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Promoting Environmental Management in very Small Businesses through “Green Angels” in a Local Collaborative Partnership: A case study from Brighton, England.

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Abstract

This paper describes the results of the East Brighton Employment and Environment Centre (EBEEC), a 15 month URBAN project, promoting environmental management to very small businesses in east Brighton, England. Some 31 volunteers –termed ‘Green Angels’– were trained in waste minimisation at the University of Brighton, and provided practical support to local firms, through site reviews and research. The EBEEC project provided information and support to some 600 SMEs in east Brighton, via newsletters, email, telephone helpline, seminars and other projects. The Project was managed by a collaborative partnership formed from regional as well as local organisations. The involvement of a University to train potential ‘Green Angels’ so as to support SMEs in an area designated for economic regeneration, was an innovative and successful method of providing environmental management support to small firms. To stimulate the uptake of environmental management, case study material based on Best Practice, was produced and disseminated to local companies via an Internet Site. A CD-Rom containing the Green Angel training package has been produced to help other projects like this. The outcomes from this Project will inform the regional and potentially the national approach to providing environmental business support and advice via local collaborative partnerships containing Universities.

Key words: environmental management, waste, Green Angels, local collaborative partnerships, universities.

INTRODUCTION

The UK Sustainable Development Strategy (DETR, 1999a), contains 4 main objectives. These are:

1. Social progress which recognises the needs of everyone;
2. Effective protection of the environment;
3. Prudent use of natural resources;
4. Maintenance of high and stable levels of economic growth and employment.

To catalyse and monitor the progress towards a more sustainable society, the Strategy outlines a number of headline indicators for the UK. Later in 1999, the UK Government published *Quality of Life Counts* (DETR, 1999b), which builds on the indicators contained in the Strategy by publishing a series of headline and core indicators, so as to provide a baseline against which progress can be measured. The headline indicators contain one on waste. Waste is, however, only a partial measure of resource use and the sustainable management of waste through environmental management systems is essential to achieve the improved resource efficiency required for sustainable development. It is clear that the management of waste as well as enhanced resource efficiency through training, for industry as well as the wider community, permeates the impacts that need to occur in relation to each of the 4 sustainable development objectives.

The developing regional agenda in the UK has resulted in sustainable development becoming a cornerstone of the policies of the National Assembly for Wales, the Scottish Parliament and the Northern Ireland Executive. For England, documentation now covers regional (DETR, 2000a) as well as local sustainable development issues (DETR, 2000b).

The implementation of sustainable development policy is dependant upon the development of a range of new and dynamic partnerships (Barnes and Phillips, 2000a). Universities can play a vital role in this transformation as they are able to retool themselves and become effective partners with a range of organisations in advancing the core objectives of sustainable development (Jackson *et al.*, 2001). The role, however, of a University in contemporary society is complex and multi-faceted and within the UK there are few case studies that demonstrate how Universities can contribute to local sustainable development programmes (Phillips *et al.*, 1999)

In the Waste Strategy for England and Wales (DETR, 2000c), sustainable development is placed at the centre of waste management policy. It states that:

“If we are to deliver sustainable development it is crucial that we begin to tackle our growing mountain of waste. This means designing products that use fewer materials and using processes that produce less waste. --- To engineer this step change in the way we think about waste we must work in partnership – with businesses, local authorities, community groups and the public. Persuading people to change their own approach to waste on a person by person, business by business basis is probably the biggest challenge that we face.”

The link between economic growth and increased waste production and disposal needs to uncouple (DETR, 2000c). Excess industrial waste is often the result of inefficiencies in production or management processes. One very good reason why companies should reduce their waste production is the cost involved (Bates and Phillips, 1999). Waste costs for many manufacturing companies are often 4% of turnover – often the profit margin of the company (Pratt and Phillips, 2000a). Reducing waste often leads to improved profits without increasing sales (Pratt and Phillips, 2000b). Industry and commerce are major producers of waste, much more so than householders are. The Waste Strategy (DETR, 2000c) points out that lack of training is a major barrier to companies reducing their waste:

“Many companies in England and Wales may lack the knowledge to tackle the unnecessary waste their activities produce, they may be unaware that they are producing more waste than they need to.”

