



alumet

**SUSTAINABILITY REPORT 2011**





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# Sustainability Statement

At Alumet Group we are committed to integrating sustainability into all aspects of our operations. To this end, a Sustainability Report was produced in 2009 to demonstrate the achievements that had been made to date and to highlight areas of focus for the future. We have continued to expand and adapt to changing market conditions since 2009 and sustainability has remained a core ethos of the business. As a result, the Alumet Sustainability Report 2011 has been produced to guide the sustainable development of the company over the coming years.

## Scope

This report assesses the sustainability of the company's inputs, processes and outputs over which it has direct control. It looks at the present situation and sets targets against Key Performance Indicators for future development. The report considers all activities at the company headquarters in Southam as well as aspects under our control at all of our live installation sites.

## What is “sustainability”?

Sustainability in the corporate sense can be taken to mean practices that find a balance between the triple-bottom line of economic, environmental and social impacts (Figure 1).

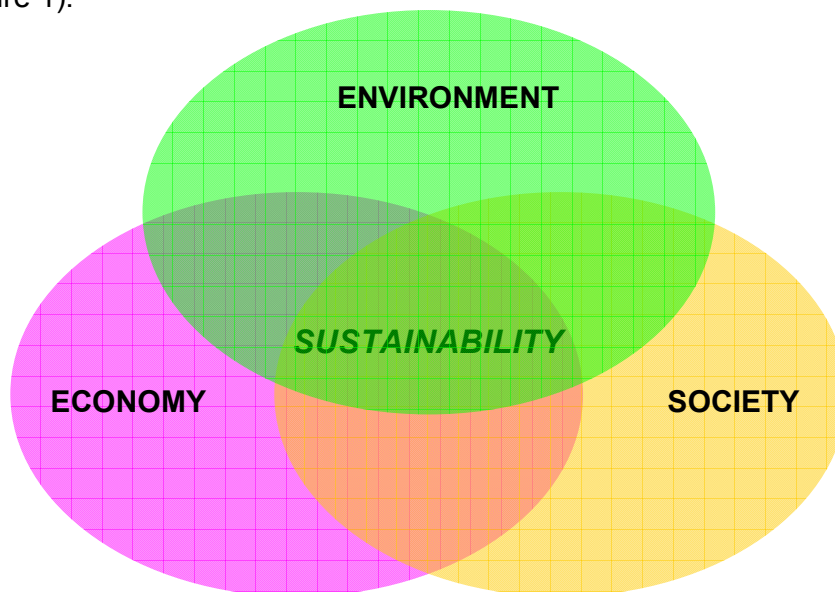


Figure 1. Sustainability as a balance between economic, environmental and social aspects.

In order to more clearly visualise what this means for sustainable practice at Alumat, the stakeholders in our operations were identified and our relationship and responsibilities were explored (Figure 2).



Figure 2. The most significant stakeholders in Alumat and our relationship with them in terms of economic, environmental and social sustainability.



## **Why report?**

Climate change, resource depletion, unsustainable land-use and the current economic climate are just a few of the motivating factors for reporting and planning our sustainable business practices. This report assesses the progress we have made since 2009 and provides an additional framework for monitoring our development in the coming years. Whilst we believe that our current practices demonstrate our commitment to sustainability, there is always room for improvement and we strive to be the industry leader not only in our products and services, but in our commitment to sustainability.

## **Structure of this report**

This report will begin by giving a brief company profile to help the reader understand the products and services that Alumet offer, and therefore the impacts that our operations have.

Next, the report will identify the areas of progress since the Alumet Sustainability Report 2009 to demonstrate the achievements that we have made to date.

The report will then set out our roadmap for achieving sustainability targets for different aspects of our operations, including 4 environmental Key Performance Indicators as recognised by DEFRA:

- Resources and Design
- Transport
- Energy (KPIs: Natural Gas, Oil)
- Waste and Recycling (KPIs: Metal, Waste)
- Community



## Company Overview

Established in 1992 by Managing Director Gary Summers, Alumet has grown year on year and now has 119 members of staff. The company is able to offer design, manufacture and installation services for the complete building envelope, including aftercare and maintenance.

