

**APPLICATION FOR REPLACEMENT OF CONSENTS TO ENABLE THE CONTINUED  
OPERATION OF FONTERRA'S TE RAPA MILK PROCESSING PLANT**

**ASSESSMENT OF ECONOMIC BENEFITS**

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## SUMMARY

1. Fonterra's Te Rapa milk processing plant processes more than 8 million litres of milk per day at the peak of the season and produces 325,000 tonnes of milk powder and cream products each year. The milk is provided by farms primarily within the Waikato Region. The site employs around 380 fulltime equivalent (FTE) staff,<sup>1</sup> who are paid \$26.9 million per annum in wages and salaries. In addition Fonterra engages a range of local contractors at the site and purchases local goods and services from businesses located within Hamilton City and elsewhere within the Waikato Region.
2. The purpose of this report is to assess the economic effects of renewal of a number of consents enabling the continued operation of the Te Rapa plant. These consents are due to expire on 1 September, 2017 and relate to the taking of water from the Waikato River, discharge of treated wastewater, cooling water and stormwater to the Waikato River, discharges to air from milk processing activities and the cogeneration plant and the operation and maintenance of outfall structures.
3. There are a number reasons why granting the consent renewals will enable Fonterra to continue the efficient operation of its activities on the Te Rapa site. These include:
  - a. Sufficient milk production capacity in the immediate area and wider surrounding catchment;
  - b. Optimised location from the perspective of milk and dairy products transportation;
  - c. The proximity of a skilled workforce;
  - d. The proximity of supplier businesses with appropriate expertise and experience;
  - e. The proximity of a good road network for plant inputs and outputs;
  - f. The ability to minimise and mitigate adverse environmental effects for neighbours and the wider community;

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<sup>1</sup>Staff numbers fluctuate depending on seasonal requirements.

- g. Economies of scale and scope as compared to relocating processing capacity to a number of alternative sites; and
  - h. Sufficient consumptive water supply to run the existing plant and reuse systems.<sup>2</sup>
- 4. The current (July, 2016) book value for the Te Rapa plant is \$169.5 million. The latest estimate (July, 2016) for the Te Rapa plant's replacement value is \$869.4 million and much of this value is sunk – i.e. it could not be recovered if the plant was forced to downsize, close or be relocated.<sup>3</sup>
- 5. Manufacturing, including food product manufacturing, is an important component of the Hamilton City economy. Other important sectors include health care and social assistance, retail trade, education and training, professional, scientific and technical services, construction and accommodation and food services. These are also important sectors in the Waikato regional economy together with agriculture.
- 6. The renewal of consents enabling the continued operation of the Te Rapa milk processing plant will maintain the economic wellbeing of people and communities within Hamilton City and the Waikato Region by:
  - a. Maintaining significant direct and indirect employment opportunities for local residents;
  - b. Maintaining significant direct and indirect wages and salaries for local residents;
  - c. Maintaining significant levels of direct and indirect expenditure with local businesses;
  - d. Maintaining population and economic activity levels within local communities thereby maintaining the breadth and quality of services available to local residents and businesses;
  - e. Providing greater employment choice for local residents; and

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<sup>2</sup>The net water balance for the site is positive – that is, generally more water is returned to the river than is taken from the river, as a consequence of water being extracted from the cows' milk by evaporation.

<sup>3</sup>The replacement cost is a better reflection of the economic value of the plant to Fonterra (and the national economy) than the book value, since it covers the costs that would be incurred if the plant was forced to close and the same volume of milk needed to be processed elsewhere. The book value of the plant is for accounting purposes rather than a measure of its economic value.