To support companies, especially Small to Medium Enterprises (SMEs) – less than 250 employees - in developing a sustainable waste management approach the UK Government has financed Envirowise – a Best Practice programme (ETBPP, 2000a). This aims to demonstrate the benefits of managing resource use and reducing the environmental impact of companies across the UK. It provides advice and tools, free of charge, for companies to use to tackle their waste problems.

Sustainable waste management underlies company competitiveness (DETR, 1998). A competitive company may be described as (DETR, 1998):

“A sustainable business is on the leading edge of responding to forces for change, anticipates pressures on its supply chain, and on resource use, the needs and expectations of its customers, investors, employees and the community in which it operates. ---- The more efficient and competitive businesses will be those who have an eye on the `triple bottom line`, focusing not only on the economic value that they add, but also on environmental and social value added or destroyed.”

Throughout UK Government publications, there is the clear linkage between a well-trained workforce, company partnerships and sustainable practice resulting in a marked increase in competitiveness.

THE EAST BRIGHTON EMPLOYMENT AND ENVIROMENT CENTRE

Slightly in excess of 95% of companies in the South East of England are SMEs and around 85% are Micro or very small businesses – less than 10 employees - (e.g. Smith and Kemp, 1998). The majority of these businesses demonstrate low awareness of environmental issues when compared to larger companies. The “Attitudes 2000” survey (2000) by Envirowise indicates that more than 80% of respondents recognise that efficiency improvements save money but most have taken only very limited action in the last two years. The issue of how to motivate businesses to invest management time and resources to turn this recognition into implementation is the key issue for the adoption of environmental management systems in very small firms; this in turn is a prerequisite for sustainable economic growth (Hart, *et. al.*, 1999)

Regional government organisations, i.e. Government Office for the South East (GOSE) and the South East England Development Agency (SEEDA) recognise the need for Sustainable Business Partnerships (SBPs) or Business Environment Forums (BEFs) to bring together key businesses, local regulators and environmental support organisations. They can provide much needed support and motivation to businesses to make environmental improvements, along the lines of continuous waste minimisation clubs (Phillips *et. al.*, 1999). Waste minimisation programmes and “green business” clubs are becoming more common across the South East region. Recently formed groups include, Surrey SBP, KENT SBP, Hampshire BEF, East Sussex SBP, Thames Valley BEF and West Sussex SBP.

The requirement for local SBP activity, promoting environmental best practice and cost savings to businesses, is identified and supported in the South East Sustainable Development Framework - “A Better Quality of Life in the South East (SEERA, 2001). This theme is reiterated in the Regional Economic Strategy, produced by SEEDA. The benefits are recognised in terms of improving financial sustainability as well as reducing the business sector’s contribution to climate change (Kyoto pledge), meeting targets under the Landfill Directive, Packaging Regulations, and local Environment Agency water demand management plans.

There are many different sources of advice and help to small businesses on environmental issues in the South East region, from national centres and best practice programmes, such as Envirowise and the Energy Efficiency Best Practice Programme (EEBPP), to waste minimisation clubs. However, Micro and Small firms do not often engage with this support (Phillips *et. al.*, 1998)

The URBAN programme is a European Union (EU) funded scheme designed to regenerate specific areas of European cities that fall below a critical level in a number of Performance Indicators (PIs), e.g. high unemployment, poor infrastructure, poorly performing business sector; etc. In 1999, the

eastern part of Brighton and Hove, comprising the Kings Cliffe, Marine and Queens Park electoral wards was awarded significant funding under the URBAN programme.

The East Brighton Employment and Environment Centre was set up with funding from the URBAN programme to provide resource efficiency consultancy, advice and support to SMEs. The project was supported by a small steering group (effectively a Sustainable Business Partnership), comprising officers from Brighton and Hove City Council's Economic Development department and the corresponding Environmental Services department, a Project manager from a Service Provider (EcoSys), a representative of the environmental Regulator in England (Environment Agency) and the University of Brighton.

Running from January 2000 to March 2001, the Project had the aims outlined in Table 1. The main themes for the Project were:

1. Deliver training and generate employment;
2. Provide advice / support to a wide range of SMEs;
3. Develop mentoring links between companies and students.

