



# Environmental Placement Programme Report 2010



**Federation of Small Businesses**  
*The UK's Leading Business Organisation*

# Executive Summary

The Environmental Placement has been run by the Green Business Partnership for over 10 years. Students are placed in host organisations to complete projects with an environmental focus. The programme benefits students by giving them real life relevant work experience as well as giving companies the chance to progress with their environmental management in a way they may not have had the time or in-house resources to do otherwise. This summer we have placed 62 students within companies from Stranraer to Orkney and with project types ranging from Green Marketing, Environmental Management and Resource Efficiency. This report summarises the student placements and the environmental and cost savings the students have made for their host companies as well as for Scotland as a whole.

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Company	Location	Project Type	Student	Course	University
Aberdeen College	Grampian	Employee Engagement	Eleonora Kapsule	European Management Studies	Aberdeen
Aberdeen Forward	Grampian	Environmental Education and Promotion	Jenny Carson	Geography	Edinburgh
Active for All	Glasgow	Waste Minimisation	Sarah Groom	Environmental Health	Strathclyde
AES Ltd	Moray	Website Development	Jack Stenson	Multimedia Technology	Glasgow Caledonian
Argentix	Edinburgh&Lothians	Resource Efficiency	Holly Fergusson	Biology	Edinburgh
Banchory Contractors	Grampian	Environmental Management	Richard Orlford	Zoology	Aberdeen
Brodies LLP	Edinburgh&Lothians	Environmental Management	Ross Brand	Physics with Environmental Science	Heriot Watt
City of Edinburgh Council	Edinburgh&Lothians	Green Employee Engagement	Cameron Petrie	Energy & Environmental Engineering	Edinburgh Napier
Dumdee University	Dumdee	Biodiversity	Jamie McEwan	Zoology	St Andrews
East Lothian Council	Edinburgh&Lothians	Carbon Footprint	Alice Westwell	Geography	Edinburgh
East Lothian Council	Edinburgh&Lothians	Carbon Management	Gavin Monson	Mechanical Eng. with Energy Eng.	Heriot Watt
East Lothian Council	Edinburgh&Lothians	Local Climate Change Impact Assessment	Lauren Gamble	Biology	Durham
Edinburgh Airport	Edinburgh&Lothians	Environmental Management	Callum Scott	Civil Engineering	Heriot Watt
Falkland Stewards	Fife	Waste Minimisation and Environmental Education	Louise Waddell	LLB & French Law	Aberdeen
Festivals Edinburgh	Edinburgh&Lothians	Green Marketing	David Brownstein	Civil Engineering	Edinburgh
Fife Council	Fife	Energy Efficiency	Jack Norton	Mechanical Engineering	Heriot Watt
Fresh Start	Edinburgh&Lothians	Database Development	Daisy Robson	History	Glasgow
Fyne Futures	Isle of Bute	Green Product Development and Marketing	Carolyn Shennan	Fashion Technology	Heriot Watt
Glasgow Furniture Initiative	Glasgow	Green Marketing	Callum Veitch	Environmental Management & Planning	Glasgow Caledonian
Glasgow Resource Recovery Park Ltd.	Glasgow	Business Development	Matthew Black	Green Technology	Scottish Agricultural College
Glasgow Wood Recycling	Glasgow	Green Marketing	Lilija Obietsova	Architecture	Glasgow School of Art
Go Greener	East Renfrewshire	Environmental Promotion and Event Management	Michelle Elliott	Plant & Soil Science	Aberdeen
GRAB Trust	Lochgilphead	Environmental Education and Promotion	Alice Turner	Marketing and Business Studies	Strirling
Green Insurance Company	Glasgow	Green Marketing	Sarah Forbes	Geography	Glasgow
Hebrides Alpha	Highlands&Islands	Waste Minimisation and Product Development	Alasdair Smith	CAD in Mechanical Engineering	Glasgow Caledonian
Highland Real Nappy Project	Highlands&Islands	Business Development	Ferdia Earle	Geography	Edinburgh
Hillcrest Housing	Tayside	Energy	Ashleigh Ovenstone	Environment & Business	Abertay
Homeaid Cathness	Highlands&Islands	Marketing and Business Development	Radoslaw Kwasniak	Chemistry	Glasgow
Hotel Missoni	Edinburgh&Lothians	GTBS	Bernadette Moloughney	Sustainable Environmental Management	Scottish Agricultural College
Hydrasun	Grampian	Waste Minimisation and Packaging Development	Alex Reid	Sustainable Development	St Andrews
Keenan Recycling	Grampian	Carbon Footprint	Kathryn Adams	Ecology	Aberdeen
Kinlyre Recycling	Campbelltown	Green Marketing	Craig McEwan	Green Technology	Scottish Agricultural College
Linkgroup	Forth Valley	Carbon Footprint	Ross Whiteford	Product Design Engineering	Strathclyde
Lothian Buses	Edinburgh&Lothians	Air Pollution Study	Alex Sutton	Sustainable Development	St Andrews
Lothian Buses	Edinburgh&Lothians	Environmental Management	Emily Freeman	Law	Edinburgh
Lothian Buses	Edinburgh&Lothians	Sustainable Tourism	Kathleen Allen	Environmental Science	Edinburgh
Moray Wastebusters	Moray	Marketing and Business Development	John Urquhart	Management with Marketing	Robert Gordon
New Start Highland	Highlands&Islands	Environmental Management System	Rahul Malhotra	Business Management	Inverness College
Zero Waste Scotland	Edinburgh&Lothians	Waste Minimisation Research	Brian Meade	Sustainability Engineering	Heriot Watt

Company	Location	Project Type	Student	Course	University
Orkney ZeroWaste	Highlands&Islands	Website Development/Marketing	Andrew Stewart	Journalism	Napier
Re-Boot	Moray	Website Development	Ruaradh Thomson	Artificial Intelligence	Edinburgh
Repaint Scotland	Glasgow	Waste Minimisation	Alexander Shields	Chemical and Process Engineering	Strathclyde
ReUseIt	Barrhead	Promotion and Web Design	Stephen McAllan	Environmental Management and Planning	Glasgow Caledonian
Rubberatkins	Grampian	Energy Reduction	Jennifer Brown	Chemical Engineering	Aberdeen
Scottish Courts Service	Edinburgh&Lothians	Waste Minimisation	Brian McDowall	Environmental Management & Planning	Glasgow Caledonian
Alexander Ross Holdings	Forth Valley	Environmental Management	Kirsty McLeod	Geography	Edinburgh
Second Opportunities	Glasgow	Marketing	Courtney Arbuthnott	Marketing	Glasgow Caledonian
SEPA	Forth Valley	Marketing / Communication	Sarah Young	Environmental Science	Strirling
Skills Scotland Ltd	Carntyne	Database Development	Abayomi Ogunleye	Software Engineering	Strirling
Starter Packs Glasgow	Glasgow	Database Development	Fabio Salvarizza	Computer Science	Strirling
Stranraer Recycling	Stranraer	Green Marketing & Product Development	Robin Talbot	Green Technology	Scottish Agricultural College
Tayside Contracts	Dundee	Waste Management Policy	Edvins Boladis	Environment & Business	Abertay
Tayside Recyclers	Dundee	Business Development	Harsh Garhwal	International Business and Marketing and Human	Dundee
Tio	Moray	Resource Efficiency	Kenneth MacFadyen	Civil Engineering	Strathclyde
Transition Town Forres	Moray	Community Education and Survey	Perry Tagima	Medicinal & Biological Science	Edinburgh
TWMA	Grampian	Environmental Management	Daniel Dumont	Mechanical Engineering	Edinburgh
Upkeep	Glasgow	Marketing	Liam Kelly	Philosophy	St Andrews
West Coast Recycling	Strathcarron	Recycling and Waste Reduction	Abigail Kilbride	Green Technology	Scottish Agricultural College
Wyman Gordon	Edinburgh&Lothians	Environmental Management	Stephen Emerson	Biology	Strirling
Xeroshield Ltd	Edinburgh&Lothians	Botanical Research & Development	William Salter	Ecology	Edinburgh
Yooz	Glasgow	Waste Minimisation	Iain Buchannan	Green Technology	Scottish Agricultural College
Young Scot	Edinburgh&Lothians	Carbon Footprint	Nick Henderson	American Studies & International Relations	Dundee

## Outcomes :

- 62 students participated
- Identified cost savings £716,000
- Tonnes of CO<sub>2</sub> 21,333
- Waste diverted from landfill (tonnes) 20,560
- 40 Improved processes/ procedures
- 35 Improved environmental awareness
- 30 Improved marketing
- 35 Customer awareness
- 5 Green Jobs Created

### National Finalists and Judges 2010



# Case Studies:

## **Aberdeen College Eleonora Kapsule**

Aberdeen College is Scotland's largest college of further education and vocational training. It has various sites and employs more than 500 people.