- f. Continuing Fonterra's contributions to local community activities.
7. The renewal of the consents sought by Fonterra will maintain resource use efficiency by enabling:
  - a. The continued use of existing plant and equipment with significant sunk costs;
  - b. The minimisation of the associated transport costs for milk collection and finished product dispatch;
  - c. The continued utilisation of a trained and experienced workforce and businesses with appropriate expertise and experience within close proximity of the plant;
  - d. The continued benefits from economies of scale and scope as compared to re-locating milk processing capability to a number of alternative sites; and
  - e. The maintenance of population and economic activity levels (or "critical mass") in Hamilton City and the Waikato Region, thereby providing economies of scale and competition in the local provision of goods and services.
8. There are also economic efficiency benefits associated with consents being renewed for a longer term as compared to short term consent renewals. The budgeted cost to renew these consent activities is in excess of \$325,000 without allowance for potential hearing costs.<sup>4</sup> Longer term consent renewals not only save more frequent consent renewal costs, but also provide greater certainty for investment in, and management of, the plant. Of particular importance to the renewal of the Te Rapa site's consent renewals is that longer term consent renewals provide appropriate incentives for investment to be made to achieve significant improvements in wastewater quality. Fonterra are proposing to invest more than \$5 million to improve the quality of wastewater discharged into the Waikato River, consistent with the requirements of Waikato Regional Council's proposed Plan Change 1 – Waikato and Waipa River Catchments.

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<sup>4</sup>The Te Rapa and TeAwamutu consent renewal applications are being run in tandem with an estimated total cost without hearings of \$650,000. Much of this cost relates to investigations into feasible wastewater improvement options for each of the plants which are consistent with the Proposed Waikato Regional Plan Change 1 requirements for wastewater discharges into the Waikato River.

9. There are no economic externality costs from the renewal of the resource consents Fonterra are seeking for the Te Rapa site, since no third parties will need to absorb economic costs as a consequence of the consent renewals being granted.
10. The Resource Management Act 1991 (RMA) requires the consent authority when considering the renewal of an existing consent to “*have regard to the value of the investment of the existing consent holder.*” The value to Fonterra (and its shareholder suppliers) of its investment in the Te Rapa plant can be considered in terms of either the value of the plant (\$869.4 million replacement cost) or the foregone future earnings of the plant if it was forced to close. By both of these measures, the value of the Te Rapa plant is significant to the existing consents’ holder.
11. Whilst Fonterra is proposing significant investment to be made to improve the quality of wastewater discharged into the Waikato River, consistent with the Waikato Regional Council’s Proposed Plan Change 1 – Waikato and Waipa River Catchments, any environmental benefits that might be achieved by more onerous conditions with respect to wastewater discharge quality need to be assessed against the economic costs to farmers and the wider community from the increased costs to Fonterra from complying with those consents.

## 1. INTRODUCTION

### Background

- 1.1 Fonterra Limited (Fonterra) operates the Te Rapa milk processing site on the northern outskirts of Hamilton City. The site was established in 1967 and now is Waikato's largest manufacturing site producing 325,000 tonnes of milk powder and cream products. At the peak of the season it processes more than 8 million litres of milk per day drawn from the surrounding Waikato Region. It accounts for around 20% of Fonterra's annual milk powder production.
- 1.2 The site employs around 380 fulltime equivalent (FTE) staff,<sup>5</sup> of whom approximately 68% live in Hamilton City, 15% live in the Waikato District, 6% live in the Waipa District, 5% live in the Matamata-Piako District and 6% live outside the Waikato Region. Total wages and salaries of \$26.9 million are paid to these staff each year. In addition the site engages a range of local contractors and purchases local goods and services from businesses located within Hamilton City and the wider Waikato Region. The bulk of the Te Rapa site's production of dairy products is transported by rail to the Port of Tauranga for export.<sup>6</sup>
- 1.3 Fonterra is seeking the renewal of a number of consents to enable the continued operation of the Te Rapa plant. These consents are due to expire on 1 September, 2017 and relate to the taking of water from the Waikato River, discharge of treated wastewater, cooling water and stormwater to the Waikato River, discharges to air from milk processing activities and the cogeneration plant and the operation and maintenance of outfall structures.

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<sup>5</sup>Staff numbers fluctuate depending on seasonal requirements.

<sup>6</sup>Fonterra's Crawford Street storage centre site in Hamilton is integrated with the KiwiRail network and is linked with Fonterra's manufacturing sites around the Central North Island including Te Awamutu, Waitoa, Morrinsville, Hautapu, Whareroa, Lichfield, Tirau, Canpac and Te Rapa. The site is an important part of Fonterra and Toll NZ's logistics strategy to reduce traffic congestion and carbon emissions – with the centralized storage site reducing 50,000 truck movements per annum from local roads.