In the Project design phase, the key planners drew upon much of the Best Practice developed in an earlier regional project that had been operated by Kent Sustainable Business Partnership. The east Brighton Project was, therefore, designed to include a wide range of planned activities that had been shown to be key elements for success. The planned activities included:

1. Forming a Business Environment Association / Forum of at least 25 companies;
2. 6 training seminars with guest speakers;
3. Newsletters;
4. Telephone and email helpline;
5. 25 environmental audits from `Green Angels` (GAs);
6. 25 environmental audits from the national Best Practice Programme (Envirowise);
7. Developing Green Business Awards;
8. Publishing case studies on a website;
9. Developing a MSc in Waste Minimisation and training 25 GAs volunteers;
10. GAs helping 15 companies to write an environmental policy;
11. GAs helping 15 companies to produce a waste inventory;
12. Securing support from 3 large firms and 1 local University;
13. Creation of 3 Full Time positions.

RECRUITING SMEs – BUSINESS TAKEUP

A database of all 600 businesses in east Brighton was developed through an extensive, in-depth survey of the area. The Project team used a wide range of business directories as well as carrying out an extensive `walk around` survey to check the exact location and type of each business. The recruitment process focussed on companies that were:

1. Interested in an environmental project;
2. Likely to make financial savings;
3. Able to realise savings through process efficiencies;
4. Significant energy consumers;
5. That had been marketing themselves as `environmental friendly`.

Initially, a mail-shot and cold calling strategy was tried, combined with extensive use of the local media through repeated (pictorial) coverage in local newspapers. The initial response by local business was very limited indeed, with less than 10 companies responding. A number of apparent barriers to recruitment soon became evident. These included the apparent anonymity, to many of the businesses, of the supporting organisations e.g. Small Business Service (Chaston, 1999). Other major barriers were company time constraints, and an overall lack of a training culture.

The first Project seminar was poorly attended (7 companies), despite a significant marketing effort to the majority of local businesses. An in-depth survey of those attending confirmed that, on the whole, micro businesses in east Brighton do not, generally, allow their staff to leave their premises during work-time for training. The main barrier to the larger companies was time commitment, i.e. is there a large financial return for a very limited amount of time spent on an issue that is seen to be peripheral to the companies success. On the whole, there was no appreciation of the value in investing in company human capital (Honig, 2001). Further events, run with key local partners and projects, attracted an additional 7 companies.

Promoting free audits from Envirowise also proved surprisingly problematic, with only three companies involved (25 were planned). Communication by the Project team with Envirowise also proved difficult; planning audits became very time consuming indeed and a much greater time input was required than was first planned. Learning from such experiences, Envirowise now has a local co-ordinator to link their activities to local programmes; demonstrating the need to constantly evaluate strategies for Best Practice programmes (Kolodny *et. al.*, 2001)

To encourage long-term local partnerships between businesses, the Project team asked 3 of the largest businesses in the area to assist, by taking a proactive lead. Despite reassurances as to the level of commitment required the response was on the whole negative. It appears that there is little history of collaborative working by local businesses in the environmental sector and none were really aware of the benefits that could accrue through sharing Best Practice.

The technical support helpline, a form of support generally viewed as the best for SMEs, had a mixed response. In principle, it was considered that such a free, expert service, that did not require a company representative to leave the firm for training, would be extensively used in the light of all the increasing legislative environmental pressure on businesses. However, only the companies that were audited by Envirowise used this service. This seems to demonstrate that companies were operating on a local knowledge basis and merely setting up free support services is of little value unless a Project worker can in some way make an initial, quick contribution to company profits to demonstrate the advantages of adopting better environmental practice. The Project has demonstrated the clear requirement for project teams to engage in environmental dialogue with businesses (Milliman *et. al.*, 2001) and to build strategy upon high quality research so as to understand how SMEs carry out environmental scanning (Julien *et. al.*, 1999).

