

Milk price notional producer

This infographic is designed to illustrate what the notional producer business looks like for the purposes of calculating Fonterra's base (farmgate) milk price. The Commission is required annually to review Fonterra's Milk Price Manual and Fonterra's base milk price calculation.

Raw milk from farmers

Fonterra's actual total raw milk supply

All raw milk collected by Fonterra is processed into Reference commodity products (RCP).

RCP = WMP; SMP; AMF; Butter and BMP

Actual Fonterra collection costs to WMP/SMP plant

Same processing site footprint as Fonterra which means that Fonterra sites that produce Non-RCPs are populated in the model with WMP/SMP plants



Notional Producer Product mix

- Monthly product mix targets are set prospectively
- Aligned to Fonterra's targeted monthly allocation of milk to SMP and WMP production and cream to AMF and butter production
- Monthly average milk composition used is Fonterra's actual milk composition across New Zealand

WMP/SMP

2014/15 WMP and SMP plants:
North Island = 28 plants
South Island = 19 plants
Total 47 plants

Lactose purchased overseas
(Quantity = specifications of RCP in production plan)

Lactose freight costs from wharf to site

BUTTER

2014/15 Butter plants:
North Island = 5 plants
South Island = 1 plant

Storage costs (cool product)
Third party storage

BMP

2014/15 BMP plants:
North Island = 2 plants
South Island = 2 plants

Lactose purchased overseas
(Quantity = specifications of RCP in production plan)

Lactose freight costs from wharf to site

AMF

2014/15 AMF plants:
North Island = 2 plants
South Island = 2 plants
(1 plant added since 2009)

YIELDS

Monthly national average yields, notional losses and RCP specifications
Comprised of:

- Target product composition of fat and protein – based on minimum fat and protein content international standard
- Production losses (fat and protein)
- Fat content of cream
- Yields calculated for each combination of SMP/Butter/BMP; SMP/AMF/BMP; WMP/Butter/BMP and WMP/AMF/BMP

OTHER COSTS

Site and plant costs for WMP/SMP/AMF/BMP/Butter

FIXED

- Energy costs
- Plant labour costs (wages)
- Repairs and maintenance costs
- Site overhead costs
- Water, cleaning, effluent, laboratory and consumables

VARIABLE (by volumes produced)

- Storage costs (dry products)
- Packaging costs
- Energy costs (includes Carbon credit requirements)
- Water, cleaning, effluent, laboratory and consumables

Selling costs

- The costs of selling through GDT (GDT fees)
- The costs of maintaining 8 in-market hubs for customer service
- The costs of maintaining 4 in-house country offices to support government procurement customers
- The costs of sales-related NZ costs

Administration costs

- Corporate overheads
- IS costs
- Communication and branding
- Governance costs
- Sustainability costs
- FTO corporate and supply chain overheads (includes main office)
- Insurance

Cost of Fixed assets (calculated for capital charge)

Supply chain operating and overhead costs

Depreciation on fixed assets (including collection assets)

Tax expense

Capital charge

Function of:

- Notional producer's Weighted cost of capital (WACC) rate
- Old assets, land & IS 2008-2012
- New assets, land & IS from 2012
- Collection and dry store assets
- Depreciation (Tilted annuity methodology)
- Capital charge on net working capital

One-off costs

LEGEND

Revenue

Costs

- RCP Reference commodity products
- WMP Whole milk powder
- SMP Skim milk powder
- AMF Anhydrous milk powder
- BMP Buttermilk powder

Prices

- WMP, SMP and AMF Prices: to Fonterra's actual prices received on GlobalDairyTrade platform (GDT)
- Butter and BMP: Fonterra's actual prices received on GDT, prices achieved on arm's length basis and prices that reflect market prices at time of contract sales
- Prices calculated by weighted average price by pricing month (Average base commodity prices)

Sales Phasing (% of product sold each month)

- Fonterra's actual sales phasings profile for each month of dairy season
- Forecasted at the start of season and updated when actual sales phasing data available
- Sales volumes include GDT and off-GDT

Sales revenue

- Revenues recognised when sales are invoiced, at time of shipment

Sales Revenue converted from USD to NZD using 'benchmark FX conversion rate'

Freight costs from plant to the wharfs for shipping

Based on Fonterra actual contract rates for dry and cool per MT of product

RCPs shipped to the customer

(90% to GDT customers, 10% to government procurement customers)

ALL PRODUCTS SOLD OVERSEAS