## Report Objective

- 1.4 The objective of this report is to assess economic effects of the continued operation of the Te Rapa site on the Hamilton City and Waikato region economies. The report will form part of the Assessment of Environmental Effects (AEE) to be lodged in relation to the consents' renewal applications.

## Report Format

- 1.5 This report is divided into 7 parts (in addition to this introductory section). These are:
- (a) The background to Fonterra's Te Rapa site's operations;
  - (b) A consideration of the relevance of economic effects under the RMA;
  - (c) A description of the Hamilton City and Waikato regional economies;
  - (d) The economic benefits from consent renewals;
  - (e) A discussion of some potential economic costs from consent renewals;
  - (f) The economic costs of the imposition of more stringent consent conditions; and
  - (g) Overall conclusions.

## 2. BACKGROUND TO FONTERRA'S TE RAPA SITE'S OPERATIONS<sup>7</sup>

- 2.1 Fonterra Co-operative Group Limited (FCGL)<sup>8</sup> is New Zealand's biggest company and produces over 2 million tonnes of dairy products each year, with 95% exported to customers and consumers in over 140 countries.
- 2.2 FCGL processes milk across 31 processing sites in New Zealand. These sites employ around 6,250 people and provide around \$525 million in wages and salaries. Fonterra has an annual turnover of approximately \$22 billion. The company is co-operatively owned by over 10,500 shareholders, who are a mix of family owned farms and corporate entities.

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<sup>7</sup> Material in this section provided by Fonterra.

<sup>8</sup> The manufacturing sites are in the name of Fonterra Limited, which is part of Fonterra Cooperative Group Limited.

- 2.3** Fonterra's Te Rapa site suppliers are largely located in the Waikato Region, where milk supply is expected to be relatively stable over the next 10 years, although may increase by up to about 1% per annum if milk prices were to recover to or above their long term average of \$6.50 per kg of milk solids. Under Section 73 of the Dairy Industry Restructuring Act (DIRA), Fonterra is required to accept all new applications to become Fonterra shareholder farmers and all applications to increase the volume of milk supplied by shareholding farmers.<sup>9</sup> Therefore Fonterra is required to maintain processing capacity to meet the future supply of milk from existing and new Fonterra farmer suppliers.
- 2.4** Fonterra has a number of other milk processing plants within the Waikato Region. However these plants operate at or near to their current capacities, processing milk collected from their respective catchments. If the Te Rapa site were to close or be required to significantly downsize, Fonterra would need to construct new milk processing capacity elsewhere within the Waikato Region or nearby to the Waikato Region.
- 2.5** The current (July, 2016) book value for the Te Rapa plant is \$169.5 million. The latest estimate (July, 2016) for the Te Rapa plant's replacement value is \$869.4 million and much of this value is sunk – i.e. it could not be recovered if the plant was forced to downsize, close or be relocated.<sup>10</sup> In addition the Te Rapa site has a number of other economic advantages for a milk processing plant, which may not be achievable at alternative sites. These include:
- (a) Sufficient milk production capacity at the site to service the immediate area and wider surrounding catchment;
  - (b) Optimised location from the perspective of milk and dairy products transportation;
  - (c) The proximity of a skilled workforce;
  - (d) The proximity of supplier businesses with appropriate expertise and experience;

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<sup>9</sup> In some exceptional circumstances, Fonterra can refuse to accept additional volumes of milk for processing. These circumstances relate to minimum volumes of milk solids and where transport costs for a new applicant exceed those of its highest transport cost existing supplier.

<sup>10</sup> The replacement cost is a better reflection of the economic value of the plant to Fonterra (and the national economy) than the book value, since it covers the costs that would be incurred if the plant was forced to close and the same volume of milk needed to be processed elsewhere. The book value of the plant is for accounting purposes rather than a measure of its economic value.

- (e) The proximity of a good road network for plant inputs and outputs;
- (f) The ability to minimise and mitigate adverse environmental effects for neighbours and the wider community;
- (g) Economies of scale and scope as compared to relocating processing capacity to a number of alternative sites;
- (h) Sufficient consumptive water supply to run the plant and reuse systems;<sup>11</sup> and
- (i) Suitable wastewater disposal options.