Redesign

Owing to poor uptake of the delivered activities, the design of the Project was modified and a new delivery plan produced that would better fit the reality of east Brighton. As most firms in the area were 'micro-enterprises', a charge of £200 per business was dropped when it became apparent that firms would not pay to participate. One output, to set up a Business Environment Association (a self-sustaining network of companies), was scrapped, as companies did not see this as advantageous. It was considered that the time required in building up relationships with other businesses was too great and could not demonstrate a clear financial advantage. The seminars and awards were abandoned as they would be time and resource consuming but offered little chance of a satisfactory outcome.

The new delivery plan placed more emphasis on maximising the benefits to the area by involving the GAs in as many audits and related activities as possible. To use committed and locally trained agents proved to be a very cost-effective tool. In one case alone, a carefully designed and targeted questionnaire, sent out by a student at the University of Sussex, had a marked impact on local businesses, with over 30 positive replies from 200 mailed – a success rate much higher than previously attained in the Project. Many of the respondents at this stage of the Project now asked for a free GA

audit, despite showing no interest to the earlier approaches. It became apparent that the frequent media messages were having a positive impact on local attitudes.

The GA audits were very well received by companies of all sizes in a range of sectors. Some 16 site visits were carried out and audit reports were provided to these companies. Many companies provided excellent feedback and they suggested that the audits were providing businesses with more in-depth reviews and financial saving opportunities than was first expected. Building on this success, 12 case studies were produced at the end of the Project, and posted on Brighton and Hove City Council's website.

Two additional activities were scheduled as a direct result of feedback from businesses:

1. An energy consortium to purchase electricity and gas on a joint tender to make savings;
2. A waste-badging scheme to help identify traders that leave their waste on the pavements, with no commercial collection contract, reducing the environmental quality of the area.

Excessive litter and commercial waste in shopping areas can be a major problem for traders who wish to encourage the public to visit their premises. The main shopping street (St James' Street) was being partially traffic-calmed and there was a clear need to develop a strategy to market an area that had suffered declining trade as consumers choose to go to other more publicly acceptable centres. Evidence from public interviews and community meetings showed that waste on the streets was ranked immediately behind a high incidence of alcohol abuse and street begging as reasons for not shopping in the area. The GAs visited every business in a high profile media campaign, promoting the Duty of Care and providing window stickers to companies with proof of a commercial waste contract. Council Highways Enforcement officers, who had devised the scheme, followed up later with enforcement visits to companies without stickers, where waste was found outside.

The Project newsletter proved to be an effective medium for communication. Particular emphasis was given to detailed face to face interviews with companies to ascertain the impact of the newsletter. During the GAs visits to 91 firms, for the promotion of the waste-badging scheme, many companies (>50%) said that they had read every edition and been considering seeking some form of future Project support. Surprisingly, later in the Project, there was only one request for assistance, for an environmental policy, and no waste inventories had been requested. It appears that companies need constant visitation and dialogue so as to build up close working relationships, before key barriers can be overcome.

DEVELOPMENT OF “GREEN ANGELS”

The project originally planned to recruit GAs from amongst the general public in the designated URBAN area. Green Angels are normally volunteers from the general community who freely contribute their skills and time to local / regional environmental projects. Green Angel activity is also an excellent vehicle for delivering training, at a number of National Vocational Qualification levels, for the voluntary environmental sector. Despite a significant effort being made to recruit amongst the local communities, there was very little take up. However, the Universities of Brighton and Sussex had undergraduate students who were keen to participate, and so 25 students were recruited. There was an acceptable gender and age range. Pleasingly, 5 of them lived in the URBAN area and so a local contribution was eventually obtained.

The GA part of the Project commenced in October 2000, a key pressure time in the academic year, as courses are just commencing as students arrive at University. Throughout this part of the Project, University support was excellent and academic staff realised that the GA activities were commensurate with a high academic level; the GA course material was further developed to create a Resource Management module at MSc level. The input of the English Universities Discipline Network in Waste Management’s framework, developed with the support of Department of Education and Employment (DfEE), was essential to this task. Capacity building has been a key outcome, the local area can now utilise a regular supply of GAs from the MSc course and it is hoped that in the coming years these will markedly increase the uptake of environmental management by industry.

