Wolf Laboratories Environmental Policy – Goals & Targets

Sean Woodward 05/09/2005; reviewed 22/02/2021

Wolflabs is ISO 14001 accredited.

- Certifying body – QMS International
- Certificate number – 14131446
- Copy of certificate is below.

QMS INTERNATIONAL
A CITATION COMPANY

ISO 14001 REGISTERED

This document certifies that the environmental management systems of

WOLF LABORATORIES LIMITED
Colenso House 1 Deans Lane, Pocklington, York YO42 2PX

have been assessed and approved by QMS International Ltd to the following environmental management systems, standards and guidelines:-

ISO 14001 : 2015

The approved environmental management systems apply to the following:-
THE DISTRIBUTION AND SERVICE OF LABORATORY EQUIPMENT

Original Approval: 06 December 2011

Current Certificate: 09 August 2018

Certificate Expiry: 05 December 2021

Certificate Number: 14131446

On behalf of QMS International Ltd

This Certificate remains valid while the holder maintains their management system in accordance with the published standard. To check the validity and status of this certificate please email certificates@qmsuk.com

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- We comply with all local and national environmental laws. This is covered in protocol 49-10915.
- Issues associated with the environmental impact of supplies are addressed with suppliers and the data provided has to be signed off by our marketing manager before new products are marketed or new suppliers are added.
- We have three protocols to ensure that we are compliant with and offer best value for customers with reference to the WEEE directive:
    - 30-10453 – WEEE annual report.
    - 35-11578 – WEEE protocol for the customer service team.
    - 30-12635 – WEEE protocol for the sales team.
- The business plan that we are acting on to minimise our environmental impact year on year is as follows:

Maintaining a business model that minimises negative environmental impacts

In general the role of business is to maximize profit and increase sales. By its very nature this means that most businesses are likely to have a negative effect upon the environment.

The approach of most businesses is to increase sales and profitability by using resources:

- Have more sales representatives than their competitors – leading to increased carbon emissions through greater use of fuel.
- Create more hard copy marketing material – leading to greater use of natural resources and increased fuel use through its distribution.
- Create own label packaging material with the resultant wastage of the original packaging and greatly added fuel use through multiple delivery points in advance of goods reaching the ultimate customer.
- Create large distribution premises in order to facilitate the above.

Clearly, a balance needs to be struck between environmental impact and wealth creation. However, it is difficult to argue against a belief that it is an overenthusiastic desire for wealth creation that is the root cause of negative environmental impacts generally.

In order for a business to make an environmental policy a natural part of day-to-day trading, Wolflabs believes that it needs to be a goal of management to outperform its competitors with respect to the company's impact upon the environment. It is only by competing in this area as well as competing for sales and profits that the market as a whole will act in a positive way with respect to environmental issues.

This means that:

- The company should keep the degree to which it adds to total carbon emissions to the minimum and ensure that its carbon emissions are significantly less than the average for its market sector.
- The company should not automatically resort to the use of hard copy marketing materials and should ensure its production of hard copy material is below the average for its market sector.
- The company should train its sales force to maximise their use of time with respect to customer visits and should resist the temptation to cold call.
- If the use of own label packaging involves the disposal of a manufacturer's original packaging, it should not be used.

- Thought should be given to the company's distribution of products - there are too many instances of goods being shipped from a manufacturing plant to a remote distribution centre only to be shipped to a customer local to the manufacturer.
- Management must ensure that their environmental policy runs through the company's entire standard operating procedure.

Too often when looked at closely, a company's environmental policy appears to be a set of bland statements with no commitment to action.

In addition to a desire to compete in this area, Wolflabs also believes that measurable indices of performance need to be put in place to illustrate the presence of targets and performance monitoring. In advance of any such indices being standardised, Wolflabs has developed its own scoring system.

We are monitoring the aspects of our business that have an environmental impact and trying to ensure that our business does not grow at the expense of greater carbon emissions and wastage of natural resources.

- Hard copy sales and marketing material will be kept to an absolute minimum.
- The heating, lighting and power usage of our premises will be kept to a minimum.
- Travelling and motor expenses will be continually monitored.
- Printing, postage and stationery will also be closely monitored.

Monitoring will be carried out mathematically by expressing our annual expenditure in the above areas as a percentage of our total sales. By referring to the company accounts of our competitors, this will give us an easy set of indices to determine how well we compete in these areas.