**2.6** Consent renewals will enable Fonterra and its supplier shareholders to continue to benefit from these economic advantages of the Te Rapa site for milk processing. Closure or downsizing of the plant due to consents not being renewed or being renewed with more stringent limits, than what Fonterra is putting forward as proposed consent conditions, would result in efficiency losses, higher costs and reduced returns for Fonterra's farmer shareholders. In addition there will be economic costs for the broader Hamilton City and Waikato communities. These are covered later in this report.

### **3. ECONOMICS AND THE RMA**

#### **Community Economic Wellbeing**

- 3.1** Economic considerations are intertwined with the concept of the sustainable management of natural and physical resources, which is embodied in the RMA. In particular, Part II section 5(2) refers to enabling "*people and communities to provide for their ... economic ... wellbeing*" as a part of the meaning of "*sustainable management*", the promotion of which is the purpose of the RMA.
- 3.2** As well as indicating the relevance of economic effects in considerations under the RMA, this section also refers to "*people and communities*", which highlights that in assessing the impacts of a proposal it is the impacts on the community and not just the applicant or particular individuals or organisations, that must be taken into

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<sup>11</sup> The net water balance for the site is positive – that is, generally more water is returned to the river than is taken from the river, as a consequence of water being extracted from the cows' milk by evaporation.

account. This is underpinned by the definition of “*environment*” which also extends to include people and communities.

- 3.3** The continued operation of the Te Rapa plant enables the residents and businesses of Hamilton City and Waikato Region to provide for their social and economic wellbeing.

### **Economic Efficiency**

- 3.4** Part II section 7(b) of the RMA notes that in achieving the purpose of the Act, all persons “*shall have particular regard to ... the efficient use and development of natural and physical resources*” which include the economic concept of efficiency<sup>12</sup>. Economic efficiency can be defined as:

*“the effectiveness of resource allocation in the economy as a whole such that outputs of goods and services fully reflect consumer preferences for these goods and services as well as individual goods and services being produced at minimum cost through appropriate mixes of factor inputs”<sup>13</sup>.*

- 3.5** More generally economic efficiency can be considered in terms of:
- Maximising the value of outputs divided by the cost of inputs;
  - Maximising the value of outputs for a given cost of inputs;
  - Minimising the cost of inputs for a given value of outputs;
  - Improving the utilisation of existing assets; and
  - Minimising waste.

- 3.6** The continued operation of Fonterra’s Te Rapa site is consistent with the efficient use of resources, especially in regard to the ongoing use of significant existing assets and transport cost savings.

### **Value of Investment to the Existing Consent Holder**

<sup>12</sup> See, for example, in *Marlborough Ridge Ltd v Marlborough District Council* [1998] NZRMA 73, the Court noted that all aspects of efficiency are “*economic*” by definition because economics is about the use of resources generally.

<sup>13</sup> Pass, Christopher and Lowes, Bryan, 1993, *Collins Dictionary of Economics* (2<sup>nd</sup> edition), Harper Collins, page 148.

- 3.7** Part 6, Section 104 (2A) of the RMA requires the consent authority when considering a renewal of an existing consent to “*have regard to the value of the investment of the existing consent holder.*” The value to Fonterra (and its shareholder suppliers) of its investment in the Te Papa site can be considered in terms of either the value of the plant (\$869.4 million estimated replacement value) or the foregone future earnings of the plant if it was forced to close. By both of these measures, the value of investment at the Te Rapa site is significant to the existing consents’ holder.

### **Viewpoint**

- 3.8** An essential first step in carrying out an evaluation of the positive and negative economic effects of a development project is to define the appropriate viewpoint that is to be adopted. This helps to define which economic effects are relevant to the analysis. Typically a city (or district) and wider regional viewpoint is adopted and sometimes even a nationwide viewpoint might be considered appropriate.
- 3.9** The Te Rapa milk processing plant is located in Hamilton City, which is also the location of the residences of around 68% of its employees. The plant’s operations also impact on the wider Waikato Region. Therefore in this report the economic effects are considered in relation to both Hamilton City and the Waikato Region.
- 3.10** There are also private or financial benefits associated with the continued operation of Fonterra’s Te Rapa site. Generally these benefits are not relevant under the RMA and the main focus of this report is therefore on the wider economic effects on parties other than Fonterra and its customers. Economists refer to such effects as “externalities”<sup>14</sup>.
- 3.11** However, Fonterra is owned by its farmer shareholders and financial benefits to Fonterra impact on the “*economic (and social) wellbeing*” of these farmer shareholders including those within the local community – i.e. the Waikato Region. Also financial benefits to Fonterra are relevant with respect to the “*efficient use and development of natural and physical resources*” and New Zealand’s export

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<sup>14</sup> Defined as the side effects of the production or use of a good or service, which affects third parties, other than just the buyer and seller.

competitiveness, given the importance of dairy product exports to the New Zealand economy.