RESULTS

Companies

A total of 20 companies received support from the Project. Some, 16 companies received GA audits (2 also had Envirowise audits), 7 other companies joined the energy consortium. The companies involved in the Project are listed in Table 2; SIC activity distribution was predominantly category K (general business). Advice was given to all companies on meeting requirements under:

- Water Industry Act;
- Water Resources Act;
- Waste Producers Duty of Care;
- Special Waste Regulations;
- Waste Management Licensing;
- Environmental Protection Act.

Detailed interviews enabled the Project team to identify the companies main areas of concern. These are summarised in Table 3.

Some 16 sites received GA audits. This involved a team of 5 GAs, shadowed by a qualified lead auditor from EcoSys. The audit covered due diligence, energy efficiency, water efficiency, waste management, recycling, and all aspects of environmental law. Approximately £15 000 in bottom line cost savings were identified, from a range of measures aimed at improving resource efficiency. Additionally, the energy consortium achieved a 30% reduction in energy tariff for participating companies. However, only 2 of the 7 companies changed contracts, this resulted in a saving of over £2 000 per annum for one company alone. The total savings identified during the programme are in Table 4.

Figure 1, contains information from 16 site visits, the major cost savings were identified in; electricity reduction (24%), water efficiency (22%), tariffs (21%), gas reduction (19%) and finally waste reduction (14%). It is interesting to note that energy measures accounted for 64% of the financial savings, indicating that the move away from “waste minimisation” to “resource efficiency” is essential in the context of smaller businesses. The audits revealed the potential for a wide range of general low-cost, low technology improvements in environmentally related issues in the companies; typical of office-based activities (Table 5).

The waste-badging scheme had a marked measure of success. Subsequent inspection by the Project team, local traders association, and the area marketing project suggested that commercial waste left on the street had been reduced by over 90%. The improved environment is likely to be the cause for the increased number of consumers now shopping in the area.

The audited companies were asked for feedback on their main areas of concern (Figure 2). Surprisingly, cost savings came lowest. This is probably because the respondents were thinking mainly about resource efficiency when answering the questions. It is likely that they had already assumed they would save money, and so ranked the other areas higher. Information on the feedback on the audit process is contained in Figure 3. It is interesting to note that small companies found the pre-audit written material hard to understand, which could point to their initial lack of knowledge surrounding environmental auditing. Overall, the Project maintained a very high profile in the URBAN area. The total number of companies advised or supported by the Project is in Table 6.

Green Angels

The overall effort and commitment from the GAs was acknowledged by Millennium Volunteers, a National Lottery project supporting volunteers in the South East, as the highest time commitment from any project in the South East (Figure 4). The average was 234 hours (31 x 7.5 hour days) for each of the 31 volunteers (there were six replacements during the project), totalling 7 248 hours. Some 20 GAs completed the general coursework and two completed the assessments to achieve MSc certification.

The suggested success factors, from the GA feedback were:

1. Flexibility of the course;
2. Teamwork (small teams of 5);
3. Central location of support office (EcoSys);
4. Expenses paid;
5. Use of Information Technology(donated by Crash UK);
6. All workers committed to sustainable development.

Careers training and advice was provided throughout the Project to equip GAs with a wide range of skills, especially those relating to the world of work. This practical training was highly valued by the GAs and was seen as a means of gaining valuable experience for career advancement. Additional, independent support and monitoring was provided for the GAs by Millennium Volunteers. The change in individual GA circumstances, charting entry into work or additional education during / after the Project is in Table 7.

DISCUSSION

Within the Project area, surveys have shown that many local companies are presently (December 2000) recognising the potential of such an advice service as advertised in regular, local newsletters. Local businesses presently appear to have become more aware of environmental issues and hence more likely to take advantage of externally funded advice from support programmes such as EEBPP, Envirowise, Design Advice, Lightswitch, etc. Effective signposting to these programmes was important; the linkage between small business uptake and these national programmes is often weak. This is as a result of the national programmes not having management systems for working with local schemes, and of local schemes not having the knowledge of how to work with national programmes.

