

# Massey Bros (Feeds) Ltd Environmental Report 2007

## **Chairman's Report**

This is now in our fourth year of environmental reporting. We recognise that our business activities do have an impact on the environment and have developed our Environmental Policy to provide a system to help manage our impact on the environmental.

The raw materials Massey Bros use are renewable from organic resources and co-products from other processes with minimal waste and so have limited impact on the environment. Our most significant environmental impacts come from 2 sources. The first is power consumption at our manufacturing sites which has the effect of producing carbon dioxide. The second is diesel from our commercial fleet of vehicles which again release various greenhouse gases into the atmosphere such as Carbon Monoxide, various hydrocarbons and Oxides of Nitrogen and particulates.

Taking figures collected over previous years it is possible to see that the carbon dioxide produced per tonne of feed manufactured has reduced continually since the base year of 2002 until this year when there have been a number of issues which have identified and rectified by altering the way the plant operates and we should achieve a reduction in emissions in 2008.

Using figures collected for diesel usage and relating them to the types of engines installed in these vehicles, there have been significant drops in all the measured emissions both in terms of emissions per kilometre and emissions per tonne delivered. This has been achieved by keeping our fleet of vehicles up to date with the latest engine technology specified as each vehicle is replaced and working with our customers to maximise the vehicle capacity.

We have 6 years of figures for the waste produced which demonstrate that we have cut our waste by about 80% since we started to measure it. We now separate it and recycle much more and as a result it will be very difficult to achieve any additional waste reduction as our raw materials are renewable and organic. As a guide, our waste is now only 0.04% of our production.

We have 5 years of water usage figures and the plan to reduce this figure from its previous high level of 2004 has succeeded and been significantly surpassed. Water is an integral part of the process and although the last year has shown a small increase in usage, this is now a reflection that we have approached the minimum usage for the operation.

In summary, the transport fleet and waste figures show another reduction. Waste has shown a small decrease but it is increasingly difficult to reduce this figure any further. Our water usage is an integral part of the process and is now at a level that is difficult to reduce. Our carbon dioxide emissions per tonne have increased but this is where the value of an environmental management system comes in. With our regular monitoring, we have seen the figures have stopped improving and we have been able to take action quickly.

Richard Massey  
Chairman

# **Environmental Policy**

## **Mission Statement**

Massey Bros (Feeds) Ltd play an important part in the food chain. As a consequence of this we must satisfy the most rigorous standards of quality control to ensure that the resultant food is safe and wholesome. Animal welfare standards must always be met and we recognise our responsibility to the environment.

## **Scope**

This environmental policy statement applies to our manufacturing facilities.

## **Environmental Policy**

- We will manage our business activities that have the potential to significantly impact the environment following the principles of BS EN ISO 14001:2004.
- We will comply with all relevant environmental legislation, regulations and other appropriate requirements.
- We are committed to continually improving environmental performance and prevent pollution.
- We will use resources efficiently and take appropriate opportunities to minimise waste through re-use and recycling.
- We will develop environmental action plans with achievable and realistic targets which will be monitored and reviewed periodically.
- We will provide appropriate training and information to our staff so that we are all able to comply with this policy and achieve our aims.
- This policy will be periodically reviewed by the directors to ensure its continuing relevance.

Kynan Massey  
Managing Director

March 2008

## Profile of the Organisation

Massey Bros (Feeds) Ltd has 2 manufacturing sites, both in the North West of England. One is based in Holmes Chapel, Cheshire and the other in Preston, Lancashire. It is a family business established over 130 years ago and still run by the family. It produces animal feed at both sites that is delivered to farms from the midlands to Scotland and into Wales.

## Management Systems

The board member with overall responsibility for the environmental system is the Managing Director. There is an environmental team that consists of the managing director and the site manager who manages both sites. This team has led the implementation of an Environmental Management system that assesses our environmental impacts. Objectives and targets are set at least annually in accordance with our environmental policy. At each site there is a local team, led by the site manager that ensures the environmental system is implemented. There is an annual review to ensure the system is kept up to date, objectives and targets are assessed and training is reviewed.