In June 2009 Aberdeen College was accredited with the Environmental Management System (EMS) ISO14001 and later that year – EcoCampus Platinum Award for all operations at all sites becoming the first educational institution in the UK to receive such an award.

Aberdeen College is committed to continuous improvement. Under the framework of the EMS the College has adopted various policies and procedures that contribute to sustainability and initiatives to promote it amongst staff and students. The College has produced a 5-year Climate Change Action Plan. However, further success will depend largely on long-term changes in the attitudes and behaviours of College's staff and students.

Eleonora was placed with Aberdeen College to improve staff and student green engagement. Eleonora's objectives were to:

- Research the factors that influence behaviours and attitudes to sustainability and the adoption of appropriate practices by individuals.
- Review the current attitudes of staff and students within the College to sustainability and sustainable practices and behaviours.
- Research and identify successful strategies adopted in other educational institutions
- Identify in consultation with staff and students strategies that may be successful within the context of Aberdeen College.

She developed a recommended strategy and action plan for Aberdeen College to better understand project's background and gain more relevant knowledge. She researched a number of topics, such as existing policies, procedures and the process of decision-making in Aberdeen College. She also created a survey to gauge attitudes and behaviours within the organisation. A questionnaire was created based on techniques employed by UK and Scottish Governments when researching public environmental attitudes and behaviours.

## **Aberdeen Forward Jenny Carson**

Aberdeen Forward (AF), is an environmental charity and social enterprise based in Aberdeen that specialises in developing and managing sustainable projects, with 11 paid employees and currently around 100 volunteers.

The Climate Challenge Fund (CCF), an economic instrument set up by the Scottish Government, supports AF by providing funding for a variety of workshops aimed at re-skilling citizens towards a lower carbon lifestyle, such as sewing, card making, practical gardening and planting an edible hedge. The CCF requires the production of quantitative figures calculating how much carbon dioxide equivalent (CO<sub>2</sub>e) is saved per participant both during and after each workshop.

Jenny was placed with AF to calculate the carbon savings and evaluate the various sustainability workshops that ran between March and August 2010 with regard to carbon saving, environmental engagement, and participant satisfaction. These were part of the Transition Aberdeen project. She used questionnaires to gain workshop participant feedback, along with carbon calculations, that were then analysed to quantify results. The findings indicated that a total of 26.81 tonnes of CO<sub>2</sub>e have been saved to date. Additionally a clear difference in environmental engagement was found between participants attending food and non-food related workshops, thus resulting in the recommendation of different depths of knowledge provision. Jenny's findings also showed that while workshops are to run to an extremely high level of participant satisfaction, continued newspaper advertisements, encouraging existing participants to further encourage participation, and introduction bike maintenance, bee keeping and interior design workshops would further improve service.

These findings and recommendations will feed directly into both funding reports (Climate Challenge Fund) and Aberdeen Forward policy.

**Active4all**  
**Sarah Groom**

Active4all is a charity which aims to develop United Kingdom's first Centre of Excellence for People with Disabilities. As a way of raising money, Active4all has created a separate trading arm called Yooz Scotland; a subsidiary social enterprise which specialises in collecting unwanted materials (waste) from construction works to resell for profits towards the centre. Sarah was placed with Active4all to set up a partnership whereby their unwanted material is collected on a regular basis. The aims of the placement were to increase tonnages of waste being diverted from landfill, increase materials available to resell for profits and to raise awareness of Yooz within the construction industry, leading to growth and expansion of the charity. Sarah also helped identify potential sale markets outlets by identification of materials collected. She set up strong relationships with construction companies and identified ways the company could reduce their carbon footprint. Sarah successfully implemented the aims of the placement including setting up an improved process for collection of unwanted goods as well as increasing the profits and environmental performance of the company.

**AES Solar**  
**Jack Stenson**

AES is the UK's original solar heating system manufacturer, based in Scotland and have been manufacturing solar hot water systems since 1979. They have extensive experience in the design, supply and installation of solar water heating systems for small and large scale domestic customers, as well as for a wide variety of commercial and public sector clients throughout the UK. AES took on Jack to create a selection of imaginative and inspired technical literature and to rejuvenate existing installation manual and technical specification. Jack was also responsible for producing electronic operations and maintenance manuals.

**Alexander Ross Holdings**  
**Kirsty MacLeod**

Alexander Ross Holdings (ARH) is a manufacturer and distributor of luxury skincare products as well as janitorial cleaning products. The company had become increasingly aware that to maintain their competitive edge they must put in place an environmental management system. The placement allowed an environmental assessment of ARH to be carried out and a supporting document for the existing energy policy to be created. A packaging study highlighted a further 10% of products that could be marked as recyclable. Installation of toilet hippos created savings of ~150 m<sup>3</sup>/year of water and ~£340/year whilst quotes replacing the lighting system highlighted savings of ~£16700/year and ~79 tCO<sub>2</sub>/year. A staff awareness campaign was also implemented. The results of the placement convinced the ARH to work towards the ISO 14001 environmental management standard.

**Agentix  
Holly Ferguson**

Holly was placed at Argentix in Midlothian. Argentix specialises in providing comprehensive commercialisation and business structuring support to assist fledgling technology enterprises. Holly's placement centred on quality management of the SABRE project. SABRE consists of thirty three leading animal breeding research groups and businesses have joined forces in - Cutting Edge Genomics for Sustainable Animal Breeding". SABRE is designed to provide a range of new breeding strategies to improve animal health and welfare; reduce chemical and energy inputs; minimise livestock waste and pollution; and, maximise food safety and quality. Holly examined all aspects of the SABRE project, with particular reference where impacts have been achieved but not measured in the formal reporting process. She reviewed and analysed the documentation relating to the project, from application onwards as well as proofed implementation of results. Her project resulted in production of a report which now ensures a more accurate and progressive set of research data for the company.

**Bancon Construction  
Richard Offland**

Bancon Construction is a medium sized company in relation to the construction industry. Part of the privately owned Bancon Group, the company operates throughout Aberdeenshire and Aberdeen City. From refurbishments to new builds, project values can be up to millions of pounds. With the industry suffering under the economic climate and the whole industry is looking for new innovative ways to make financial savings as well as obtaining further credit via environmental initiatives.

Rick Offland was tasked with assessing the company's energy and water use throughout the construction sites as well as within the head office. Data has been gathered over the previous two years regarding the company's energy and water use, Rick was also required to create a tool which would allow for this data to be entered with an immediate output stating performance which could be compared internally and against past figures. Rick's placement was successful in creating a tool for Bancon Construction enabling them to monitor energy and water use on sites and consequently across the entire organisation. In addition, the company can save costs when energy and water use is reduced to industry benchmarks as well as the associated environmental benefits of a reduction in resource use.

**Brodies LLP  
Ross Brand**

Brodies LLP is a leading corporate and commercial law practice delivering legal services to a diverse range of public and private sector clients. It is the largest legal practice headquartered and solely based in Scotland with over 420 staff. It has two offices in the city centre of Edinburgh and another based in the city centre of Glasgow.

Two years ago, they set up a Green Team known as "Sustain" and they have introduced a number of measures since, including energy use reduction measures, recycling of paper, glass, plastic and card, travel reduction measures such as the use of video conferencing for meetings as well as introducing a "bike to work" scheme for staff and paper usage reduction strategies including E-filing and duplex printing.

Working for Brodies Ross's project objectives were to

- Conduct focus groups to get feedback on green activities in the office.
- Carbon footprint all 3 offices using the Legal Sector Alliance protocol, this was developed in consultation with the Carbon Trust.
- Investigate how to introduce improved recycling across the firm and set waste targets for 2011.
- Undertake a gap analysis on how to achieve environmental accreditation.

Ross calculated an 845 tonne carbon footprint for all offices. He then made a list of recommendations to help Brodies reduce that footprint next year. As well as the carbon footprint reports, Ross set up an Energy Saving Trust Audit for the Glasgow Office, investigated alternatives to the current recycling strategy and performed gap analysis for the

firm to achieve Environmental accreditation. Ross also held several meetings with the firm's green team and performed a cost and environmental impact analysis of implementing a filtered water system in the Atholl Crescent premises in Edinburgh.

