Before fitting Dairy Flo:-

Temperature of milk as delivered to Vat = 18 Degrees Celsius
Quantity of Milk delivered per day (avg. over year) = 4000 ltrs
Number of days milked each year = 300

Calories Required = mass(g) x Temperature Change required
Calories Required = 4000000 * (18 – 7)
= 44000000
Watt Hours = Calories * 0.001163
= 51172 Wh
= 51.172 Kwh per day = 15351.6 Kwh per year

After fitting Dairy Flo:-

Temperature of milk as delivered to Vat = 14 Degrees Celsius
Quantity of Milk delivered per day (avg. over year) = 4000 ltrs
Number of days milked each year = 300

Calories Required = mass(g) x Temperature Change required
Calories Required = 4000000 * (14 – 7)
= 28000000
Watt Hours = Calories * 0.001163
= 32564 Wh
= 32.564 Kwh per day = 9769.2 Kwh per Year

15351.6 – 9769.2 = 5581.8 KWh saved Per Year!!

Assuming that the refrigeration equipment can give 2KWh of cooling for every 1KWh of electricity usage then Total Annual Power Savings attributable to the Dairy Flo are **2790.9 Kwh**

At a cost of (say) 21.1c per Kwh this is a saving to the end user of $588.88c per Annum.