Alumet has three fabrication plants at its head office in Warwickshire. The most recent of which is a £500,000 unit opened in 2008 by HRH the Duke of Kent. These facilities allow us to produce the majority of products in-house, as well as allowing for further research and development into façade technology. The Southam site also has a tool room, paint shop, welding facility and machine shop.

The Alumet Group consists of Alumet Systems (UK) Ltd and Alumet Renewable Technologies. Alumet Systems (UK) Ltd comprises: Avon Solar Control, Avon Dry Wall Beam, ABLE Façade System, Alumet Permanent Access, Alumet Maintenance and Alumet Refurb. The main Alumet Systems (UK) Ltd products are curtain-walling, brise soleil, louvre systems, solar shading, dry wall beam and permanent access systems. Alumet Renewable Technologies comprises: BritSol, EOS Energy and Spitfire Wholesale. Spitfire operates as a photovoltaic panel wholesaler, EOS Energy as a solar installation service and Britsol produces a mounting system for pv panels.



## Progress since 2009

After the successes of 2008/9, the industry-wide recession brought everyone back down to earth with a bump. As Britain climbs slowly out of recession and the company recovers to full strength we continue to pursue our sustainability goals with vigour.

The Alumet Group has now grown to include Alumet Systems (UK) Ltd and Alumet Renewable Technologies (ART), comprising the new operations: BritSol, EOS Energy and Spitfire Wholesale.

Since the appointment of Lee Summers as Environmental Director, the new post of Sustainability Officer was created in October 2011 to enable Alumet to continue to improve its sustainable performance and gain a competitive advantage over its rivals.

Notable sustainability initiatives to date include:

- Organisational Carbon Footprinting, to be completed in early 2012
- ISO 14001 accreditation
- A dedicated Green Team and an environmental department comprising of the Environmental Director, HSE Manager, HSE Advisor and Sustainability Officer
- WRAP: Halving Waste to Landfill commitment certification
- Becoming a Panel Advisory Group Member of the National Industrial Symbiosis Programme (NISP)
- Cycle to Work Scheme in operation
- Annual Community Open Days

These efforts have seen Alumet win several awards for sustainability, for example the Business Award for Community Support 2010, Green Apple Award – Environmental Excellence 2011, Builder & Engineer Awards – Corporate Social Responsibility 2010, and many more.



## Resources and Design

One of the ways in which Alumet can significantly influence the sustainability of its operations is to look at the products we produce. The design, materials, manufacture and transport of these products all have associated sustainability issues.

### **Materials**

Bearing in mind sustainability at the design stage means that Alumet strives to purchase the most sustainable materials available to produce high-quality products. In terms of quantity and sustainability impacts the main materials we purchase are aluminium, steel, glass and photovoltaic panels.

In order to ensure the best sustainable practice for the purchase of these materials the Sustainability Officer liaises with relevant departments and reviews products where necessary. A Corporate Social Responsibility/Sustainability Questionnaire was submitted to our suppliers in October 2011 to investigate their own sustainability performances. The results of this survey will be used to inform future decisions regarding supply. We also have a Purchasing Policy which states a preference for local suppliers and those who are striving to improve their CO<sub>2</sub> emissions and recycling rates of their materials.

### **Manufacture**

The inputs, processes and outputs of manufacturing and fabrication are considered in our ISO14001 Environmental Management System. The impacts of manufacture are minimised using best available techniques. This includes, for example, minimising energy use in the factory and reducing waste from breakages and non-conformances on live installation sites.

### **Transport**

Once products have been fabricated on site in Southam, they require delivery to sites for installation. In order to reduce the environmental impacts associated with this transport a Green Travel Framework will be put in place to re-emphasise initiatives such as eco-driving training and co-ordinated journeys.



# Transport

Data collection on diesel usage began in 2009 and the Sustainability Report 2009 set a general target to reduce diesel usage by 10% between 2010 and 2011. Diesel is used for transport in company vehicles. This includes the delivery of goods and materials, staff transport in pool cars and staff transport in company cars. There is no method of distinguishing between personal travel, commuting and business use of company cars at present. Between 2009 and 2011 three company vehicles ran on petrol rather than diesel.