### **City of Edinburgh Council Cameron Petrie**

The City of Edinburgh Council employs 20,000 staff over 300 locations throughout Edinburgh. It is involved with providing vital services, such as housing, education leisure care and transport for the city occupants and visitors.

The Council has set themselves a target of reducing their emissions by 25% by 2013. In order to meet this target, aside from larger scale projects incorporated into their carbon management scheme, colleague awareness of their personal environmental impact is important.

In order to raise awareness, the Council rolled out its Carbon Club pilot initiative in conjunction with BT in January 2010. In setting up the carbon clubs, the Council has provided a framework of support for colleagues to get involved with climate change and work towards reducing the Council's emissions.

The aim of Cameron's placement was to develop tools and training materials for the council's Carbon Club. In developing the Carbon Clubs further, the Council will be able to work toward their reductions targets from both the top down; through the carbon management scheme, and also from grass roots up, by way of carbon clubs and infusing the idea of energy efficiency as the norm in all council employees.

In order to assess the current situation with the Carbon Club and to provide areas of initial focus, Cameron assessed the latest energy consumption figures for the 5 locations (for both gas and electricity usage). As an outcome of the work performed during this placement Cameron produced a firm backbone of training packages for use for both the Carbon Club members and also prospective members. The comprehensive information provided in the handbook allows the possibility to be condensed into presentations for use in the marketing and recruitment of members.

In doing this, the Carbon Club support material can utilise the responses to amend and tailor the supporting information to the needs of the members. It also opens the gateway for feeding back both critical appraisal which is imperative for the initiative to be refined and improved but also to allow the feed back of success stories which again is critical for use in publicity and marketing material.

### **Dundee University Jamie McEwan**

Dundee University is an internationally renowned centre for teaching and research. With roughly 3000 members of staff and around 1800 students living, working and studying in and around the campus the grounds and estates are a place of recreation, to study, eat or meet friends as well as a home to many students and staff. The university aims to integrate biodiversity into this dynamic environment to make a positive contribution to peoples well being and quality of life.

Jamie's project was to survey biodiversity on the campus with a view to creating new habitat and opportunity for it to thrive on campus.

He surveyed the current wildlife areas on campus and recorded the biodiversity.

As a result of Jamie's placement it is hoped that biodiversity will improve. Jamie has also suggested methods to encourage additional biodiversity. For instance creating a mosaic of different lawn lengths across campus providing a variety of habitats and opportunities for a wider range of plants and associated organism. This could be made to be aesthetically pleasing whilst perhaps saving money via time spent maintaining short lawns.

In the future it is hoped that the survey results will provide a useful framework so future monitoring and comparisons can be made. This project will be of benefit to staff and students as it has put measures in place to allow it to grow and be monitored in the long term should see a biodiversity enhancement.

**East Lothian Council**  
**Alice Westwell**

East Lothian Council (ELC) is based in Haddington, East Lothian and employs around 5000 staff. In line with the Scottish and UK Government targets to reduce their carbon emissions by 80% by 2050, East Lothian Council has set its own target of a 25% reduction in carbon emissions by 2014 as outlined in the Council's Carbon Management Plan 2009-2014. The popularity of visits to the coastal areas of East Lothian is growing. The John Muir Country Park Management Plan 2010-2014 highlighted the Country Park as a suitable site to begin research into the carbon footprint of coastal visitor hotspots to promote their sustainable futures. As it is the largest Country Park in Scotland its size denotes that its carbon footprint may be larger and therefore worth investigating before approaching smaller sites. Alice's project was to assess the Carbon Footprint of the John Muir Country Park. Alice calculated a 117.9 tonne operational carbon footprint for the park, which increased dramatically to 3218.92 tonnes when visitors to this coastal hotspot were incorporated. She identified a potential for 233 tonnes of carbon emissions and £88,611 to be saved annually through such initiatives as introducing recycling and composting at the Park, exercising control over the car, more efficient public toilets and enhancing public awareness. Alice constructed business plans for these which she presented to the Council to promote the Park's sustainable management and future.

**East Lothian Council**  
**Gavin Monson**

Gavin was placed at East Lothian Council. The council runs around 800 facilities (eg town halls and school buildings) of which around 100 are available for the public to let. The purpose of the placement was to build a database to manage the councils' lets in a more cost effective and environmentally sustainable way. The most effective method to reduce the cost of the lets that was identified was to consolidate the lets into as few buildings as possible. This would allow the council to shut many buildings out of hours saving substantial amounts of energy and money. If fully Implemented the savings total around £70'000 per annum in energy alone and up to a total of £150'000 per annum if reduced staffing and cleaning costs are taken into account. The energy savings also translate to a 700 tonne reduction in the council's 44'000 tonne carbon footprint contributing to the council's carbon targets.

**East Lothian Council**  
**Lauren Gamble**

The aim of Lauren's project for East Lothian Council was to research and compile a Local Climate Impacts Profile (LCLIP). The LCLIP considers impacts and responses to severe weather events in a locality to highlight current areas of vulnerability.

The objectives included:

- Producing a spreadsheet of severe weather events which have affected East Lothian over the last 10 years - including details of the weather type, impacts and consequences.
- Finding details of the responses to these weather events by the appropriate council departments and Community Planning Partners (CPP).
- Researching the historical climate trends of East Lothian to compliment the information found for the recent period.

Lauren collected data by a media trawl, an online survey for residents' experiences and interviews with responders from the council and related organisations. The completed LCLIP is an important first step in climate change adaptation, forming part of East Lothian's 2010-15 Environment Strategy, as research indicates severe weather is likely to become more common in future, so successful adaptation will be crucial.

## **BAA Edinburgh Callum Scott**

Callum Scott was placed at BAA to implement the recommendations made during an audit of BAA Edinburgh Airports 'Corporate and Social Responsibility Report'. The placement objectives were as follows:

- Set a realistic target for water reduction in 2010 and beyond, incorporating any planned developments and potential efficiency projects
- Predict future effluent volume that the airport will produce incorporating any future developments in order to ensure compliance with Scottish Water consent
- Develop a plan to communicate recycling figures with passengers
- Carry out a formal audit of Shanks recycling site
- Invite members of the local community to sit on the noise strategy steering group to increase the level of community engagement

His first task was to carry out research on historical data in relation to water consumption and waste disposal at the airport. He also arranged meetings with members of staff in and out with BAA to carry out his research and compiled reports on his respective targets.

BAA has succeeded in implementing the recommendations of the audit as a result of Callum Scott's placement with them.

## **Falkland Stewards Louise Waddell**

Falkland Stewards is an umbrella organisation whose partners are committed to improving the townscape and landscape of Falkland and the surrounding Fife area. One of these organisations is Falkland Centre for Stewardship (FCS) which runs the Big Tent festival. The Big Tent festival attracts around 12,000 visitors over the weekend and is Scotland's largest environmental festival.

The main objectives of the placement were to:

- Reduce the amount of waste sent to landfill
- Promote recycling festival weekend
- Assist with the management of volunteers and volunteer rota over the festival weekend
- Calculate the waste that is diverted from landfill and carry out some evaluations.
- Work with traders to ensure food waste is diverted from landfill

Louise spent the preceding weeks drafting and implementing a waste strategy, organising the infrastructure, the logistics, and the PR. This ensured that a slick system was in place by the festival weekend, resulting in around 3 tonnes being diverted from landfill and a fantastic sun-tan for everyone on her recycling team! In addition to the above Louise helped FCS improve on their sustainability objectives set out in the Greener Festivals award application, dealt with contracts for speakers and entertainers at the festival and carried out visitor survey collecting information to be used for the sustainability strategy and for improvements to the festival next year.

## **Fife Council Jack Norton**

Fife Council Development Services is a large division of Fife Council that deals with a vast range of business support services. Within this division Development Services Property team based in Glenrothes manages a portfolio of business properties throughout Fife which range from multi-occupancy buildings to small industrial units, with a total lettable floor space in excess of 500,000sq.ft. The council is fully aware of today's emphasise on a green sustainable future and aims to become the greenest council in Scotland. Development Services aims to reduce the carbon footprints of all its properties and are in the initial stages of a 10 year plan to implement energy efficiency throughout its properties. This project will form the backbone of the 10 year energy efficiency plan.