## Key Environmental Impacts

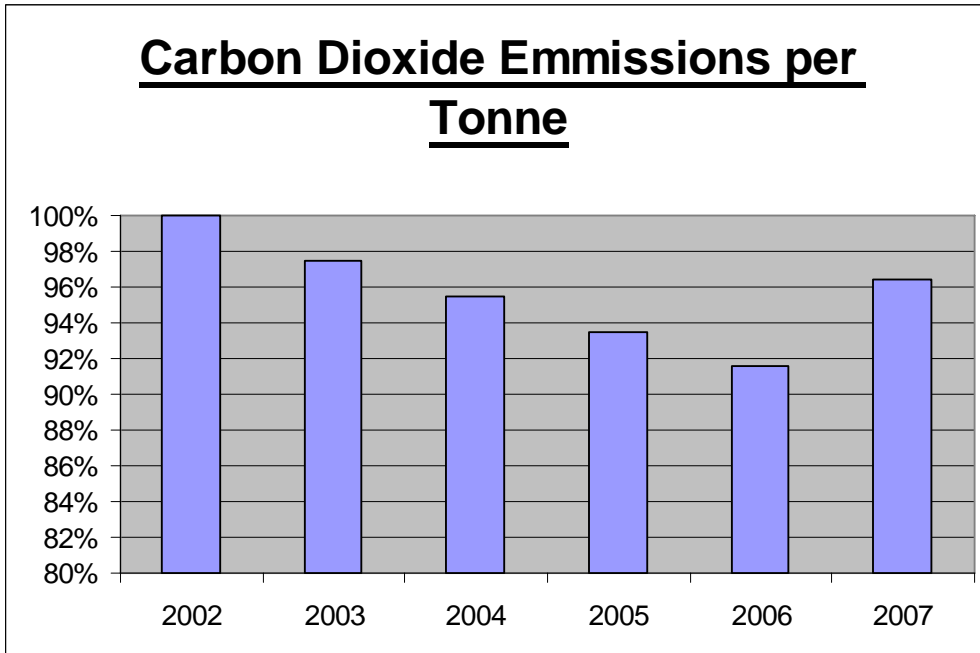
From our environmental management system, we have established that our key environmental impact is the emission of greenhouse gasses (notably Carbon Dioxide.) The greenhouse gases are emitted in two main ways. First, carbon dioxide emitted can be calculated from the grid electricity, gas and gas oil that is used at each site. Second, various emissions can be calculated from the diesel used by our fleet of commercial vehicles and knowing the type of engines in each one. Below is a table detailing the emissions for both Articulated Vehicles and Rigid vehicles by engine specification.

Artic HGV	Carbon Monoxide	Hydrocarbon	Nitrous Oxides	Particulates
Euro I	22	87	893	482
Euro II	18	78	650	185
Euro III	9	47	641	124
Euro IV	7	33	325	24

Rigid HGV	Carbon Monoxide	Hydrocarbon	Nitrous Oxides	Particulates
Euro I	21	113	440	318
Euro II	17	105	316	168
Euro III	9	47	224	113
Euro IV	6	33	158	22

