



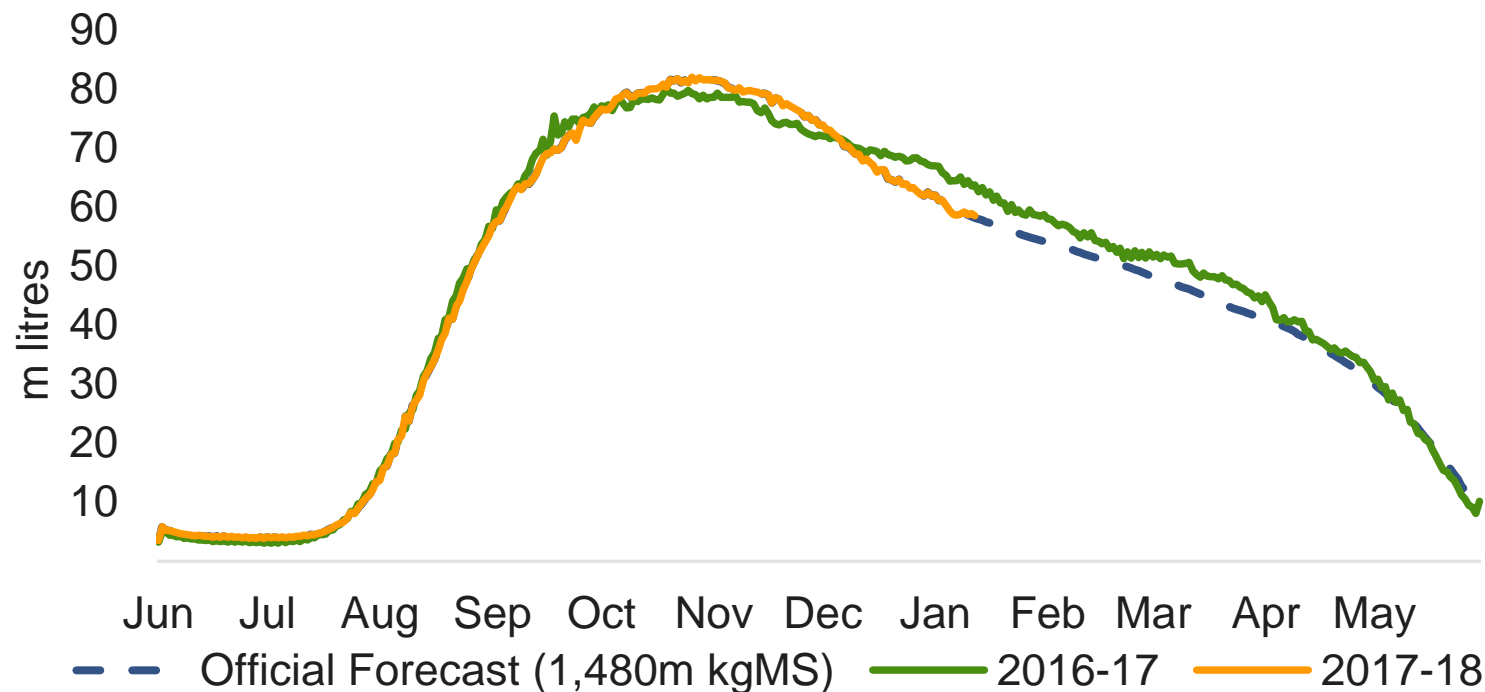
Dairy for life

NDDT Northland  
Farmers Conference  
February 2017

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# NZ milk supply forecast for F18 reduced to 1,480m kgMS





# Beingmate is an important investment





# The Global Context

Food is at the centre of many sustainability challenges facing the world.

The global transformation required to meet these challenges will shape the future of food production.

# 40%

## Water scarcity

By 2030 it is projected that 40 per cent of water demand in the world won't be met.

## Water quality

Intensification of agriculture has contributed to declining water quality around the world, caused by run-off of nutrients from the land.

## Limiting and adapting to climate change

The world's food production systems must address emissions from agriculture. It is also likely that agricultural production will face significant disruption from changes to climates and increased variability in weather patterns.

# 2°C

## Global Agreement

Paris Agreement to keep global temperature rise this century to well below 2°C.



## Limited new land for further agricultural growth

Even with today's agricultural practices, there is not enough additional agricultural land to meet the growing demand for food.



## Threatened biodiversity

Around the world the variety of plants, animals and micro-organisms, and the ecosystems they form, has decreased.