Jack Norton, a mechanical engineering student at Heriot Watt University was given the task of producing an energy efficiency report on a number of properties owned and managed by the

property team. Jack completed site surveys of all properties and gathered all the necessary information at the Initial Stages. A detailed investigation and vast research was then carried out to allow for the production of a detailed energy efficiency report.

Jack discovered that applying new heating systems such as biomass boilers, new lighting such as LED, heat loss prevention measures such as cavity wall insulation and renewable energy devices would result in an energy saving of 340,750kWh, financial saving of over £27,000 and a reduction of the councils carbon footprint by 146.3 tonnes of CO<sub>2</sub>.

### **Fresh Start Daisy Robson**

Daisy Robson was placed at Fresh Start. The aim of her placement was to develop a quality system and develop a database for the organisation. Fresh Start, a charity that helps those who have experienced homelessness get back on their feet by providing Starter Packs, Hit Squad decorating and befriending services. Daisy started by creating two manuals – one for the staff induction process and another for the database. She also introduced a development model for the database, a process in which staff can raise concerns or request changes to aid the work they do. This enables the database to be used to its full potential and ensures communication between staff, current and new.

### **Fyne Futures Carolyn Shennan**

Fyne Futures is a registered Scottish charity and not-for-profit organisation. It was created in 2004 with the aim of providing a recycling service and a focus for environmental sustainability across Bute and Cowal. The areas within Fyne Futures consist of the Recycling Centre, Bute Produce, and Towards Zero Carbon Bute (TZCB). They collect recycling via kerbside pick up which is brought to the Rothesay site for processing.

Fyne Futures Recycling Centre include textiles which are brought to the site via their kerbside collections. An opportunity to maximise the income from textiles by reusing materials to make garments and accessories was identified.

Carolyn Shennan is currently studying Fashion Technology at Heriot Watt University in Galashiels; she was placed at Fyne Futures Recycling Centre on the Isle of Bute, to sort through the textiles collected and identify a more suitable income. Currently Nathan's waste savers buy the textiles for 50p/kg; the annual tonnage is 30 and the income from this is £15,000. She worked out that the potential of selling at least 1 tonne of garments in the refurbished shop could make a possible £16,000 pa.

Her work involved market research and fashion trend forecasting, which helped define what to pick out while rummaging in the textiles, to then sell on at Fyne futures furniture shop which she refurbished as part of the project too. Also old furniture was up cycled by customising it and using recycled textiles in the process which added value. She set up window displays to make people aware of what can be done to reuse and restyle their old belongings to divert from landfill.

### **Glasgow Furniture Initiative Callum Veitch**

Glasgow Furniture Initiative (GFI) is an organisation that provides quality, restored furniture to people in disadvantaged positions. Their service provides essential household furniture, often to people recovering from homelessness or escaping domestic violence. GFI collect unwanted furniture free of charge, this ranges from beds to suites to white goods, which is then professionally cleaned, restored, safety tested and sold at low cost. GFI's service also alleviates environmental problems by diverting unnecessary material being sent to landfill. In the period from June 2009 to July 2010 GFI assisted over 5,000 households and diverted over 1,200 tonnes of waste from being sent to landfill.

Callum assisted GFI with marketing and promotion of the company. He implemented changes, such as website development, and produced a 'best practice' business

development guide that has set a benchmark and will continue to be used for marketing and promotion of GFI.

### **Glasgow Resource Recovery Park** **Matthew Black**

Matthew was placed at Glasgow Resource Recovery Park in summer 2010. The company are primarily concerned with maximising waste diversion from landfill and maximising the re-use and/or recycling of the items or materials diverted.

Matthew's placement was to focus on developing a household and commercial food waste collection service to augment the company's existing pallet of recycling services. Matthew developed this project beyond the research and planning stage and helped implement the full service over the course of the summer placement with successful outcome for the company.

### **Glasgow Wood Recycling** **Lilia Oblestova**

Glasgow Wood Recycling is a social enterprise and charity which offers wood waste collection services and sales of reclaimed timber and garden products made from similar materials. The company were convinced of the merits of using social media in its widest form and wished to carry out a comprehensive evaluation of a social media marketing strategy Lilia was placed with the company to complete an online marketing placement with objectives to increase sales and tonnages of wood waste collected. She expanded the content of the website and increased traffic by improving customer awareness through sending out a newsletter to 600 people and keeping a facebook page updated. The creation of a detailed stock list enabled Lilia to double the product range of an online shop, and adding the terms and conditions made it functional again. A set of instructions have been left for staff to use in future.

### **Go Greener** **Michelle Elliott**

Go Greener is a community lead, not-for-profit organisation. Go Greener are concerned with working to improve the environment in East Renfrewshire and with making changes locally that will have an impact globally. The organisation currently consists solely of volunteers and the Michelle's aims were; to develop clear and efficient infrastructure and procedures, and to help co-ordinate and carry out the current and potential projects that the organisation are undertaking.

Michelle's project for Go Greener involved: building databases to create an effective infrastructure; organising a highly successful event; sourcing and applying for funding; and generally assisting in the development of the organisation. Being a not for profit organisation consisting of volunteers, having Michelle project manage on a full time basis has helped the organisation to realise its full potential. The experience of the Environmental Placement Programme has been invaluable to the personal development of Michelle and to the development and growth of Go Greener.

### **Grab Trust** **Alice Turner**

The GRAB Trust is a not-for-profit charitable organisation, based in Lochgilphead, Argyll. It was formed in 1993 to address waste and recycling issues in the area. The main aim of the trust is to promote, educate and encourage recycling throughout Argyll and Bute. Alice was placed with the company to promote the services offered and analyse and improve the current business and communication plan. Alice also was tasked with helping to develop a new business and communication plan for 2011. She identified areas in the current business plan that could be improved, e.g. to encourage participation in Waste Prevention and Waste

Minimisation projects with the business community, as well as designing a clear strategy for communications. She also helped to identify key services, activities and the support required by the public of Argyll & Bute, and determined possible areas of development i.e. additional services that could be offered.

Alice developed and instigated a GRAB Trust communications plan to state different mediums used for communication, and when, how and where they are used to make it clear to any person who reads it.

Alice visited them and made them aware of the recycling provisions available within the area. Two of these hotels thought they could reduce their waste by 30-40% by recycling glass and cardboard. The other hotel which currently recycles glass, believed that 50% or more of their waste is recyclable, so would definitely reduce a lot more if they recycled cardboard. These hotels could reduce their bin size or collection frequency whilst paying for recycling collections and still save hundreds of pounds annually by reducing the waste going to landfill. Alice has created a marketing communication plan which details the amount of marketing conducted each month and in what areas. This will make it easy for all project to workers to see to what extent the trust is promoted and when.

### **Green Insurance Company Sarah Forbes**

The Green Insurance Company is an insurance intermediary based in Uddingston, Glasgow. The company offers a selection of products including car insurance, pet insurance and breakdown cover

Sarah was placed with the company to enhance the promotion of TGIC's 'green' credentials to customers, as well as building on the green policies they currently have in place as an organisation.

She developed a grants scheme giving away £20,000 of the company's profits to green community programmes as well as conducted an environmental survey of the Company's suppliers. Sarah also assisted The Green Insurance Company by revising the Company's green policy and environmental information presented on their website.

### **Hebrides Alpha Alasdair Smith**

Hebrides Alpha (HA) is a social enterprise firm which provides therapeutic employment to individuals with alcohol and other drug addiction problems. Services currently delivered include window cleaning, power washing, and gutter cleaning, recycling and hiring out bouncy castles. The aim of the student project was to:

- Ascertain whether there is a significant interest and demand for a business recycling service in Lewis & Harris
- Identify the specific requirements of each local business in regards to their waste streams i.e. what types of waste they produce, quantity, preferred frequency of collection, what storage space they have available, how many bins they need and how much they are currently paying.

Alasdair Smith, a third year Computer Aided Design in Mechanical Engineering student at Glasgow Caledonian University was placed at HA to research the interest and demand for a business recycling service in Lewis and Harris. Alasdair sent 450 letters and questionnaires and spoke to, or met, 201 businesses. His objective was to find out what types of waste, quantity, storage areas, collection frequency, bins and cost each business had. With these findings Alasdair calculated the waste from businesses were cardboard 50%, plastic 25%, paper 15% and cans 10%. Alasdair found that 117 businesses would use the service, 64 would not due to not having enough waste and 20 may use the service depending on price.

