



# Getting to low emissions agriculture

*Ideas from the Motu Low Emissions Future Dialogue*

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# Is agriculture different?

## Gases

### Nitrous oxide

- long-lived but cannot get to zero

### Methane

- Short-run climate benefits from reductions now
- For peak temperature – need to start serious reductions by 2050



## Food security

Focus on low emissions per unit of nutrition

- Low emissions for each food type
- Move toward low emissions food



## Long-run vision:

NZ operates a highly efficient, ultra-low-emission food production system

a combination of.....

1. NZ operates an ultra-GHG-efficient livestock sector.
2. NZ produces zero-methane, low-N<sub>2</sub>O nutrition.
3. NZ reduces food waste across the chain of food production and consumption.
4. NZers have low emission diets.



# What needs to happen to get there?

2. NZ produces zero-methane, low-N<sub>2</sub>O nutrition

→ Farms optimise use of nitrogenous fertiliser

A 'nutrition' metric is agreed

Profitable non-ruminant land-use options have been found, tested and established

Pricing mechanism rewards low emission nutrition (producing and eating)



What actions can we take now and who can take them?

## 2. NZ produces zero-methane, low-N<sub>2</sub>O nutrition

→ A 'nutrition' metric is agreed

→ MPI funds research to define and test alternative metrics

Federated Farmers leads a diverse stakeholder dialogue group to agree a metric

MFAT get international community to accept the metric



# What actions can we take now and who can take them?

NZ produces zero-methane, low-N<sub>2</sub>O nutrition

→ Profitable non-ruminant land-use options have been found, tested and established

→ MPI funds more research on non-ruminant production including field/market trials

Business schools do supply chain analysis for new products

MBIE supports creation of new cooperative industry bodies

Farmers and entrepreneurs work together to create integrated production, processing and marketing chains

Ag ITOs train young people to work in new industries

Consumer groups promote new products

# Act now with a future focus

Goal is not zero emissions from agriculture but **ultra-efficient, low-emissions nutrition**

Start now

- Continued increases in efficiency within existing uses
- Move toward low-emission high-nutrition products

Need nutrition metric and pricing to provide clear signals for direction of changes

Create options and capability

Many, many actors and actions – what can you do?



Future food?



### The process