# 9.7B

## **Feeding a growing population**

By 2050 the world's population is projected to increase to 9.7 billion. This is expected to drive a 50 per cent increase in the demand for food.

# 792M

## **Access to nutrition**

Many people don't have access to adequate nutrition. Around 792 million people are undernourished around the world.



# 1.9B

## **A public health crisis**

The leading cause of death in most countries today is poor diets and lifestyles. About 1.9 billion adults are overweight or obese.

# %

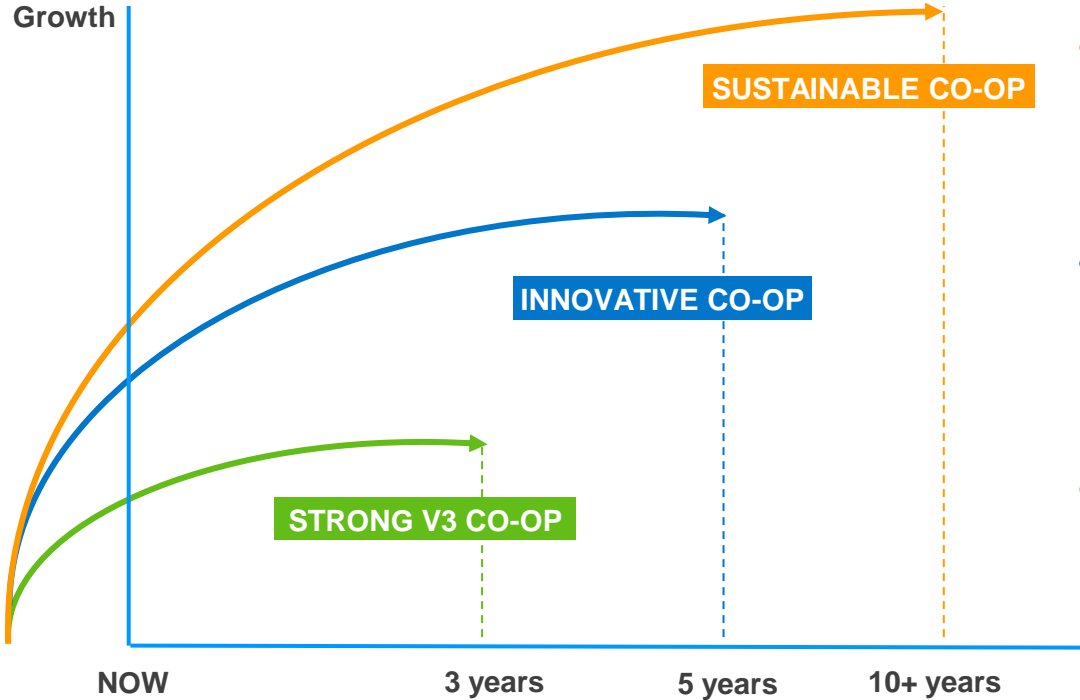
## **Improvements in global land productivity have slowed down**

Over the past century innovation has significantly increased productivity per hectare of land. However, these gains are slowing. Productivity growth per hectare is now less than one per cent each year.



# Strategy focused on achieving our ambition

## Three strategic horizons



- Creating sustainable value for all stakeholders
- Investing in technology and people for the future
- Demand-led strategy to optimise NZ milk, supported by milk pools

Competitive advantage of **Cost Leadership through Scale Efficiency**



# R&D focused on four platforms

## Dairy Beverage Solutions

Improving:

- Affordability
- Convenience
- Environmental sustainability
- Functionality
- Taste and texture



### Expected outcome:

- Differentiated products
- World-leading dairy protein portfolio
- Optimised consumer experience

## Dairy Nutrition Delivery

Delivering specific nutritional benefits with focus on:

- Cognition
- Mobility
- Wellness



### Expected outcome:

- Dairy nutritional solutions
- Substantiated health benefits
- Cost-effective nutrition

## Dairy Food Solutions

Designing food solutions which provide superior functional and sensory performance across a range of applications