### **Highland Real Nappy Project Ferdia Earle**

Highland Real Nappy Project is a community association which aims to promote the use of washable nappies with families and health professionals in Highland in order to reduce waste to landfill. Ferdia was tasked with marketing this new project in the Highland area and to increase sales via online methods, mail order and at events/markets and other retail outlets. Ferdia worked to improve the marketing of this service to highland families by making it possible to buy nappies locally at competitive rates and with low postage charges/option of local pickup. She also developed their marketing plan and set up stalls at various events in order to promote the service. This will help HRNP in its aim to increase its financial sustainability by developing its retail service to allow it to continue to offer the advice/support/incentives which lead to significant tonnes of waste diverted from landfill and contribute to aims of Scotland being a Zero Waste nation.

### **Hillcrest Housing Association Ashleigh Ovenstone**

Hillcrest Housing Association is one of Scotland's largest regional Housing Associations. Hillcrest is a non profit making organisation with registered charity status in Scotland. Hillcrest has been a major housing provider for over forty years, and manages over five thousand properties spread across five different areas, namely; Dundee, Angus, Edinburgh, Fife and Perth & Kinross.

Feed in Tariffs (FITs) were introduced by the Government in April 2010 as a way of encouraging small scale generation of electricity from renewable sources

Ashleigh was placed with Hillcrest Housing Association in Dundee to research, report and recommend how they can benefit from the Feed in Tariff scheme that was introduced this year. Her study focused on the Dundee area only and the use of solar PV technology. The study identified the cost, rate of return, expected FIT's income and electricity savings which will potentially benefit Hillcrest Housing Association.

She researched the Feed-in Tariff scheme and solar PV technology and gathered detailed information from informed sources, academic reports and expert opinions. Ashleigh was also successful in identifying eligible properties within Hillcrest housing stock in Dundee area as well as identifying all practical implications of feed in tariff scheme and solar PV installation. She was successful in providing Hillcrest with a report on the feasibility of using this scheme as well as detailing costs, rate of return as well as payback periods and providing recommendations based on her findings which will help Hillcrest benefit from this scheme.

### **Homeaid Caithness and Sutherland Radek Kwasniak**

HomeAid Caithness & Sutherland is a Thurso-based charity which provides essential household furniture and electrical items to people who would not be able to furnish their houses without assistance. It started as a small recycling venture and during its 14 years of existence it has grown to a full-blown community enterprise, which saves 250 tonnes of unused items a year from ending up in landfills. Apart from recycling, the other important positive impact the charity has on the community is that it helps to get people back to work, relieves poverty, builds confidence and develops people's skills. It has 4 full-time, 11 part-time employees and 29 volunteers.

Funding however has remained a major challenge. Due to the Highland Council lowering financial support for the charity, HomeAid is looking for sources of income that would generate enough profit to make it self-sustainable. One of the ideas, which is a base for this is project, was to start a small removals and clearances service.

The company took on Radek, to research the feasibility of starting to provide this new service. Radek, a chemistry student from the University of Glasgow completed a feasibility study into setting up a small removals and clearances company. The opportunity to generate high profits was identified as a result of Radek's placement with the company.

The achievement of the student will enable HomeAid to become more self-sustainable and less dependent on the grants from government and other organisations, and possibly to employ a new member of staff. The outcome of the placement was positive for both the company and the student.

### **Hotel Missoni Bernadette Moloughney**

Hotel Missoni is a newly opened 5-star hotel in the heart of Edinburgh's historic Old Town. Incorporating Rezidor's Responsible Business (RB) policy, Hotel Missoni has applied for the Green Tourism Business Scheme (GTBS) in recognition of high standards of environmental performance. Bernadette Moloughney, was appointed to co-ordinate the GTBS application in conjunction with developing the hotel's Responsible Business Plan for 2010 and beyond. This post involved reviewing current environmental standards, identifying opportunities for improvement, developing an Action Plan for the GTBS appraisal in accordance with the GTBS checklist and implementing the initial recommendations.

A Responsible Business Action Plan was also drafted incorporating long-term social, ethical and environmental objectives. Included in this was RB staff training delivered by Bernadette, staff awareness and incentive schemes, carbon offsetting possibilities, energy awareness and conservation, improved recycling and communication sustainability to guests.

### **Hydrasun Alex Reid**

Hydrasun manufactures hoses and fittings for the oil and gas, petrochemical, marine and defence industries. The company employs a total of 461 employees across its UK and international operations. The company headquarters are in Aberdeen. Hydrasun has high aspirations and is growing fast, but has begun to recognise the potential environmental impacts this continued expansion may have. The company wanted to minimise, recycle and, if possible, eliminate materials from the company's two main packaging streams in order to reduce both environmental impact and costs. The objective of the placement was to come up with new and innovative ideas regarding the use of packaging, addressing how suppliers package incoming goods and how Hydrasun goods are packaged to go on to the market. Polythene bags used to package Hydrasun fittings were often grossly oversized, so a trial with smaller bag sizes was initiated. A message was also added to all polythene bags encouraging customers to reuse or recycle them. The transition to smaller bag sizes was projected to save a minimum of £8,624 across the company's operations as well as reduce environmental impact.

A baler was purchased to improve the efficiency and cost effectiveness of cardboard recycling. Wood waste will be offered free of charge to employees to reduce uplift costs. Recycling of waste hose, paper, cans and plastic and composting for food waste will be implemented upon moving to new headquarters, diverting the majority of 'general waste' from landfill.

Alex's placement has generated savings of £20,205 and eliminated 8.8 tonnes of packaging material annually.

### **Keenan Recycling Kathryn Adams**

Keenan Recycling Ltd specializes in the manufacture of soil improvers by recycling organic materials through composting. The objective of the student placement was to calculate the carbon footprint for the site. This was in response to customers demand and they were also keen to improve their environmental reputation in order to apply for VIBES.

Kathryn started by determining the scope of activities which would be included in the carbon footprint, and once she had calculated the carbon footprint she then helped the company by identifying opportunities to reduce it. She also researched suitable carbon offsetting schemes and the associated cost with using them as a method of 'reducing' the carbon footprint.

**Kintyre Recycling  
Craig McEwan**

Kintyre recycling is a community enterprise providing kerbside recycling services for Argyll and Bute council as well as providing schemes for textiles, plastics, and cans paper and cardboard. They have little or no budget for marketing activities and Craig was placed with them to help identify potential future/proposed services for the company and develop their business and marketing plan. He was also tasked with assessing the effectiveness of current communication with Kintyre Demographic, surveying public opinion and public knowledge and awareness of Recycling Services in the area. Craig's placement resulted in and improved service for the company and new numbers of new customers and an increased local knowledge of the services offered by Kintyre Recycling.

**Link Housing  
Ross Whiteford**

The Link group provides new and improved homes for rent and sale, community regeneration programmes and personal care for individuals

Working as a carbon footprint researcher for the Link Housing Association, Ross's placement involved assessing the carbon footprint of the Link Group business related activity. This role involved in-depth research and knowledge on carbon footprinting as well as the ability to compile detailed reports and excel spreadsheets.

His reports included a carbon footprint of Link Group's LTD's business related activity over a 12 month period. Emissions resulting from electricity use, gas use water use paper and stationary use, transport, and waste were considered. Ross completed set of spreadsheets which enable future assessments to be performed with minimal effort, as well as a project report and methodology paper which supports the use of emissions calculation spreadsheets.

**Lothian Buses  
Alexander Sutton**

The aim of Lothian Buses 'Air Quality Survey Project' was to assess the contribution of Lothian Buses to nitrogen oxides (and particular matter) relative to other vehicle emissions in Edinburgh's Air Quality Management Areas (AQMA's). These pollutants are of primary concern in Edinburgh, as the levels exceed national targets and have obvious public health implications. The study incorporated a three tiered methodology: a manual traffic census, analysis of yearly averaged automatic traffic count data and a modelling analysis of Lothian Buses proposed bus fleet alterations. It is anticipated the results derived from the project will provide Lothian Buses with an analysis for future mitigation strategies.

**Lothian Buses  
Emily Freeman**

Emily was placed with Lothian Buses plc, a local bus company operating in Edinburgh who in the last year has started a number of effective environmental initiatives, greatly improving their impact on the environment. In order to continue this process of improvement and collect their environmental information into one place, Lothian buses asked Emily to look at implementing an environmental management system for the company. The key areas of this were a preliminary environmental review and legislation register. The preliminary environmental review involved looking at the company as a whole, considering all the areas and activities which had a potential or actual impact on the environment and ranking them by significance. The legislation register involved finding all the legal obligations on the company linked to environmental matters, and making it clear to the company what their obligations were.