#### 4. BACKGROUND TO HAMILTON CITY AND WAIKATO REGION ECONOMIES<sup>15</sup>

##### Population

- 4.1** Statistics New Zealand's June 2016 population estimate for Hamilton City is 161,200. In 2006, population in the City was 134,800, implying growth of 19.6% over the period 2006 to 2016, as compared to growth of 12.1% for New Zealand as whole. Statistics New Zealand's 'medium' population projections<sup>16</sup> have Hamilton City's population increasing to 212,900 in 2043 – i.e. an average rate of increase of 1.0% per annum over the period 2016-43, compared to an average rate of growth for New Zealand of 0.7% per annum.
- 4.2** Statistics New Zealand's June 2016 population estimate for the Waikato Region is 449,200. In 2006 population in the region was 393,200. The region's population over the period 2006 to 2016 has grown by 14.2%. Statistics New Zealand's 'medium' population projections have the region's population increasing to 517,400 in 2043 – i.e. an average rate of increase of 0.5% per annum over the period 2016-43.
- 4.3** Employment data highlights the importance of manufacturing to the Hamilton City economy. In February 2015, 8,750 jobs (10.8%) of the City's 81,270 jobs were in manufacturing including 1,890 food product manufacturing jobs (including 1,120 dairy product manufacturing jobs and 450 meat and meat product manufacturing jobs), 1,780 fabricated metal product manufacturing jobs, and 1,300 machinery and equipment jobs. Other significant sources of employment within Hamilton City are health and social assistance (13,620 jobs, or 16.8% of total employment), retail trade (8,590 jobs or 10.6% of total employment), education and training (8,040 jobs or 9.9% of total employment), professional, scientific and technical services (7,020 jobs or 8.6% of total employment), construction (5,630 jobs or

<sup>15</sup> Data in this section from Statistics New Zealand.

<sup>16</sup> Statistics New Zealand prepare three sets of projections – high, medium and low – according to natural population change (i.e. the net effect of birth and death rate assumptions) and net migration assumptions. These projections do not explicitly incorporate assumptions about different rates of economic development.

6.9% of total employment) and accommodation and food services (4,990 jobs or 6.1% of total employment).

- 4.4** For the Waikato Region in February, 2015 there were 176,110 jobs. Manufacturing provided 22,300 jobs (12.7% of total employment) with 9,100 jobs in food manufacturing (including 3,890 meat and meat product manufacturing jobs and 3,790 dairy product manufacturing jobs), 2,530 in machinery and equipment manufacturing, 2,460 fabricated metal products manufacturing and 2,260 wood and wood products manufacturing. Agriculture, forestry and fishing is another significant sector in the Waikato Region providing 17,790 jobs (10.1% of total employment), including 16,380 jobs in agriculture<sup>17</sup> of which 7,460 are dairy farming jobs and 2,140 sheep and beef farming jobs. Other important sources of employment for the Waikato Region are health care and social assistance (20,000 jobs or 11.4% of total regional employment), retail trade (17,820 jobs or 10.1% of total regional employment), education and training (16,440 jobs or 9.3% of total regional employment), accommodation and food services (12,290 jobs or 7.0% of total regional employment), construction (12,140 jobs or 7.0% of total employment), and professional, scientific and technical services (11,270 jobs or 6.4% of total employment).

## **5. ECONOMIC BENEFITS FROM CONSENTS RENEWAL**

### **Maintaining Economic Activity within Hamilton City and Waikato Regional Economies<sup>18</sup>**

- 5.1** The Te Rapa milk processing plant employs around 380 FTE staff, who receive \$26.9 million in wages and salaries per annum. Fonterra spends an estimated additional \$82.5 million per annum on other goods and services (excluding milk) required at the plant. The bulk of this is with local Waikato region businesses, principally located within Hamilton City. Goods and services to the plant provided by local firms include packaging materials, cleaning products and services, motor vehicles, freight and maintenance contractors.