Between 2009 and 2010 absolute diesel usage increased by 2.3%. Including petrol, the absolute amount of fuel used in company vehicles increased by 2.85%. In the fleet, efficiency, in terms of miles per gallon, improved by 0.52%. This is attributed to emphasis on eco-driving techniques. In 2011 the establishment of the Alumet Low Vehicle Emissions Commitment and a new company car policy have seen new vehicle purchases based on minimum fuel efficiency of 50mpg and maximum carbon emissions of 150g/km. Cars bought in 2011 were 15.45% more efficient than those sold in 2011 to date.

These results demonstrate that with a commitment to low emission vehicles, Alumet can improve our fuel efficiency at the same time as expanding the business. We remain fully committed to reducing our emissions from diesel and petrol. In order to achieve this, we commit between 2011 and 2013 to:

1. Continue to replace old company vehicles with only those listed in the new company car policy, with lower emissions. The policy will be reviewed periodically to ensure it contains the best options.
2. Implement a Green Travel Framework in order to reduce the distances travelled, increase the efficiency of essential journeys and investigate offsetting the carbon produced in these journeys, in that order of priority.
3. Investigate the possibility of installing an electric vehicle charging point on site in Southam and utilising the region's Plugged-In Places network to allow local journeys to be made using electric vehicles.

# Energy

Energy usage by Alumet can be divided into sources, which are:

- Mains electricity
- Solar electricity
- Gas
- Gas oil
- Diesel and Petrol
- Propane

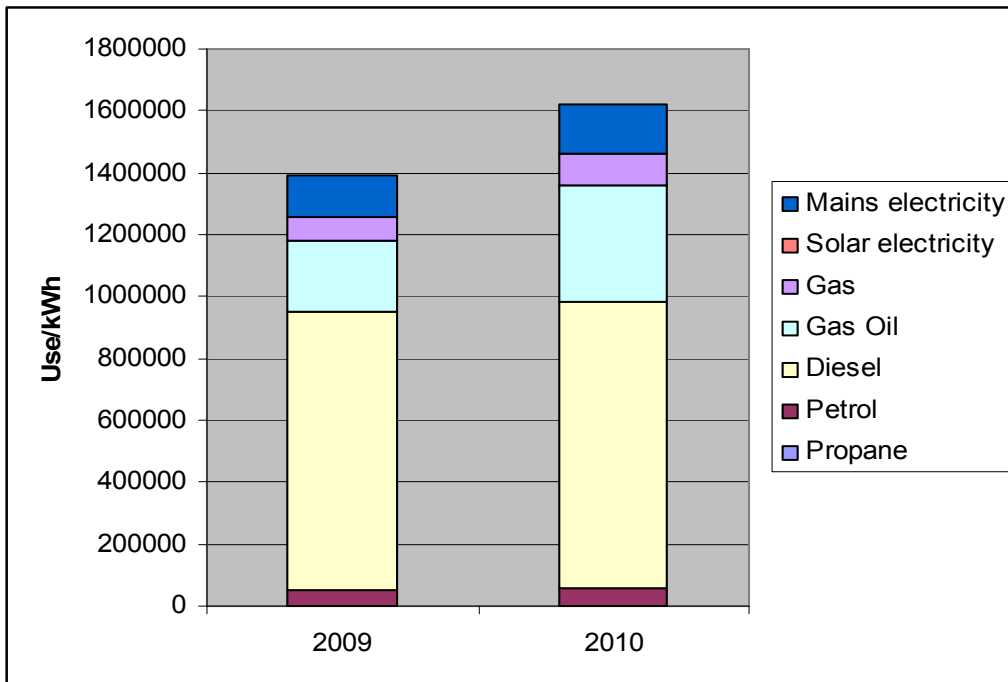


Figure 3. Standardised total energy usage for 2009 and 2010.