As a result of the project, the company has the beginnings of an environmental management system which is a decision is made to do so, could be developed to the point of ISO14001 accreditation.

## **Lothian Buses**

### **Kathleen Allen**

Lothian Buses plc is a municipal bus company. They own Edinburgh bus tours. There are 5 different tours taking people around the city of Edinburgh. Lothian Buses plc has made considerable progress in improving its environmental performance. To date Tours is the only part of the company that has received little attention in this regard. EBT are considering the Green Tourism Business Scheme (GTBS) in order to provide a framework for environmental improvement. Kathleen Allen was charged with the task of carrying out a survey to gauge public opinion on sustainable tourism and the GTBS, the results of which would be used to persuade management of the necessity to 'go green' She was asked to produce a gap analysis detailing all the actions that would need to be taken in order to achieve GTBS gold award.

The survey showed a potential market in sustainable tourism with 27% stating that they would be more likely to go on a bus tour if it was certified as being more 'environmentally friendly'. The gap analysis has pointed out some key areas for improvement such as separating out and recycling food waste which would bring them towards zero waste to landfill.

## **Moray Wastebusters**

### **John Urquhart**

Moray Waste Busters is a registered charity which was established in 2002 to promote public awareness of the "3 R's" (Reduce-Reuse-Recycle). It has developed into a well-established and popular feature of the local community, promoting awareness of the need for waste minimisation through a range of activities including an environmental education programme for schools (and other interested groups), a reuse/reclaim facility and a training placement scheme for disadvantaged adults from the local community who need help preparing for the world of work.

John was placed with Moray Waste Busters (MWB) in Forres to develop a business plan and to produce a marketing strategy in order to boost numbers of new customers and make themselves more visible to the general public in Moray. Through discussions with the company secretary John was able to pinpoint areas in the Business Plan that needed to be updated so that they would be current as of 2011, running through to 2014. Next he reworded, updated figures and sections, deleted some sections and just generally tried to make the document more professional looking.

This stage entailed thinking of the information he needed to receive from current customers of MWB and then drawing up the questions that were going to enable him to draw this information out of them. He managed to obtain one hundred responses from current customers to his survey, which helped in the development of the marketing strategy.

John's placement resulted in new customers and higher awareness of MWB within the wider Moray area, brought about through the implementation of the marketing plan and New business plan drafted for 2011-2014.

## **New Start Highland**

### **Rahul Malhotra**

Established in 2000, New Start Highland is a local charity serving communities in the Highlands by providing support and assistance to the most vulnerable in society, including people who are moving from homelessness, long-term unemployed or otherwise experiencing social exclusion.

New Start's range of services includes furniture reuse, employment training, housing support, and supported volunteering opportunities.

Rahul was placed with New Start Highland (NSH) to improve their quality management system. Before this the organisation aimed to pass the FRNE (furniture reuse network enterprise) standards. The aim of Rahul's placement had been based around working through a checklist provided for the FRNE standards and to complete all the requirements and procedures within the checklist. The job has been to evidence and document all the processes and procedures that took place within the organisation. A folder has been created

where all the information has been documented and referenced as it would be easy for any external party to refer to it. Rahul also collated data to monitor NSH's environmental activities including energy bills, water bills and carbon footprints  
NSH are now on course to attain the ISO: 9001 standard.

### **Orkney Zero Waste Andrew Stewart**

Orkney Zero Waste is an organisation set up to reduce the amount of rubbish going to landfill. Andrew was placed with company to develop a marketing package to promote and support the new Recycling Centre including:

- 1) developing the website to advertise the centre and all recycling activities, inform members and interested parties and recruit new members and volunteers;
- 2) market the new centre throughout Orkney by all media means;
- 3) additional publicity for recruiting and promotion through press, radio and newsletter distribution;
- 4) set-up a record-keeping system to keep track of goods and materials brought into – and taken from the centre.

Unfortunately Andrew's project was not able to be completed due to lack of planning permission for one issue of the project at Orkney Zero Waste.

### **REBOOT Ruaridh Thomson**

ReBOOT Moray Computer Recycling is a charity based in Forres, Moray. They specialise in computer and electrical equipment recycling for businesses and householders. ReBOOT also provide IT support, repairs, and sales of refurbished computer systems.

Ruaridh Thomson was taken on as a Website Developer to create a new website that utilises modern technologies to attract and educate customers about the efforts of ReBOOT.

Through the implementation of an online quote and contact system customers are able to effortlessly place recycling orders with ReBOOT. Ruaridh also implemented analytics software that will allow ReBOOT to quickly understand the customer-base using the website, and alter marketing (if needed) appropriately.

Utilising the website fully should increase day-to-day productivity significantly, and also expand the potential market.

### **Repaint Scotland Alexander Shields**

Repaint Scotland is a charitable organisation, based in Ibrox, Glasgow. The company prepares surplus water based paint for reuse and then distributes it through sales and donations.

Alexander was placed at RePaint Scotland to improve their processes, procedures and overall business efficiency. Savings were achieved by contacting another waste management company who also filtered off 30% of the waste as water. Processes were improved by recycling paint from the pump filters as well as by drawing up Colour Test Cards to achieve consistency of colour between different batches. The placement was a fantastic experience of a work environment and a valuable insight to a genuine professional project.

**ReUselt  
Stephen McAllan**

Stephen was placed at ReUselt in Glasgow to develop their website and marketing material. ReUselt provide affordable quality second hand furniture, electrical goods and household items to low income households and those experiencing other forms of deprivation. Stephen worked at designing and writing the code for the website and also worked at promoting local and national awareness of the website and established hyperlinks with other appropriate organisation websites eg local councils. He also developed a new logo and marketing material and developed a new marketing plan for the company.

**Rubberatkins  
Jennifer Brown**

Rubberatkins is a world class, world wide company which provides technical, design and manufacturing services to solve customers' needs by applying in-house expertise in rubber. They supply the oil and gas as well as the renewable energy sector.

Jennifer Brown was placed with Rubberatkins to identify solutions to help cut the energy use for their site in Aberdeen. Jennifer researched solutions for heat retention at the moulding presses and investigated the use of an air to air heat exchanger that will utilise the escaping energy. She looked into the delivery door and investigated methods to prevent large draughts disrupting the moulding presses.

She also researched to the prospect of renewable energy solutions including wind turbines and solar panels. Jennifer's placement resulted in 91 tonnes of CO<sub>2</sub> being saved.

**Scottish Courts Service  
Brian McDowell**

Scottish Court Services (SCS), is responsible for the administration of the court system in Scotland. SCS operate an estate of around 65 buildings across the country and employ approximately 1600 staff

Brian was placed at the SCS to determine the current waste management practices at a sampling of the SCS estate in order to ascertain how much waste is actually going to landfill, against what is being paid for and how much waste could be recycled. Brian gathered sufficient data to form a business case for bringing in recycling services and better managing landfill waste (i.e. using bins to their full potential). Brian has also encouraged employee engagement and so cleaning staff now more aware of waste processes (i.e. breaking down cardboard boxes). Brian's placement has resulted in reduced waste going to landfill, increase staff awareness of green issues and the potential for huge environmental savings when recycling is put in place.

**Second Opportunities  
Courtney Arbuthnot**

Courtney's 8 week placement was based within Second Opportunities, a furniture reuse charity located in Govan, Glasgow. Aims of the placement were to increase awareness of Second Opportunities and increase office furniture and household goods via sales through eBay and gum tree, as well as developing the website. Online sales were very successful in both re-selling furniture as well as advertising services which Second Opportunities provide, such as van hire, furniture collection, re-sale and delivery. An online selling system was established as well as training of staff in how to use the process. However the development of the website was unsuccessful due to time constraints.

## **Scottish Environmental Protection Agency Sarah Young**

SEPA 's aim is to protect and improve Scotland's Environment through enforcing environmental law to ensure that businesses environmental impacts do not breach Scottish UK and EU legislation.

The aim of the placement was to create a new intranet site for Scottish Environmental Protection Agency's (SEPA) internal environmental policy and delivery plan, 'Greening SEPA'. The site was to:

- Have accessible and current information for all staff
- Act as a handbook for Green coordinators, volunteers who implement the policy at a local level.

To achieve this, Sarah was trained in Alterian, the new content management programme; she collated and researched information for content and finally uploaded and formatted pages. SEPA's intranet is now more accessible and user-friendly!

