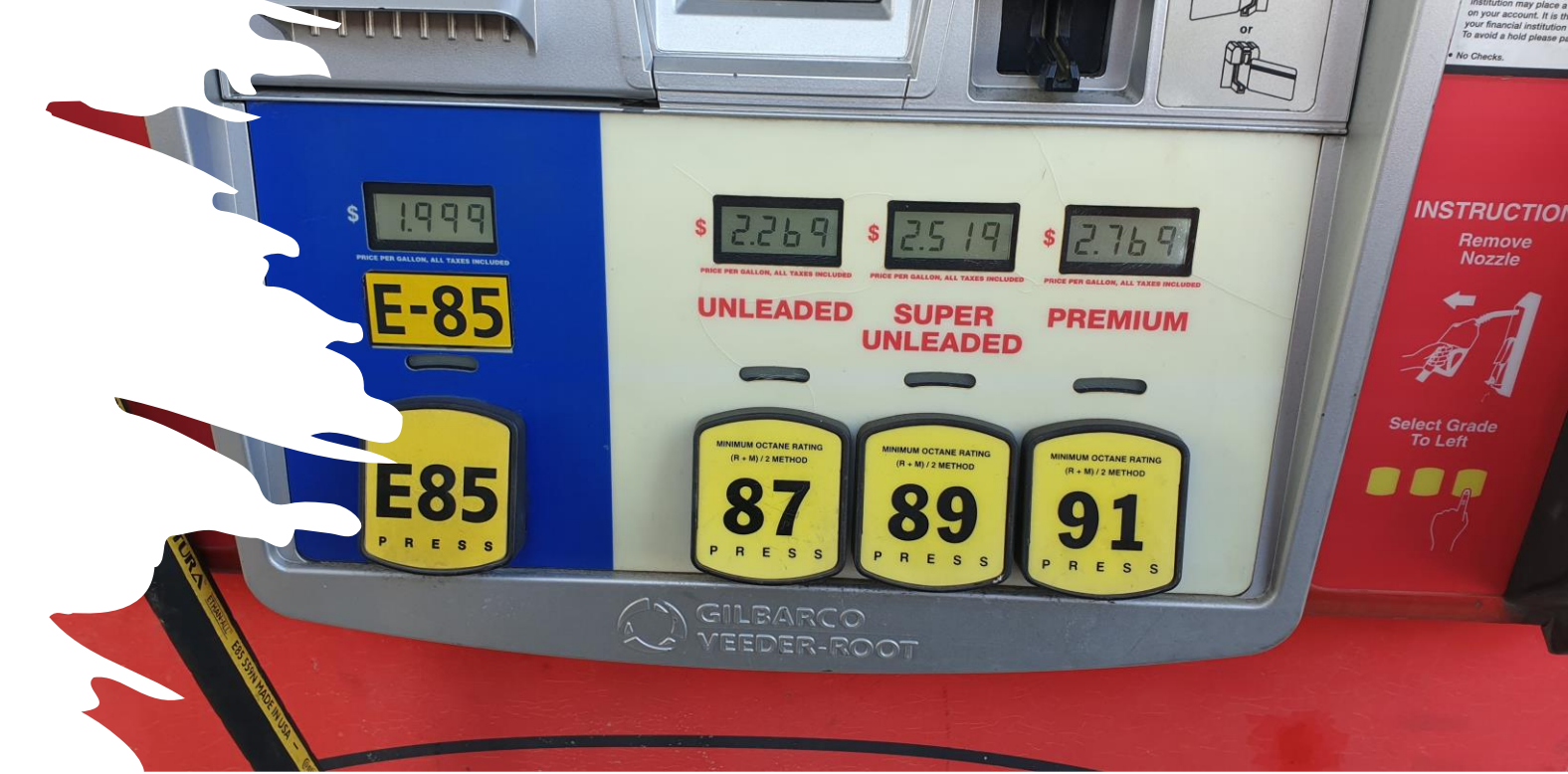
Current Opportunities in NZ

- Biofuels

- 3.5% mandate by 2025
- Virtually no NZ production
- Sugar beet, miscanthus, oilseed crops, wood waste
- Limited life – hydrogen/EVs?