<sup>17</sup> Includes agriculture support services.

<sup>18</sup> Unless stated otherwise data in this section provided by Fonterra.

- 5.2** These are the direct economic impacts for the local economy from the plant's operation.<sup>19</sup>
- 5.3** However in addition to these direct economic impacts there are indirect impacts arising from:
- a. The effects on suppliers of goods and services provided to the plant from within the Hamilton City and the wider Waikato Region (i.e. the "forward and backward linkage" effects); and
  - b. The supply of goods and services from within Hamilton City and the Waikato Region to employees at the plant and to those engaged in supplying goods and services to the plant (i.e. the "induced" effects). For example, there will be additional jobs and incomes for employees of supermarkets, restaurants, bars, and short term accommodation as a consequence of the additional expenditure by employees directly employed at the plant.
- 5.4** Multipliers can be estimated to gauge the size of these indirect effects. The size of the multipliers is a function of the extent to which an area's economy is self-sufficient in the provision of a full range of goods and services and the area's proximity to alternative sources of supply. Multipliers typically fall in the range of 1.5 to 2.0 and taking the mid-point of this range (i.e. 1.75) implies total impacts (i.e. direct plus indirect impacts) of:
- 665 FTE jobs for local Waikato Region residents; and
  - \$47.2 million per annum in wages and salaries for local Waikato residents.
- 5.5** Most of the direct and indirect benefits of the plants continued operation will accrue to Hamilton City residents and businesses because (i) this is the place of residence of most of the plant employees; (ii) many of the employees living outside of Hamilton City will purchase goods and services from Hamilton City

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<sup>19</sup> No account is taken in this section of the direct and indirect economic impacts of dairy farming within the Waikato Region. Dairy farming will in general not be affected by whether the resource consents are renewed – i.e. milk produced within the region it is assumed will be diverted to other milk processing plants if consents are not renewed. However to the extent the non-renewal of consents or stricter consent conditions add costs to milk processing, farmers will be impacted as a consequence of lower payments for milk.

businesses; and (iii) Hamilton City businesses will be suppliers of goods and services to the plant.

### **Economic Benefits from Increased Economic Activity**

- 5.6** As indicators of levels of economic activity, economic impacts in terms of increased expenditure, incomes and employment within the local economy are not in themselves measures of improvements in economic welfare or economic wellbeing. However, there are economic welfare enhancing benefits associated with increased levels of economic activity. These relate to one or more of:
- a. Increased economies of scale: Businesses and public sector agencies are able to provide increased amounts of outputs with lower unit costs, hence increasing profitability or lowering prices;
  - b. Increased competition: Increases in the demand for goods and services allow a greater number of providers of goods and services in markets and there are efficiency benefits from increased levels of competition;
  - c. Reduced unemployment and underemployment<sup>20</sup> of resources: To the extent resources (including labour) would be otherwise unemployed or underemployed, higher levels of economic activity can bring efficiency benefits when there is a reduction in unemployment and underemployment. The extent of such gains is of course a function of the extent of underutilized resources within the local economy at the time and the match of resource requirements and those resources unemployed or underemployed within the local economy; and
  - d. Increased quality of central government provided services: Sometimes the quality of services provided by central government such as education and health care are a function of population levels and the breadth and quality of such services in a community is higher with higher levels of economic activity, particularly to the extent they lead to or maintain higher levels of population.

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<sup>20</sup> Underemployment differs from unemployment in that resources are employed but not at their maximum worth; e.g. in the case of labour, it can be employed at a higher skill and/or productivity level, reflected in higher wage rates.

- 5.7** The Te Rapa milk processing plant gives Hamilton City and the Waikato Region greater critical mass and as a consequence the local residents and businesses can expect some increased benefit from economies of scale, greater competition, increased resource utilisation and better central government provided services.