## **Skills Scotland Abayomi Ogunleye**

Skills (Scotland) Limited is a charitable organisation based in the east-side area of Glasgow (Carntyne). The organisation is geared towards training programmes in Recycling for Reuse as well as the alleviation of poverty in the immediate community and Africa. Abayomi's project was to develop a database management system for the company to use. Prior to his arrival, Skills (Scotland) Limited did not have a proper database in place. In his time at the organisation, he was able to work with volunteers and at this same time complete the database. He has gained skills in different areas such as communication skills, business acumen and other good business qualities.

## **Starter Packs Glasgow Fabio Salvatorezza**

Started Packs Glasgow provides a range of household items generally regarded as basic necessities for a standard of living. The company's primary client group is that of homeless households acquiring permanent tenancies, some of the city's marginalised residents. Pack provision contributes to the sustainment of tenancies promoting stability for the household, cohesiveness for the community and cost reductions for the landlord. This also prevents these items from going to landfill as waste.

Fabio was given the task of updating and rebuilding the company's database to ensure a stable and robust way of reporting and monitoring data. After extensive research, Fabio was able to develop a database that will allow the company to more effectively service new and existing business requirements.

Data will be used by the company in funding applications or to progress the social investment and will capture the social, environmental and economic outputs of the projects vis a vis the core service and the ancillary income generation to allow illustration of the rider benefits to the city, community and country.

## **Stranraer Recycling Robin Talbot**

The Stranraer Recycling Group (SRG) was set up to promote recycling in the Stranraer area. Gradually this led to the group taking advantage of the opportunity to collect metal cans being disposed of in the general waste. Robin was placed with Stranraer Recycling to increase business productivity through various methods. He was tasked with finding new volunteers in areas of expansion, increasing the number of cans collected by engaging new businesses. He also looked into developing tools for an education pack for local schools. Robin also researched heating/electricity for waste vegetable oil processing and promoting the facilities available locally through Stranraer Recycling. His placement has resulted in more businesses

contacted allowing new collection routes to be created, increased customer awareness of SRG's facilities, new customers and a new service developed

### **Tayside Contracts** **Edvins Balodis**

Tayside Contracts is a commercial local authority contracting organisation with the head office in Dundee, with over 2500 employees, providing a wide range of services through Tayside within Perth and Kinross, Dundee City and Angus Councils. Following publication of Scotland's Zero Waste Plan, the organisation made the decision to develop a waste management policy and strategy and investigate the possibility of consolidating waste and developing waste management systems for all activities.

Edvins was placed with Tayside Contracts to develop a Corporate Waste Management Policy for Tayside Contracts. During this process new procedures and disposal routes were created to develop a sustainable waste management system. Edvins's placement resulted in increased customer awareness - transfer of their procedures to external waste carriers, as well as improved marketing/detailed knowledge of market. He also found a market for cardboard recycling through Stirling Fiber. Edvins also improved processes or procedures through a waste reception at the recycling sites, ensuring waste transfer notes filling procedures were carried out. This placement resulted in 5800 tonnes of CO<sub>2</sub> being saved.

### **Tayside Recyclers** **Harsh Garwal**

Harsh was placed with Tayside Recyclers. Tayside Recyclers deals with waste production; working to change people's attitudes to the items they throw away and to divert these from the landfill for re-use.

Harsh was tasked with increasing their marketing of their services and increasing productivity as a result. He started by working out the most suitable areas to distribute fliers and posters as well as designing the fliers and posters to be distributed.

He targeted potential donor and user groups via website, electronic and social networking media. He organised and ran 'swap' events where goods could be exchanged.

Harsh's placement resulted in a significant increase in productivity for Tayside Recyclers.

### **This is Organics Ltd** **Kenneth McFadyen**

Kenny was placed with This is Organics (Tio) Ltd in Forres, Moray. Tio are one of the leading organic producers and suppliers in the UK and are the only dedicated supplier of organic carrots to TESCO. Prior to his arrival the company had a survey carried out by the Carbon Trust, outlining various carbon reducing activities, none of which had been implemented.

Kenny was tasked with improving environmental performance at the company - lessening Tio's impact on the environment as well as reducing their costs. Kenny attended the Green team meetings and helped them move forward with their aims. He helped implement as many Carbon Trust recommendations as possible and formed a plan to complete the others.

He formulated a plan to implement targets set in Tesco's supplier's Environmental Guidelines. His placement resulted in reductions in environmental impact and guidelines in place to continue these reductions.

Kenny left Tio at a point where they can progress forward and also have raised the general environmental knowledge of all staff.

Kenny's placement resulted in 130 tonnes of CO<sub>2</sub> being saved for the company, £30,000 cost savings as well as 130m<sup>3</sup> general waste saved from landfill and 422 miles of paper towels.

**Transition Town Forres  
Perry Tagima**

The main objective of Transition Town Forres (TTF) is to create a more sustainable community with long-lasting environmental, social and economic strength, to implement strategies and working groups to increase community awareness and capacity building towards lower consumption, increase recycling and composting, more local spending and healthier living.

Perry was placed with TTF to assist in the creation of a Carbon Clinic. This entailed conducting research and actively participating in the implementing of a carbon reduction monitoring project.

He worked with others to design an innovative carbon reduction questionnaire (including increasing recycling and composting) and implementing methods of encouraging and involving public participation and collating results into an end of placement report.

His placement resulted in awareness rising to over 100 people and increased local knowledge of awareness of Peak Oil and effects of climate change.

**Total Waste Management Alliance  
Daniel Dumont**

Daniel was placed with Total Waste Management Alliance (TWMA) Ltd. Total Waste Management Alliance Ltd (TWMA Ltd) is a customer focussed company that provides a specialist range of equipment and services to the oil and gas industry, where its main objective is to reduce the environmental impact of drilling.

The aim of Daniel's placement was to investigate the efficiency of the slops treatment process carried out at TWMA Ltd's industrial site in Peterhead. This involved frequent site visits, gathering and measuring data as well as communicating with site staff. Daniel's research revealed that a number of losses were preventing the process from operating at its full potential and research was undertaken to reduce the magnitude of these losses as much as possible. Finally, research into replacing the components other systems was taken into consideration and the cost effectiveness of doing so was calculated. Opportunities to use exhaust energy in other areas of the site was also investigated. Daniels project identified savings of almost £40,000 in electricity and fuel costs each year.

**Upkeep  
Liam Kelly**

Liam was placed at Upkeep. The Upkeep furniture recycling project is an initiative set up by Upkeep community enterprise based in Shettleston. Upkeep is a subsidiary of the Shettleston Housing Association and through the association they have been given a brand new shop for a year to use as an outlet for used furniture. Liam's placement was to re-direct home furniture and electrical items from void clearances to outlet shop and to provide low cost furniture to low income families in Shettleston via new outlet shop. He formulated a marketing plan to promote free uplift service of reusable furniture and increased environmental awareness in Shettleston community. He researched and sourced appropriate recycling services for products that cannot be sold in the outlet shop. His placement increased volunteer opportunities in the local opportunities. Liam's placement increases in the supply of furniture items for the Upkeep furniture project through the marketing of the project to potential donors and increased awareness of the Upkeep furniture project amongst potential customers.

## **West Coast Recycling**

### **Abi KilBride**

West Coast Recycling is a community organisation interested in all areas of recycling. The group covers 6 communities in the Wester Ross area.

Abi was placed with West Coast Recycling and her time was spent on three projects, a waste survey in the village of Shieldaig, attending local events to promote WCR and working on a website. Alongside this she also produced publicity material to advertise the group and wrote an article for a local newsletter.

Some aspects of the placement related to her previous art and design experience, such as teaching recycled craft workshops and designing the website. Other aspects required new skills such as web editing and working with statistics.

The waste sampling project was concluded with a report and feedback from events was also written up for the use of WCR. The website is an information source that can be accessed by members of the WCR management committee and updated subject to their requirements.

## **Stephen Emerson**

### **Wyman-Gordon**

Wyman Gordon specialise in the design construction and implementation of complex metal components from aircraft engines and pipe works to human implants.

The main objectives of Stephen's placement were to survey the plant's waste management system, survey oil storage on site and identify breaches of legislation. Stephen's first task was to gather information on energy inputs and waste outputs such as electricity consumption waste metal and trade effluent, survey waste management processes and the oil storage/lagoon area of the plant. The overall objective was to make recommendations that would bring the company in line with current legislation. Wyman-Gordon has successfully implemented the changes recommended as a result of Stephen Emerson's placement with them.