Energy can also be divided into uses:

Use	Source
Office equipment (eg. phones, computers, kitchen appliances)	Electricity
Factory machinery	Electricity/Propane
Lighting	Electricity
Heating	Gas, gas oil and electricity

Southam site vehicles (forklift)	Diesel/Propane
Site equipment (eg. forklifts, gecko)	Diesel
Transport of goods	Diesel
Travel in company vehicles	Diesel/Petrol

Table 1. Energy by end use and source.

Unfortunately, data cannot be divided into sufficient resolution at present to fully split energy by end use. This is because we currently have no way of distinguishing between the end uses of incoming mains electricity. In order to rectify this issue and provide clearer data for the future, the following measures could be put in place:

- Smart meters
- Full energy audit of the offices and factory

The EMS contains a procedure for utilities monitoring, which has provided us with almost 3 years of reliable data. This enables us to accurately assess how our energy use has changed since 2009. Between 2009 and 2010 absolute energy use has increased (Figure 3) and this increase is apparent in all fuel types except Propane. The different utilities will now be explored in more detail to establish our progress since 2009 and set targets against Key Performance Indicators for the coming years.

### **Electricity**

The Sustainability Report 2009 set a general target to reduce electricity use by 10% against turnover. In 2009 the Southam and Pudsey sites used 1.00kWh/£100 of turnover whereas in 2010 we used 0.91kWh/£100. This means that the efficiency of our energy use when standardised by turnover has increased by 9.27%.

In absolute terms, electricity usage has increased from 133,887kWh in 2009 to 157,137kWh in 2010. For the Southam site, this can be broken down by month in order to explore any trends.

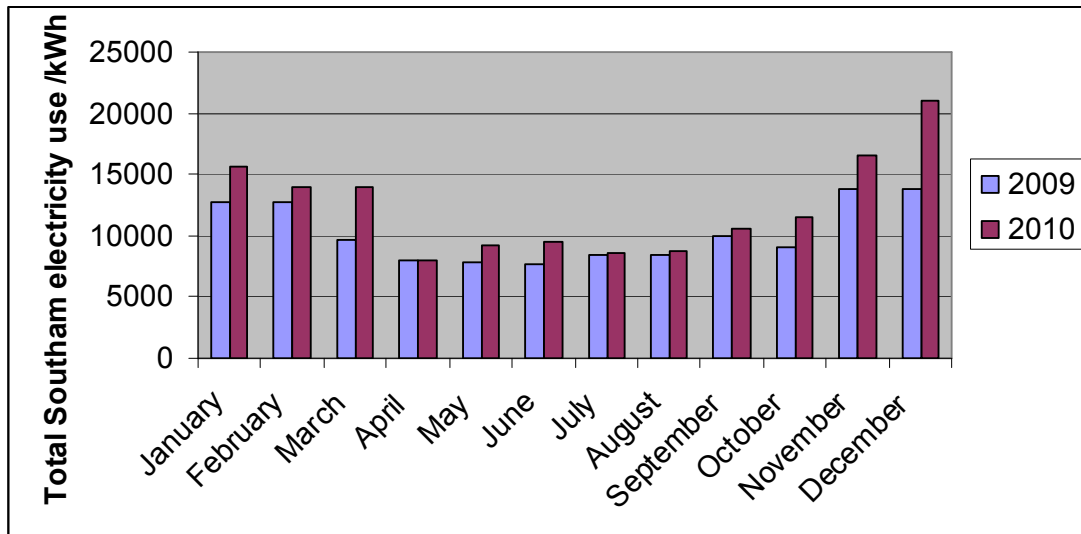



Figure 4. Total electricity use by month at the Southam site.

It is apparent that electricity use has increased between 2009 and 2010 in every month. The increase is most apparent in winter months (January-March and October-December). Since the main uses of electricity are lighting, office equipment and factory equipment, it is likely that the general increase in electricity usage is due to the following:

- An increase in staff numbers from 2009-10, which requires additional lighting and office equipment
- New additions to factory machinery and expanded manufacturing capacity
- Expansion of office space to include Alumet Renewable Technologies (ART)

In order to investigate this trend, individual meter readings were analysed between years to assess which areas were responsible for the increased usage. This showed that the major differences between 2009 and 2010 are attributed to additional usage in Senator House and M/C Shop. This confirms that the additional use came from the ART office space and the factory. Monthly data for Senator House also shows that usage was particularly higher in November and December 2010. This is most likely due to severe weather conditions which led to increased use of personal heaters or the heating function of air conditioning units. This would account for increased demand in winter months.