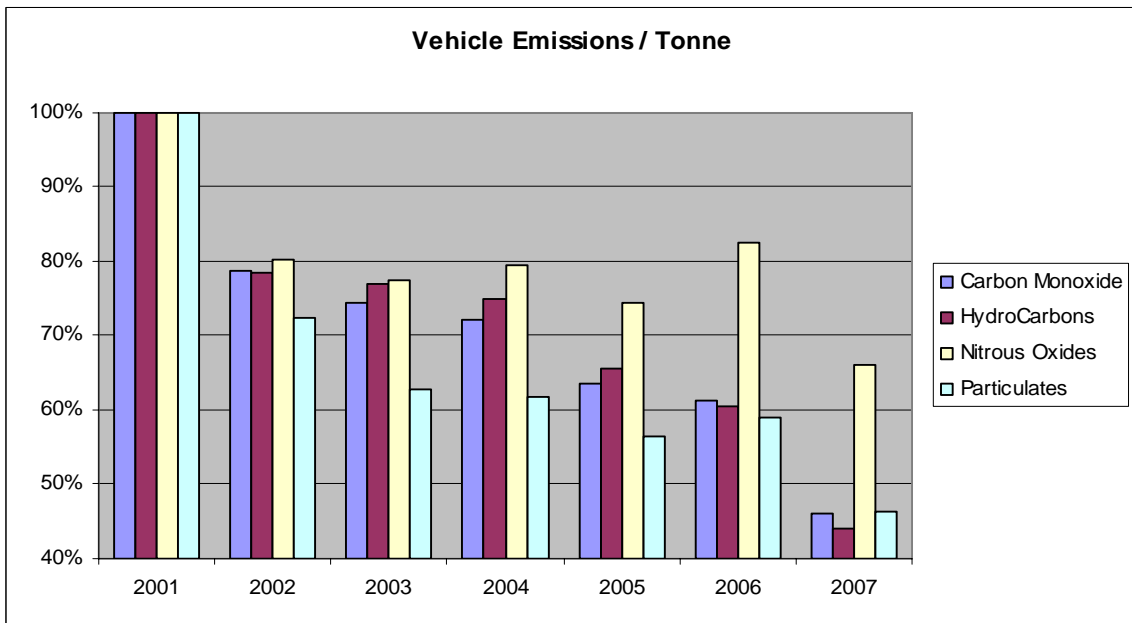
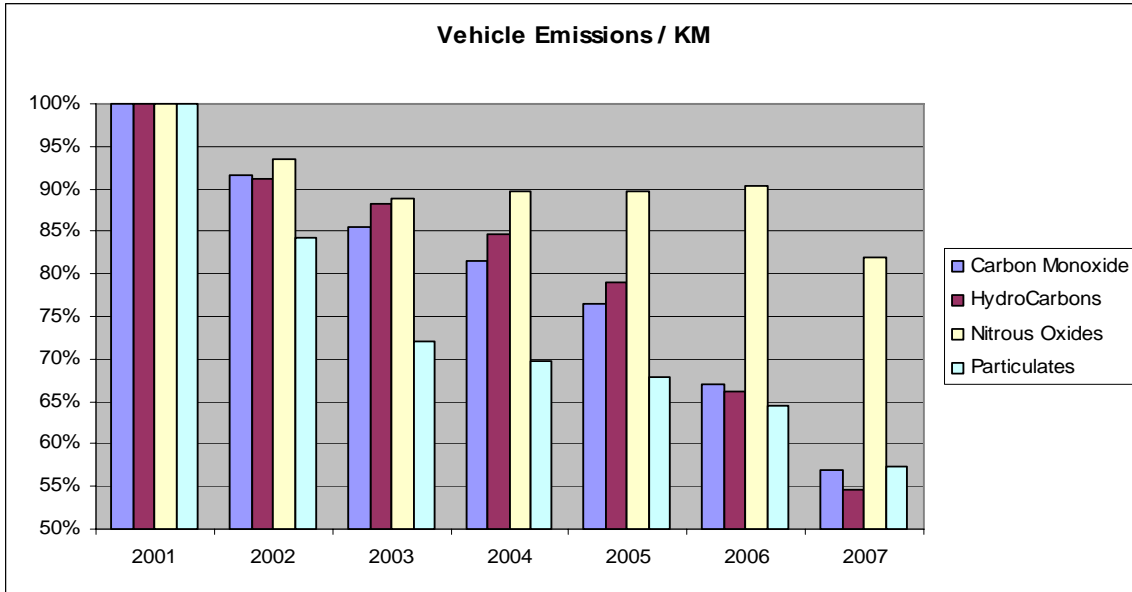
## Carbon Dioxide from Manufacturing Sites

Taking 2002 as the base year, we have calculated the units of electricity and quantity of gas and gas oil used at each site. This has been converted to an amount of carbon dioxide produced and divided by the tonnage manufactured. We work hard every year to try and improve our efficiency and it can be seen that there has been a reduction in carbon dioxide emitted / tonne feed produced until this year. We have had a number of issues crop up during the year but with our continual monitoring, we have rectified these issues and put systems in place that should show a reduction in emissions per tonne next year.