### Expected outcome:

- Next generation cream cheeses, mozzarella, cheeses and creams

## Dairy Farming Systems

Delivering 'More of the Right Milk' through science and technology



### Expected outcome:

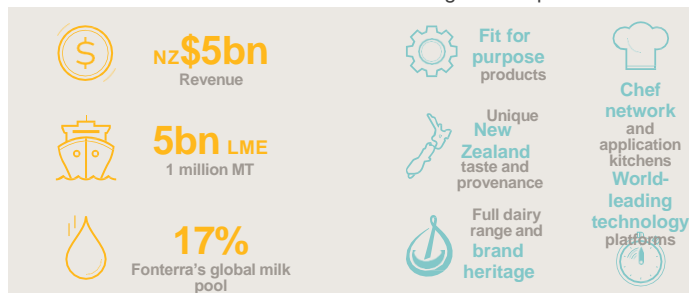
- Safe, high-quality and traceable milk
- More value to our milk
- Milk is responsibly and sustainably sourced



# Global Foodservice channel-led strategy

## 1. ASPIRATION

We have clear growth aspirations



## 5. MARKET FOCUS

We focus on 20 markets led by China, Indonesia, Australia and Global Accounts with expansion into USA and Brazil



Note: Aspiration refers to 2025.

## 2. RIGHT TO PLAY

We are uniquely positioned to deliver on our growth aspirations

## 3. CHANNEL FOCUS

We focus on three specific types of food service businesses



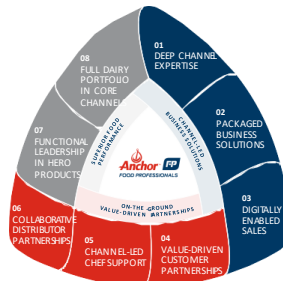
## 4. CATEGORY FOCUS

Our innovation focuses on six hero products made for our customers' most important applications



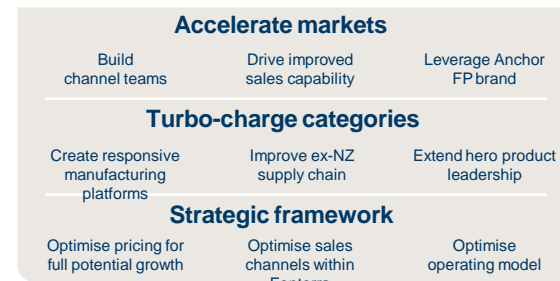
## 6. RIGHT TO WIN

We will drive a step-change in accelerated growth and sustainable competitive advantage



## 7. ENABLERS

We are investing in new capability to enable the Channel-led System







# 98.4%

## Fencing statistics

98.4 per cent of waterways on supplying farms in New Zealand are fenced to keep cows out of waterways.



## On-farm emissions

19.9 million tonnes CO<sub>2</sub>e emitted from supplying farms around the world.

## Emissions intensity per kilogram<sup>1</sup>

New Zealand	0.85
Australia	0.92
China	1.62

# 22%

22 per cent reduction in New Zealand somatic cell count since 2009, a key indicator of animal health.



## Farmer training

More than 2,600 farmers in Sri Lanka received training.

# 50

New ambition for 50 water catchments in New Zealand.



# 4%

## Riparian management plans

4 per cent of supplying farms in New Zealand have documented riparian management plans.

# 95%

95 per cent of supplying farms in New Zealand are participating in nutrient management reporting and benchmarking.





# Protein Technologies

## Functional and nutritional performance

### Functional Proteins At Scale

1955 – First to mechanise the Casein Process

1973 – First UF plants, first WPC plant

1979 – First Caseinate production

1981 – First to produce TMP

1988 – Scaled Lactoferrin process

1994 – First to produce MPC at scale

1995 – First to produce WPI at scale

2000 – First functional MPCs

2008 – First functional WPC

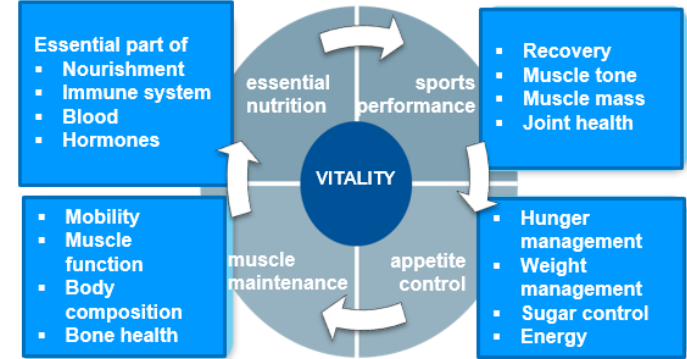
2012 – Low viscosity fMPC

2014 – Low viscosity fWPC

2015 – Novel Lactoferrin process

2017 – Clean flavour fMPC

### Nutritional Drivers for Protein



### Functional Drivers in Protein Enriched Foods