Alumet remain committed to reducing our dependence on carbon-intensive mains electricity. As such, we are making the following commitments for 2011-2013:

4. To promote energy efficient practices within offices in order to prevent further increases in electricity consumption per capita. This will be achieved through the formation and implementation of an Energy Management Plan
5. To source an increasing proportion of our energy from renewable sources by 2013. This will be achieved through installing additional renewable generation capacity on site and investigating further renewable opportunities.

### **Gas and Gas Oil**

The Sustainability Report 2009 set a general target to reduce gas use by 10% against turnover. Gas is used exclusively for a heating system which was installed in 2008 and serves the Main Factory and Innovation House. Gas oil is used to power an older heating system for Avon House, Press Shop, Machine Shop, Unit 3 stores and Senator House, and for forklifts used on site and mobile bowzers sent to live installation sites. Gas oil is also delivered directly to live installation sites for use in forklifts.

Normalised against turnover, gas usage has increased 12.57% between 2009 and 2010 from 0.54kWh/£100 to 0.61kWh/£100 and gas oil usage normalised against turnover has increased 27.65% from 1.71kWh/£100 to 2.18kWh/£100.

Since gas is exclusively used for heating in the factory unit, it is appropriate to assess the usage compared to weather conditions. This is done by standardising usage by degree days (Figure 5). The standard chosen is 15.5°C, which is the standard level below which buildings are expected to require heating.

The results show that, excluding January, standardised gas usage was higher in 2010 as compared to 2009. This implies that demand for heating has increased irrespective of weather conditions. This could be explained by additional manufacturing and production that was carried out in 2010, which lead to factory doors being open more often to receive and send deliveries. This would account for the increased heating requirement for the factory.

Reassuringly, the baseline gas usage between April and September is at or close to 0kWh (with the exception of April 2010). This shows that the heating is being shut down when not required, demonstrating the effective energy management in place.

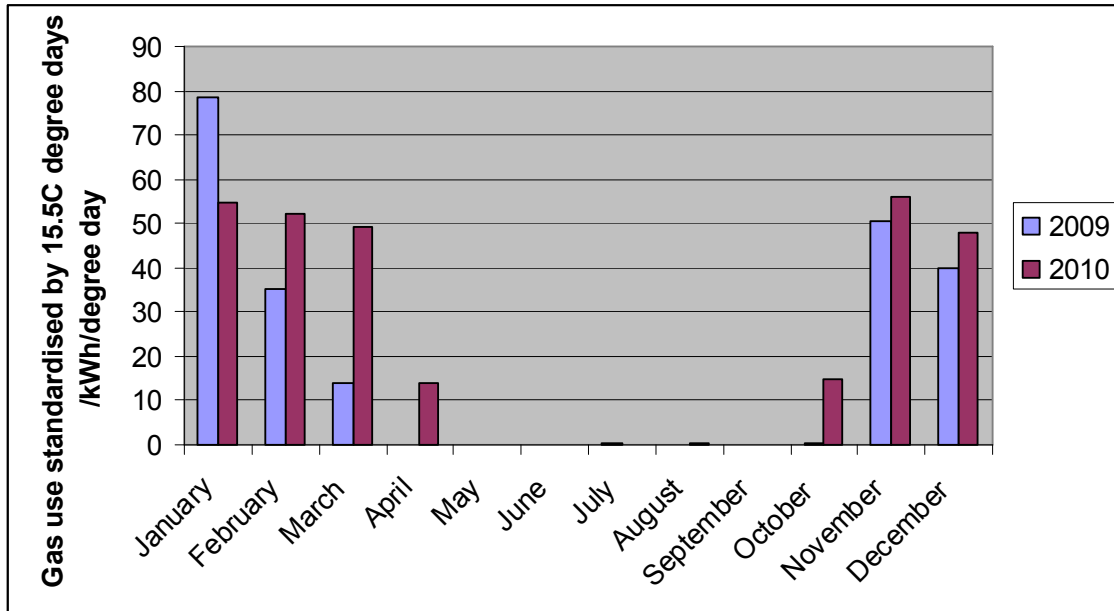


Figure 5. Gas usage 2009-2010 standardised against 15.5°C degree days.