### **Economic Efficiency Benefits from Optimising Plant Location**

- 5.8** There are a number of economic efficiency benefits from Fonterra obtaining renewal of consents to enable the continued operation of the Te Rapa site. These have been listed earlier in Section 2 of this report and include the continued use of existing plant and equipment with an estimated replacement value of \$869.4 million,<sup>21</sup> the minimisation of transport costs (and carbon footprint) for milk collection and finished product dispatch, the availability of a trained and experienced workforce and businesses with appropriate expertise and experience within close proximity of the plant, and economies of scale and scope as compared to re-locating processing capability to a number of alternative sites.
- 5.9** There are economic efficiency benefits associated with consents being renewed for a longer term as compared to short term consent renewals. To undertake a consent renewal process will typically require a project timeframe of at least 2 years, and for more complex applications requiring technical assessments to evaluate adverse environmental effects and how these might be remedied or mitigated this timeframe could extend to up to 4 years. The budgeted cost to renew these Te Rapa plant consents for Fonterra is around \$325,000 without allowance for potential hearing costs.<sup>22</sup> Longer term consent renewals not only save more frequent consent renewal costs, but also provide greater certainty for investment in, and management of, the plant. In addition, greater certainty over a longer consent length provides for considerably greater confidence in committing to any future investment within the site - e.g. improved and more efficient technology. Of particular importance to the renewal of the Te Rapa site's consents

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<sup>21</sup> In addition to the economic efficiency benefits from the continued use of plant and equipment having a replacement value of \$869.4 million, Fonterra's significant investment in the Te Rapa plant is also relevant in terms of Part 6, section 104 (2A) of the RMA, which requires regard to be given to the value of the investment of the existing consent holder.

<sup>22</sup> The Te Rapa and Te Awamutu consent renewal applications are being run in tandem with an estimated total cost without hearings of \$650,000. Much of this cost relates to investigations into feasible wastewater improvement options for each of the plants which are consistent with the Proposed Waikato Regional Plan Change 1 requirements for wastewater discharges into the Waikato River.

is that longer term consent renewals provide appropriate incentives for investment to be made to achieve significant improvements in wastewater quality.

- 5.10** Maintaining these economic efficiency benefits is consistent with *“the efficient use and development of natural and physical resources”* (Part 2, section 7(b) of the RMA) as well as enabling *“people and communities to provide for their economic and social wellbeing”* (Part 2, section 5(2) of the RMA).

### **Greater Economic Resilience for Hamilton City and the Waikato Region**

- 5.11** As discussed earlier in this report, the Waikato Region is significantly dependent upon the agricultural sector. Therefore the Te Rapa milk processing plant helps provide greater diversity and balance to the local economy. Although it involves the processing of an agricultural commodity, having milk processing capacity within the region provides employment opportunities and incomes less dependent upon returns to the agricultural sector. This makes the local economy more resilient to agricultural commodity price cycles.

- 5.12** Hamilton City also benefits from having additional manufacturing activity to provide diversity to its economy.

### **Rates Income to the Hamilton City Council and Waikato Regional Council**

- 5.13** The Te Rapa plant pays around \$412,000 per annum in rates to the Hamilton City Council and \$38,500 to the Waikato Regional Council. Whilst these payments are for services provided by the Councils and from which Fonterra and its employees benefit, economies of scale mean that should the Councils lose this income, the range and quality of services provided by the Councils would diminish and/or payments by other ratepayers in the City and Region would need to increase.

### **Community Sponsorship Programmes**

- 5.14** In recognition of the important role the community plays in helping Fonterra realise its potential, the company provides financial and other support to a number of initiatives at the local community level through its Fonterra Grass Roots Fund. The Upper Waikato Region, covering Auckland South to Waikato (including Hamilton,

Te Rapa, Morrinsville, Te Aroha, Waitoa, Matamata, Thames and Pukekohe) has an annual budget of \$96,000. The types of organisations that have benefited in the past include Plunket, fire brigades, lifesaving organisations, schools, kindergartens, calf clubs and group days, and sports clubs.

## **6. POTENTIAL ECONOMIC COSTS OF RENEWAL OF RESOURCE CONSENTS**

### **Lost Alternative Land Uses**

- 6.1** Lost alternative land uses of the site are not an external cost of Fonterra's continued use of the Te Rapa site for milk processing. The productive value of the land in alternative uses is internalised into the cost structure of the Te Rapa development – in other words Fonterra in purchasing the land has paid a price reflective of future net returns from alternative uses for the land. Such costs are not costs to be borne by the wider community.