Our overall goal is to ensure that we outperform our competitors with respect to environmental impact versus overall sales and to promote this to our customers such that our competitors are encouraged to compete.

Business needs to be carried out and wealth needs to be created. The question that should be asked is whether this is being done in the most environmentally sustainable way possible. Expressing our environmental impact as a percentage of our total sales allows us ensure that Wolflabs is not growing at the expense of the environment. Our rationale is that as long as we are beating our competitors in this area, an increase in our sales has a positive effect on the environment because we are not supplying consumer goods and this means that if we do not supply the product, another company will have to.

Carbon Emissions

This table outlines the tonnes of CO2 produced by Wolflabs.

Year	2017 – Tonnes of CO2	2018 – Tonnes of CO2	2019 – Tonnes of CO2	2020 – Tonnes of CO2
Flights	0	0	0.2	0
Car	8.86	14.11	5.81	1.30
Gas usage	5.59	6.49	6.49	6.49
Electricity usage	9.04	7.23	7.21	6.94
Business total	38.22	27.83	19.51	14.73
Total cost to offset	£286.65	£208.65	£147.86	£110.48

The table below shows consumption that has an environmental impact expressed against turnover for the past eight years. It can be seen from the data that our turnover has more than doubled over this period but that this has not been achieved by increasing the proportion of our budget that has an environmental impact.

Year	2002	2003	2004	2005	2006	2007
Heating, lighting & power	0.02%	0.02%	0.02%	0.01%	0.01%	0.13%
Printing, postage & stationery	0.17%	0.17%	0.18%	0.17%	0.17%	0.10%
Travelling & motor expenses	1.18%	1.05%	1.04%	0.95%	0.98%	0.40%
Marketing	0.15%	0.12%	0.12%	0.24%	0.24%	0.20%
Total %	1.52%	1.36%	1.36%	1.37%	1.04%	0.83%
Total Sales	£3,027,791	£3,238,756	£3,660,636	£3,890,850	£4,407,000	£4,461,000

Year	2008	2009	2010	2011	2012	2013
Heating, lighting & power	0.13%	0.25%	0.01%	0.12%	0.07%	0.07%
Printing, postage & stationery	0.04%	0.04%	0.03%	0.04%	0.03%	0.05%
Travelling & motor expenses	0.27%	0.20%	0.16%	0.23%	0.20%	0.33%
Marketing	0.19%	0.60%	0.03%	0.04%	0.02%	0.04%
Total %	0.63%	1.09%	0.23%	0.42%	0.31%	0.49%
Total Sales	£4,822,000	£4,457,140	£4,247,934	£4,122,876	£4,887,425	£5,689,585

Year	2014	2015	2016	2017	2018	2019
Heating, lighting & power	0.09%	0.07%	0.05%	0.06%	0.03%	0.03%
Printing, postage & stationery	0.04%	0.04%	0.03%	0.02%	0.02%	0.02%
Travelling & motor expenses	0.31%	0.24%	0.22%	0.14%	0.12%	0.11%
Marketing	0.04%	0.04%	0.04%	0.03%	0.02%	0.01%
Total %	0.48%	0.39%	0.34%	0.25%	0.19%	0.17%
Total Sales	£5,989,576	£6,027,931	£7,113,402	£9,260,829	£9,837,434	£10,917,511
Carbon emissions - total tonnes of CO2				38.22	27.83	19.51
Emissions offset?				Yes	Yes	Yes

Year	2020
Heating, lighting & power	0.05%
Printing, postage & stationery	0.01%
Travelling & motor expenses	0.00%
Marketing	0.02%
Total %	0.08%
Total Sales	£11,350,894
Carbon emissions - total tonnes of CO2	14.73
Emissions offset?	Yes

* The company moved to larger premises at the end of 2006. It now sublets office space and pays the heating, lighting and power bills of its tenants.
** Heating and power unit charges increased considerably in 2009. Actual consumption was approximately the same.
*** Wolflabs began logging and offsetting carbon emissions in 2017

Working with suppliers to promote environmentally friendly, energy efficient products

Wolflabs works with its suppliers such that all products we actively promote are assessed for their environmental impact. We do this by logging the location of manufacture, the maximum power draw of the equipment and listing any features of the products that reduce their environmental impact. This information is presented on the product pages on our website.

If a product offers clear environmental advantages over its competitors, this information is added to the comparison table for the relevant product category. For example several product category pages feature “energy efficiency” as a means of highlighting equipment that uses less power.