The data for gas oil is not available in a monthly format, so similar analysis cannot be carried out. We are able to distinguish between gas oil delivered to Southam (used for heating and forklifts) and gas oil delivered directly to live installation sites (used for forklifts). The results show that usage at both Southam and live installation sites increased in similar proportions (Figure 6). This means that the additional use is most likely attributed to additional workload in 2010, requiring extra use of forklifts.

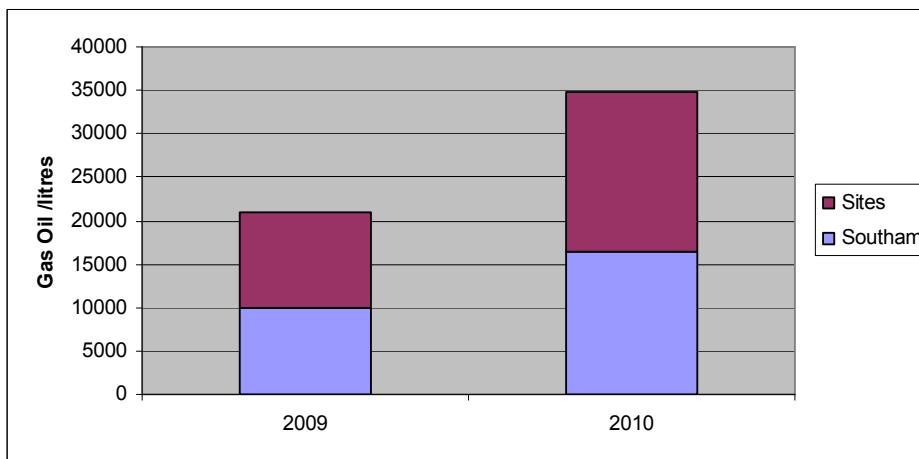



Figure 6. Gas oil split by site.



Alumet remain committed to reducing our dependence on carbon-intensive gas and gas oil usage. As such, we are making the following commitments for 2011-2013:

6. To formalise a heating policy in the Energy Management Strategy in order to promote efficient use of the gas and gas oil heating systems
7. To investigate alternatives to the older gas oil heating system including renewable technologies
8. To formalise guidelines for the use of gas oil in forklifts on site and the use of fuel sent to live installation sites in order to maximise the efficiency of use

### **Propane**

Propane is used for a forklift on-site and for a heat gun used to apply packaging to products in the factory. Data can be segregated to separate these two uses. Absolute propane use decreased by 17.1% between 2009 and 2010. The majority of this decrease is attributable to the forklift use. Since turnover and production were increased in 2010, compared to 2009, this decrease could be due to increased use of the diesel forklifts instead of the propane forklift. Discrepancies could also be due to variable levels of propane being stored on site between years, as propane is ordered in bulk. As the length of the dataset increases, trends in propane use will become more apparent. Therefore we will continue to monitor propane used on site to more accurately determine the trends in usage.



## Waste and Recycling

At present, we separate waste into general, cardboard/paper, metal and hazardous. Our hazardous waste is removed in line with all environmental legislation for safe disposal. Metal waste is collected in the factory and sent for recycling.

Other factory waste, packaging and office waste is segregated into cardboard/paper, food waste for composting and other general waste. It can therefore be assumed that close to 100% of our compostable food waste and cardboard/paper is being recycled, with any deviation due to employees placing materials in the incorrect bin.

Our general waste is sorted at a transfer station where 25-80% of it is recycled, according to figures from our current waste provider (Fortress). Therefore it can be assumed that materials, such as plastic bottles/sheeting and tins/cans, contained in our general waste are also being recycled.