## Greenhouse Gases from Commercial Fleet

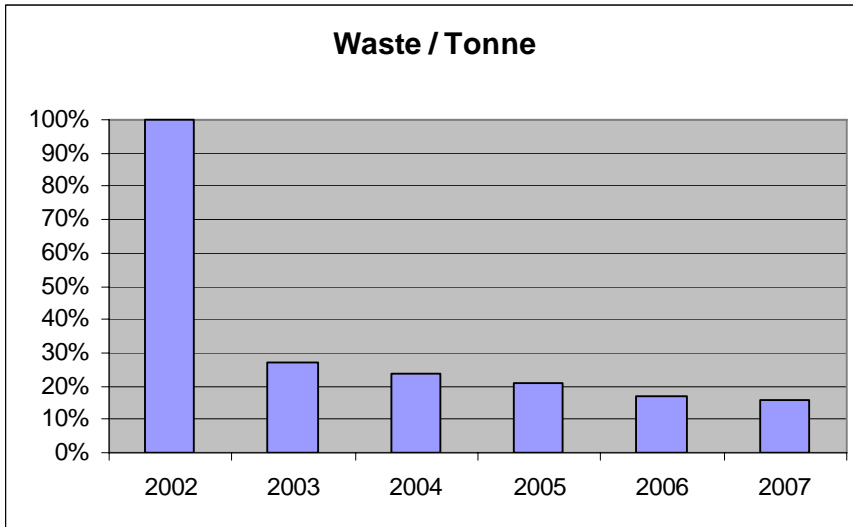
Taking 2001 as the base year, we have calculated the amount of diesel used by each engine specification in the fleet and from this we have calculated how much of each of the 4 measured gases has been produced. There has been a significant reduction in emissions / tonne delivered and emissions / 100 Kms travelled.



As we indicated last year, we expected to reduce our emissions of nitrous oxides as well as the other emissions when the older wagons in the fleet are replaced with the Euro IV and Euro V standard. This has been achieved.

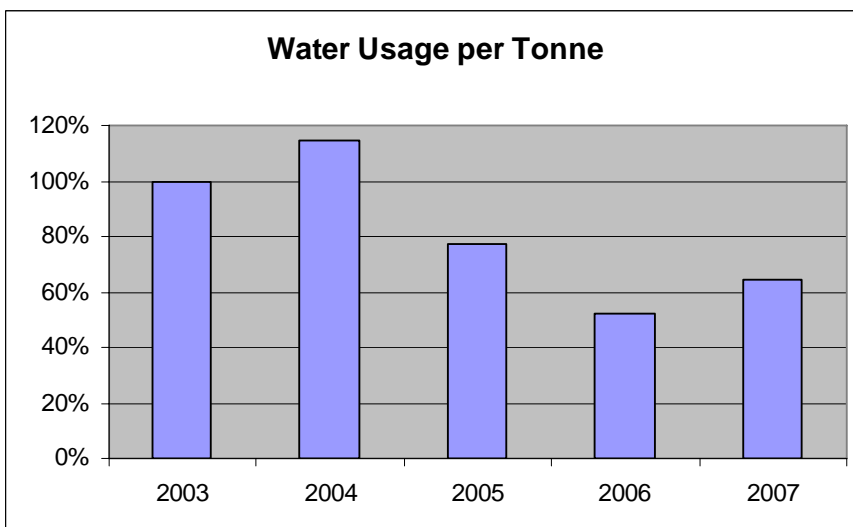
## Waste

We are now keeping records of the amount of waste that is produced. In 2003 we began recycling. The effect this has had on the waste we have produced per tonne of feed can clearly be seen from the graph. Since we examined this area of waste in 2002, we have significantly reduced the waste we produce to such a level where it is hard to reduce it any further.



## Water Usage

For the last five years we have kept records of our water usage. Taking 2003 as the base year, it can be seen that water usage per tonne manufactured had increased during 2004.



The plan we put in place to reduce our water usage has met with a great deal of success. Although water usage per tonne has increased over the last year, nevertheless, it is still the 2<sup>nd</sup> best result we have achieved in our 5 years of reporting. Additionally, the figures do not show that we are using an increasing quantity of non-potable water in our plant which further lessens our environmental impact.

## **Conclusion**

We have now completed our fourth year with our environmental management systems in place to help manage our environmental impacts. Our most significant impact continues to be carbon dioxide emissions relating to our power usage. We can see that this has increased for the first time in four years but this is where the value of an environmental management system comes in. With our regular monitoring, we have seen the figures have stopped improving and we have been able to take action quickly and we should see an improvement next year. We also have a significant impact from diesel usage in the commercial fleet. We can also see that this has reduced over each of the last 4 years and we have implemented a policy of regularly replacing the fleet with the latest fuel efficiency technology to help continue this trend.

It is clear to see the benefit of assessing our environmental impact and continuing to measure it year after year. We will continue to try and find ways of reducing our environmental impact but each year it becomes more and more difficult to find additional improvements. Taking the four areas above and the results we have achieved and actions we have taken, this shows our clear commitment to reducing our environmental impact.