### **Utilities**

- 6.2** Externality costs can arise when utilities provided by central or local government (e.g. roads, water supply, storm water and flood control systems and wastewater disposal) are not appropriately priced. In the case of Fonterra's Te Rapa milk processing plant, no such externality costs arise.
- 6.3** Fonterra and its farmer suppliers make payments via road user charges and rates for the ongoing maintenance and necessary upgrades to the state highway and local council road networks as a consequence of milk tanker movements within the site's catchment.
- 6.4** With respect to water supply and storm water and wastewater disposal (for the plant) Fonterra's Te Rapa plant is largely self-sufficient. Only the plant's sewage wastewater goes through the Hamilton City Council's disposal system and Fonterra meets its share of these costs in the same manner as other ratepayers. Fonterra is not cross-subsidised by other ratepayers within the City and region.

## **7 RENEWAL OF CONSENTS WITH MORE STRINGENT CONDITIONS**

**7.1** Fonterra is proposing to invest in its wastewater treatment system to improve the quality of wastewater prior to discharge into the Waikato River. This is consistent with the requirements of the Waikato Regional Council's Proposed Plan Change 1 – Waikato and Waipa River Catchments. However, a possible outcome of the consent renewal applications' process is that the some consents are renewed but that more stringent requirements than proposed by Fonterra are imposed. The need or otherwise for more stringent conditions because of any environmental effects arising from the continued operation of the Te Rapa site are covered in the technical reports of other experts appended to the AEE. It is beyond the scope of an assessment of the economic effects of the Te Rapa site's current activities. The water quality and ecology technical report (see Appendix F) concludes that effects of continued discharge of wastewater by the plant utilising existing technology are less than minor. However in line with the requirements of the Waikato Regional Council's Proposed Plan Change 1, Fonterra is proposing to make staged investments to improve the quality of wastewater discharge from the Te Rapa plant.

**7.2** From an economic wellbeing and economic efficiency perspective it is relevant to give some consideration to the economic effects of any additional costs imposed on Fonterra to make yet further improvements in wastewater quality prior to discharge, especially where any incremental environmental benefits are assessed as being less than minor. Any significant additional costs imposed on Fonterra would impact upon and potentially reduce the payout to Fonterra's co-operative farmer members.

## **8 CONCLUSIONS**

**8.1** The renewal of consents enabling the continued operation of the Te Rapa milk processing plant will maintain the economic wellbeing of people and communities within Hamilton City and the Waikato Region by:

- (i) Maintaining significant direct and indirect employment opportunities for local residents;

- (ii) Maintaining significant direct and indirect wages and salaries for local residents;
- (iii) Maintaining significant levels of direct and indirect expenditure with local businesses;
- (iv) Maintaining population and economic activity levels within local communities thereby maintaining the breadth and quality of services available to local residents and businesses;
- (v) Providing greater employment choice for local residents;and
- (vi) Continuing Fonterra's contributions to local community activities.

8.2 The renewal of consents sought for the Te Rapa site will maintain resource use efficiency by enabling:

- (i) The continued use of existing plant and equipment with significant sunk costs;
- (ii) The minimisation of the associated transport costs for milk collection and finished product dispatch;
- (iii) The continued utilisation of a trained and experienced workforce and businesses with appropriate expertise and experience within close proximity of the plant;
- (iv) The continued benefits from economies of scale and scope as compared to re-locating milk processing capability to alternative sites outside Hamilton City (or the Waikato region) with associated inefficiencies; and
- (v) The maintenance of population and economic activity levels (or "critical mass") in Hamilton City and the Waikato region, thereby providing economies of scale and competition in the local provision of goods and services.

8.3 Fonterra is proposing to implement changes which will improve the quality of wastewater discharged into the Waikato River in line with the requirements of the Waikato Regional Council's proposed Plan Change 1. If the new consents require greater improvements than Fonterra is proposing, then any incremental environmental benefits that might be achieved by more stringent requirements need to be assessed against the economic costs to farmers and the wider community from the increased costs to Fonterra from complying with those more stringent requirements.

- 8.4 The value to Fonterra (and its shareholder suppliers) of its investment in the Te Rapa plant can be considered in terms of either the value of the plant (\$869.4 million replacement cost) or the foregone future earnings of the plant if it was forced to close. By both of these measures, the value of the Te Rapa plant is significant to the existing consents' holder.