## **Xeroshield Ltd**

### **William Salter**

Xeroshield Ltd. is an SME dedicated to the development of insect pest control products and services that offer alternatives to the use of conventional insecticides. William was placed with the company to determine the feasibility of using this product to control aphids on roses, as a possible alternative to current treatments used by gardeners. This involved carrying out bioassays to allow calculation of LC50 and LC90 values (concentrations required to kill 50% and 90% of insects respectively) as well as assessing any damage to rose plants caused by the treatment.

William's placement resulted in an environmentally friendly pesticide being developed. It is still in the testing stage but significant progress has been made and more large scale trials can now be implemented.

## **Yooz**

### **Iain Buchannan**

Iain was placed with Yooz which is the trading arm of the charity 'Active4All', which was set up to fund and build a sports centre for the disabled. He was tasked with identifying volumes of off-cuts, identifying types of plastics, identifying how much plastic goes to landfill and establishing current market price of recovered plastics. He also looked into costing of capital equipment; new or used as well as understanding the plastics recycling market in Scotland in order to combine collections adding tonnage and value. Iain also developed a marketing plan and improved the process of segregation and cleaning of plastic waste. Iain's placement has resulted in Yooz increasing their customer awareness through improved marketing procedures.

**Young Scot  
Nick Young**

Young Scot is the national youth information and citizenship charity for 11-26 year olds based in Edinburgh. Nick's placement was to assess the carbon footprint of Young Scot's activities for the year 2009/10. Nick worked with staff to undertake a commuter survey and produced a footprint report detailing a carbon reduction plan. Nick's placement resulted in improved methods and systems for monitoring and reporting carbon and an increased awareness of carbon issues among staff. He also developed a potential new project – 'Green Scot' which the organisation can take forward if they wish.

**Zero Waste Scotland  
Brian Meade**

Brian was placed with Zero Waste Scotland to investigate an economical, practical and sustainable way of dealing with food waste in large quantities on one site. Sometime but not always food waste, in large quantities, is put down into the sewer system using FWDs and passed on from the "waste generator" to the local water authority or Waste Water Treatment Plant (WWTP).

It is clear from Brian's study that the best practical environmental option is to continue disposing the food waste through the FWD and into the sewerage system. This method is the most cost effective, hygienic and convenient way to dispose the food waste at a hospital. In order to justify the expense of the alternative options the COD and SS of the hospital would have to be reduced by over 50% or trade effluent consent conditions be reduced. The only other way this method of disposal will become uneconomical is if regulations are put in place to restrict/ban their use or if trade effluent charges are revised and increased substantially.

## Student Quotes

'The Environmental Placement Programme is an excellent way for students to gain relevant work experience and a fantastic way for organisations to embark on a project that they may not have the time or resources to otherwise carry out. I found the experience of managing a project in the work place, provided me with the necessary skill set to confidently undertake the challenge of my honours project and pursue an exciting career.'

*Michelle Elliot, Go Greener*

'It has been a great experience and I have gained a number of transferable skills such as time and project management.'

*Sarah Young, SEPA*

'I have found the placement both extremely enjoyable, working in a friendly and relaxed environment, as well as fulfilling, as Aberdeen Forward have not only met all my expectations but superseded them!'

*Jenny Carson, Aberdeen Forward*

'The placement confirmed that I am looking for a career outside of the traditional legal parameters. It has also given me the chance to network, putting me in touch with people in fields I am very interested in working in, in the future.'

*Louise Waddell, Falklands Stewards*

'I found the experience immensely rewarding. The experience also improved my awareness of professional conduct, and in turn, my ability to act in a professional manner. I feel I now have a greater knowledge of marketing and promotion and how to apply this to a working situation. I have enhanced my decision making abilities, successfully produced a working report and implemented changes to increase the awareness of and promote Glasgow Furniture Initiative.'

*Callum Veitch, Glasgow Furniture Initiative*

'Getting through the selection process was a fantastic achievement as the number of applicants was very high which raised the bar considerably. I feel the experience I brought to the role served me well, not least of which was the ability to work on my own initiative. Overall it was an immensely beneficial practical application of academic knowledge and environmental management within a working organisation.'

*Berni Moloughney, Hotel Missoni*

'I feel I have come away from the project having gained a lot – from practical experience of working in a busy company, to specific issues arising in a local bus company, to knowledge of a wide range of issues from informal talks with Lothian Buses employees. I am satisfied with the documents I have worked on and confident that they will help Lothian Buses continue its good work on environmental protection.'

*Emily Freeman, Lothian Buses*

'Aside from gaining a comprehensive knowledge on the disposal options available for food waste, I have learned valuable skills from working in industry. I feel I have a greater understanding of the day to day running of a business and the importance of communication within a team.'

*Brian Meade, Zero Waste Scotland*

## Company Quotes

'The EPP scheme has yet again provided the chance for innovative progress being made in how Scotland deals with waste and resultant reductions in carbon emissions. From this placement, I believe Scotland leads the way in which we handle so called waste building materials and I hope politicians will take cognisance of the excellent work done by Sarah.'

*Ian Strachan, Active4all*

'This was been a timely and excellent placement for us. Having Louise work with us over the critical two months lead up time has allowed us to actually deliver on our sustainability strategy in a way that we would simply not have been able to due to lack of resources in time, staff and budget. We have very much benefitted from the programme and would hope for its continuation beyond 2010 (despite all the impending budget cuts!).'

*Helen Lawrenson, Falkland Stewards*

'This programme has been very supportive to Go Greener providing us with a high level of expertise at a crucial time in the organisations development.

From the original interviews with potential students for the placement, through the programme itself and to the ongoing outcomes we have been entirely satisfied with the placement.'

*A Jones, Go Greener*

'Overall, I hope that the volume and complexity of work undertaken and the great results received which I have outlined above speaks for itself. This is a phenomenal achievement in just 8 weeks. I could not speak more highly of Sarah and given the chance we would keep her longer!

I would highly recommend the programme. It was easy to get involved with, the process has worked well, and I would certainly consider taking part next year as well.'

*Charlotte Hanna, The Green Insurance Company*

'The process of applying for the student was very easy and Hebrides Alpha would definitely consider taking on a student in the future.'

*Robert Sinclair, Hebrides Alpha*

'My expectations have been exceeded by Lauren for this placement; she has demonstrated great organisation, communication and report writing skills throughout the project. Lauren has been a great asset to the team this summer; she has exceeded my expectations and has been a fantastic addition to the team. I will be sad to see her go.'

*Amber Moss, East Lothian Council*

'From the first stages of arranging the EPP through to welcoming and working with Berni, I have been extremely happy with the programme and the effect that it will have in helping Missoni achieve its environmental goals. I would highly recommend it to any business looking to reduce their impact on the environment or improve their Corporate Social Responsibility.'

*Carolyn Mitchell, Hotel Missoni*

'Our expectations have been surpassed. Emily was given the challenging task of starting Lothian Buses on a path towards an accredited EMS. Given our diversity of operations and sheer size this was no mean feat and our expectation was that a legislation register would be an entirely satisfactory. In actual fact Emily has achieved much more than the legislation register and the company is going to be left with a system of risk registers, legislation registers etc which should mean the company is well placed to move to accreditation.'

*Steve Johnson, Lothian Buses*

'This is the second year that we have had an EPP student and both times the organisational structure of the programme and support supervision was exemplary.

I think that for the nature of the work we carry out it is helpful to have these focused studies which we normally would not have time to carry out but are areas of interest to a number of companies.

*Ann Picking, Zero Waste Scotland*

## Judges and Sponsors Quotes

'It was a real pleasure to be on the judging panel. I found it all very interesting and I thoroughly enjoyed the event.

I was impressed and inspired by the quality of the students' projects, their reports and presentations. I thought the event was extremely well organised and highly successful.'

*Michael Dixon Federation of Small Businesses*

'The programme offers students the opportunity to exploit the things they have learned during their studies in real world settings. Crucially, it is a practical challenge to their creativity. The programme should give us confidence in the capacity of the rising generation to respond to the challenges of the modern world.'

*Professor Geoffrey Boulton, General Secretary of the Royal Society of Edinburgh*

'The Environmental Placement Programme provides an excellent opportunity for students to have a positive impact on business success, at the same time as helping to protect our environment and up-skilling the workforce of tomorrow. In today's changing job market, this programme contributes to the development of tomorrow's environmental entrepreneurs, by helping students gain essential skills for the workplace.'

*Jim Mather, Minister for Energy Enterprise and Tourism*