Quantifying the Energy Consumption of Laboratory Equipment

Every piece of electrical equipment has to be provided with details of its maximum power draw. However, most energy will be drawn when the equipment is powering up. Once the equipment is running the energy consumption will be greatly reduced. Although laboratory equipment varies greatly in how it is used, discussions with manufacturers have resulted in a fairly consistent response with respect to power draws whilst equipment is in use. On average the equipment is likely to draw around 10% of its maximum power rating once external factors such as opening doors, increasing loads, running at varying speeds etc. are taken into account. Our feeling is that using a figure of 10% of maximum power draw to calculate energy usage and carbon emissions is more reliable than referring to data provided by manufacturers. This is because the few manufacturers who produce average power consumption figures generally feel they have no choice but to test equipment under ideal conditions.

You can calculate your energy costs using the figures shown in our applications tables as follows:

Annual cost = (kW x 0.1) x hours in use x £/kW

For example, with a unit cost of £0.10 per kW an autoclave rated at 9kW used for 2 hours per day 230 times per year will cost £41.40 per year to run. Defra has calculated that 0.54522kg (2010) of CO2 is released for every kW of electricity used, so the autoclave will be responsible for the release of around 226kg of CO2 over the course of the year. We are keen to work with people interested in helping us to offer more detailed information, and to measure energy usage in working laboratories.

One of our current projects involves more accurately quantifying the ratio between maximum power draw and usual power draw. Please contact us if you are interested in participating in this project.

Working with customers to supply environmentally friendly, energy efficient products

As stated above Wolflabs automatically draws environmental benefits to the attention of customers as part of its sales and marketing process. Our customer service team not only follows the regulations associated with the WEEE directive but works with customers to ensure best value for money.

Wolflabs and Cool Earth

In June 2017 we started supporting Cool Earth, a charity that that works alongside indigenous villages to halt rainforest destruction. Cool Earth puts local people back in control, giving them the resources they need to keep their forest intact. And by saving at-risk rainforest they shield millions of acres of neighbouring forest. It is an approach that research proves to be the most effective way of keeping rainforest standing. It is also an approach that is transforming the lives of some of the world's poorest and most vulnerable communities.

It can be seen from the figures shown above that since we began following the plan in 2010 our sales have more than doubled but that this has not been achieved via methods that involved increasing our environmental impact because we have adhered to our original goals.

- Our systems automatically encourage the use of environmentally friendly technologies and promote positive environmental impacts. More details on this are shown below.
- In addition to the above it can also be seen that we are accredited to ISO 14001.

MANAGEMENT OF THE MANUFACTURE, DELIVERY AND DISPOSAL OF PRODUCTS & THE SYSTEMS TOOLS AND PROCESSES WE USE.

In addition to complying with all local and national environmental laws and running protocols to ensure compliance with and offering best value for the WEEE directive, Wolflabs has additional protocols to minimise the environmental impact of our business. Much of this is covered in the plan shown above.

Carbon emissions and pollutions levels are reduced by virtue of the following protocols:

- The Wolflabs sales team is office based. Although we still see customers on a regular basis we do not use our sales team for prospecting by calling out to site. This is one of the reasons why our motor and travel expenses are much lower than those of our competitors when expressed as a percentage of turnover.
- Wolflabs operates from a set of offices in a small market town. As shown in the data above this keeps our heating, lighting and power consumption very low when expressed as a percentage of our total sales.
- Before marketing products we request details on the location of manufacturer, the maximum power of the equipment and any ecological features. For example the data below shows on the page for DW-86L338J.

Environmental Performance

Location of Manufacturer	Outside of Europe
Max. Power Draw	3.750kW
Ecological Features	High efficiency to decrease energy consumption

When it is clear that certain products offer environmental benefits over others we highlight this in the comparison tables, for example in the way we have done with the “High energy efficiency” attribute at https://www.wolflabs.co.uk/laboratory-products/freezers-ultra-low-temperature and “Energy efficient?” at https://www.wolflabs.co.uk/laboratory-products/ovens-drying-warming.

Waste and pollution levels are reduced by virtue of the following protocols:

- With the exception of business cards Wolflabs produces no hard copy marketing material.
- Most of our competitors produce own label packaging. This involves de-boxing products from the packaging of their suppliers and re-boxing using their own materials. Wolflabs sees this as needless waste and so only uses the packaging of manufacturers.