Our waste volumes are inevitably increasing as the business expands; therefore we are looking into alternatives to our current waste arrangements. We have contacted our suppliers through a CSR Questionnaire to investigate the possibility of minimising incoming packaging and we re-use materials on-site for packaging. Alumat are committed to reducing our waste and finding sustainable options for disposal. In 2011 we formalised this commitment by signing up to the WRAP: Halving Waste to Landfill campaign. In addition we will:

9. Continue to seek materials with the lowest possible quantities of packaging and put pressure on suppliers to reduce any unnecessary packaging. We will continue to reuse as many materials as possible on site.
10. Increase the proportion of our waste that is recycled, therefore reducing the amount of waste sent to landfill.
11. Investigate the possibility of installing an onsite baler in order to bale our cardboard and plastic wrapping. This would reduce the transport requirements for our waste.



# Community

In addition to environmental concerns, sustainability also concerns the impact that businesses have in society. Since 2009 Alumat has undertaken many activities which demonstrate our commitment to social sustainability. This has included:

- Sponsorships, such as the local Rugby Club, Southam in Bloom, local Scouts and Guides
- Volunteering, for example for Link Romania and Coventry Homeless Shelter
- Annual Open Days for members of the community to visit our site
- Fundraising for organisations including Myton Hospice, Motor Neurone Disease Association and Thomas's Fund

Our dedication resulted in the receipt of the Business Award for Community Support 2010.

We pledge to continue this commitment by:

12. Continuing to host annual Open Days where members of the community can visit our site
13. Continuing to hold fundraising events and volunteer our time to charities
14. Considering any sponsorship applications which are made to us

## Sustainability Roadmap

Commitment	Action Plan	Timeframe	Responsibility
1. To promote energy efficient practices within offices in order to prevent further increases in electricity consumption against turnover	An Energy Management Strategy will be formulated. This will specify the guidelines and rules that employees should follow regarding the efficient use of electrical equipment, especially heating/cooling systems and lighting. It will also include guidance on efficiency training for specific pieces of equipment.	2011-13	Sustainability Officer and Engineering Manager
2. To source an increasing proportion of our energy from renewable sources by 2013	Plans are in place for additional photovoltaic capacity to be added to the factory roof. Other sources such as additional pv, wind and biomass will be investigated. Overall, we aim to produce 20% of our electricity from renewables by 2013.	2013	Sustainability Officer and Environmental Manager
3. To formalise a heating policy in the Energy Management Strategy in order to promote efficient use of the gas and gas oil heating system	As with (1), policy will be formalised and communicated to all staff regarding the most efficient ways of heating/cooling buildings to create a comfortable and efficient working environment.	2011	Sustainability Officer and Engineering Manager
4. To investigate alternatives to the older gas oil heating system including renewable technologies	A new heating system was installed for some of the buildings in 2008 however an inefficient old gas oil system is still in use. Alternatives to this system should be investigated and a cost-benefit analysis presented to improve the efficiency of heating.	2012	Sustainability Officer

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 Author: Eleanor Stewart  
 Position: Sustainability Officer

5. To formalise guidelines for the use of gas oil in forklifts on site and the use of fuel sent out in bowsters to maximise the efficiency of use	As in (1), policy for efficient use of gas oil will be formalised and communicated to all employees to ensure that gas oil is used in the most efficient way possible in order to reduce usage and associated emissions when standardised against turnover.	2012	Sustainability Officer
6. Continue to replace old company vehicles with only those listed in the new company car policy with the lowest possible emissions	The Alumet Low Vehicle Emissions Commitment will continue to be adhered to with only low emissions vehicles being purchased. The company car policy will be reviewed to ensure that it provides the lowest emission options.	2011-2013	Sustainability Officer and HS&E Officer
7. Implement a Green Travel Framework in order to reduce the distances travelled, increase the efficiency of essential journeys and investigate offsetting the carbon produced in these journeys, in that order of priority.	A Green Travel Framework will be produced for the company to maximise the efficiency with which diesel is used for transport of goods and people. This will be split into business travel, transport of goods and commuter travel in order to tackle business diesel usage, and also to demonstrate Alumet's commitment to sustainability in the wider sense.	2012	Sustainability Officer