- Biodigestors

- NZ trials
- NZ effluent is inconsistent.
- Benefit from international tech – farm supply

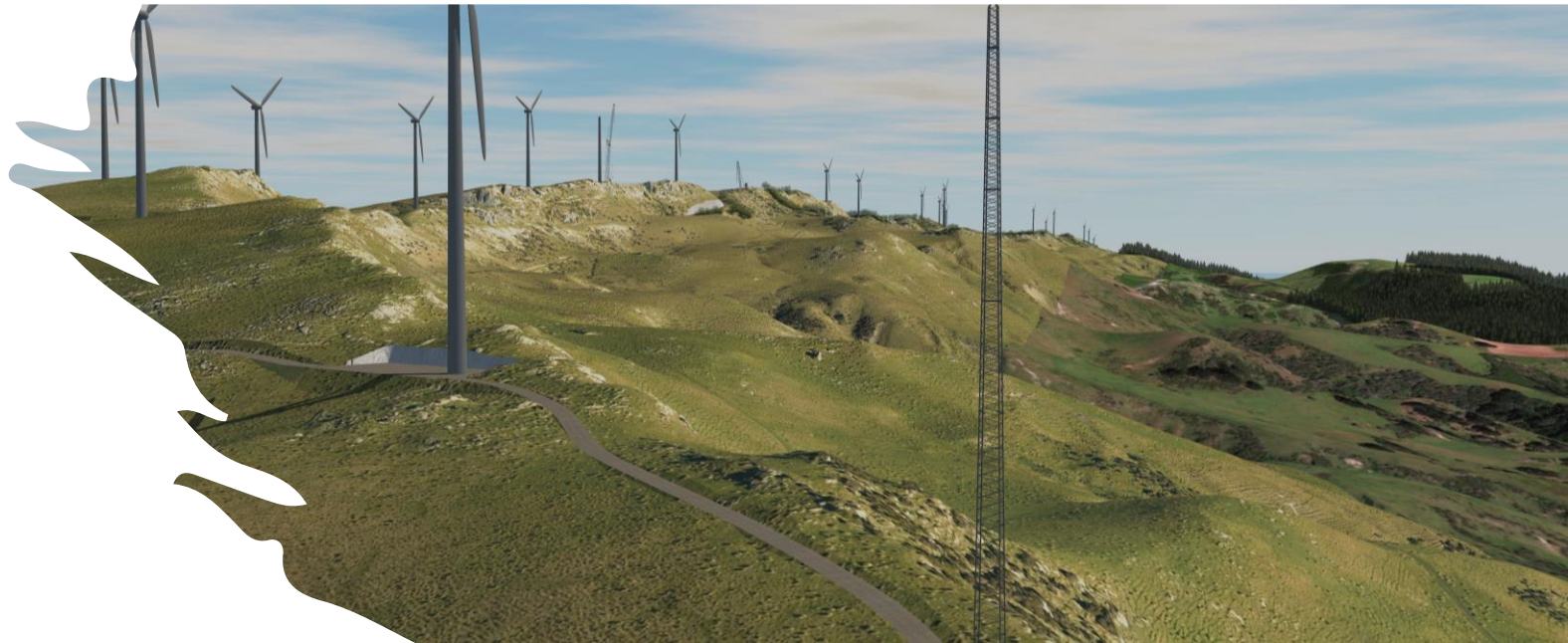


Value of Straw Compared to Oil

| Bale Type | Bale Weight | Kilo watt hours (kWh) per bale | Oil equivalent (litres) | Oil Value equivalent (€0.60 c/L) |
|------------------|-------------|--------------------------------|-------------------------|----------------------------------|
| 4 x 4 Round | 150kg | 690 | 66 | €40 |
| 5 x 4 Round | 250kg | 1,150 | 110 | €66 |
| 8 x 4 x 4 Square | 500kg | 2,300 | 220 | €132 |

Current Opportunities in NZ

- Wind
 - Big scale power companies only – Mt Cass
 - Opportunity for small scale
 - Desirability
- Solar
 - Very popular – prospectors are hunting in Canterbury
 - Land near sub station
 - Future policy and tech will make all the difference.



Power Pricing (*Variable pricing only*)

- Power company – 12.83c, Lines charges – 4.78c = 17.61c
- Wholesale 8c
- Opportunity –
 - direct to neighbour
 - Battery – EVs, Hydrogen, Milk tankers
- Cooperative