<p>8. Investigate the possibility of installing a charging point on site in Southam and utilising the regions CABLED network to allow local journeys to be made using electric vehicles.</p>	<p>With new tariffs being launched which could save £200-£1,300/year as compared to diesel; electric vehicles are becoming a more favourable option. In addition, there is a charging network in place in the West Midlands which means the system could be utilised for business travel within the region. This possibility will be investigated and a cost-benefit analysis conducted.</p>	<p>2012</p>	<p>Sustainability Officer</p>
<p>9. Continue to seek materials with the lowest possible quantities of packaging and put pressure on suppliers to reduce any unnecessary packaging. Continue to reuse materials on site as much as possible.</p>	<p>Any new product or material purchases will consider the packaging and waste generated, and endeavour to minimise this. This will include assessing whether current materials could be provided in less packaging as well as pressuring new and existing suppliers to reduce, reuse or recycle their packaging. Materials such as crates and packaging will be reused where possible on site, and where this is not possible, they will be recycled if possible.</p>	<p>2011-2013</p>	<p>Sustainability Officer, Quality Manager, Production Manager</p>
<p>10. Increase the proportion of our waste that is recycled, therefore reducing the amount of waste sent to landfill</p>	<p>With landfill tax increasing by £8/tonne/year to £80/tonne in 2014, it makes financial as well as environmental sense to reduce the amount of waste we send to landfill. This will be investigated and we will implement changes to our waste management accordingly</p>	<p>2012</p>	<p>Sustainability Officer</p>

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 Author: Eleanor Stewart  
 Position: Sustainability Officer

<p>11. Investigate the possibility of installing an onsite baler in order to bale our cardboard and plastic wrapping. This will reduce the transport requirements for our waste.</p>	<p>On site baling of cardboard and potentially plastic packaging would reduce the transport requirements (by volume) for our waste, and generate an income, as well as reducing the costs of waste disposal and guaranteeing a 100% recycling rate for these materials.</p> <p>Cost benefit analysis will be conducted for different waste solutions including different balers on site.</p>	<p>2011</p>	<p>Sustainability Officer</p>
<p>12. Continuing to host annual Open Days where members of the community can visit our site</p>	<p>Annual Open Days will continue to demonstrate Alumet's commitment to sustainable communities.</p>	<p>Ongoing</p>	<p>Marketing Manager</p>
<p>13. Continuing to hold fundraising events and volunteer our time to charities</p>	<p>Fundraising will continue, as organised by various members of the team, and the amount of money raised will be publicised on the staff intranet.</p>	<p>Ongoing</p>	<p>Marketing Manager</p>
<p>14. Considering any sponsorship applications which are made to us</p>	<p>Any applications for sponsorship from social communities and groups will be considered, and if financially viable, Alumet will continue to support local community initiatives.</p>	<p>Ongoing</p>	<p>Marketing Manager</p>

## Targets

At the time of publication, we are in the process of finalising an organisational carbon footprint to the Carbon Trust Standard. In order to demonstrate our commitment to sustainability and carbon reduction, we have set the following targets against KPIs. These will be achieved through the actions in the Sustainability Roadmap. Due to the nature of the business, it is difficult to project a steady growth and emission pattern over the coming years. Therefore, targets were set under the following assumptions, with the aim of reducing our carbon emissions normalised against turnover by at least 3% per year:

- Total electricity demand per unit of turnover will remain the same, but 20% of electricity will be sourced from renewables
- Gas, gas oil, diesel and petrol, and propane will continue with their current trajectories

Indicator	2009 kWh/£100	2010 kWh/£100	2012 target kWh/£100
Total energy	10.20	9.16	8.59
Change /%		-10.23	-6.22
Mains electricity	0.91	0.85	0.68
Change /%		-6.7	-20
Solar electricity	0	0	0.17
Change /%		0	
Gas	0.54	0.61	0.69
Change /%		+12.6	+12.6
Gas Oil	1.63	2.03	2.53
Change /%		+24.4	+24.4
Diesel and petrol	7.10	5.66	4.51
Change /%		-20.3	-20.3
Propane	0.01	0.01	0.01
Change /%		0	0