Extensive partnerships, at all levels, is key for success in projects such as this (ETBPP, 1999; ETBPP, 2000b)

Table 8 contains the ranking of each efficiency recommendation as a percentage of the total savings identified during the Project. From this we can see, that the highest savings came from: tariffs (21.2%), lighting efficiency (15.2%), urinal controls (10.8%), printed circuit board recycling (9.4%) and cistern volume reduction (6.1%). Tariff savings could have been significantly higher, as only 4 of the companies audited were involved in the energy consortium. The computer recycling operation occurred in one company only, so this is an area that could easily expand in the future. It is worth noting that heating plant, controls and insulation together make up 19.3%. This shows that the main areas to focus on for identifying resource efficiency cost savings in very small firms are; lighting systems, heating systems and bathroom water use.

Overall, the East Brighton Employment and Environment Centre project was focussed on building relationships and providing advice to a range of players; Table 9 contains information about the publications produced. One example of the novelty of the approach is provided by the work carried out with estate agents. The single biggest impact of an estate agent is its customers - most building work is probably carried out by property management companies or people within 2 years of moving in to a new house. A “Green Home Guide” was produced as a result, showing where local recycling facilities are sited, how to get a compostor, water butt and energy efficient lights as well as other pointers to reducing the environmental impact of homes.

Engaging businesses

Local, Best Practice case studies are very important so as to underpin future developments. Quick savings are sought by SMEs, but implementation is a problem. Businesses need “hand-holding” to fully implement recommendations; e.g. energy consortia can make significant savings if they can be formed. There is often a lack of engagement with smaller companies from the main environmental educators / trainers (local authorities, Envirowise, Environment Agency, Encams, Small Business Service, etc.), because it is difficult to justify the cost of this type of project; so very small businesses often suffer from a knowledge and information gap (Pratt and Phillips, 2000b).

Project finances

The financial database used by the Government Office for management of the European Regional Development Fund was very restrictive. When new projects are developed they have to reorganise budgets as the delivery changes. This proved very difficult. Funding support from Government Office South East Sustainable Development Team, the Environment Agency and the Single Regeneration Budget was much more simply managed. Monitoring EU funds itself requires a half-time manager, which is a larger overhead than might be expected as contributions-in-kind from micro-businesses are very difficult to account for. A number of contributing / benefiting charities presented problems, because they are not counted as SMEs by the funders, even though many are Companies Limited by Guarantee.

Having only one year's funding was the biggest drawback. Just as companies became familiar with the Project, it was necessary to withdraw to a very basic signposting service due to lack of funding. In the meantime, the Project team is presently offering support, for the area, with a technical support line and newsletters.

Working with Green Angels

Working with a local University, a rolling programme of GAs should provide a continuous programme of support for small businesses. A wide range of skills is required to produce a successful GA; organisations should be cognisant about the required key skills when designing future courses. To empower the GAs, the Project team requires highly experienced personnel with well-developed motivational skills. The GAs benefited from the well planned training, vocational counselling, transferable skills workshops, and teambuilding activities that enriched their CVs. Most importantly, they have direct experience of analysing how small companies work and how to influence them to manage their resources so as to improve their competitiveness.

There is, however, a need to recruit GAs from across the community spectrum, e.g. retired professionals (Wright and Lund, 2001), so as to involve all sections in integrating environmental, economic and social objectives (Roseland, 2000).

Project staffing

Arranging Steering Group meetings with 100% attendance proved impossible. The Project design only incorporated two full time staff and four part time staff. Finding a suitable candidate to fill the Business Marketing and Support post proved very difficult. Salary allocation for this type of position needs to be on the "experienced manager" scale (£21-30,000 p.a.). Due to budget limits, Project Management was only budgeted at 0.6 FTE, which was not enough time considering the monitoring

needs. The Technical Support posts (2 x 0.4 FTE) were also time constrained. Assisting the volunteers was demanding and could have justified two full-time support roles. The full time Training Co-ordinator post proved most successful. Future projects need to acquire more resource to accommodate higher salary scales and hence more staff hours for projects of this size.

University contribution

A University has a central role in empowering local environmental partnerships. One way to strengthen University / Community partnerships is for the academic institution to drive the participatory research that is required (Park *et al.*, 1993). The University can also act as a facilitator, drawing upon its experience at resource acquisition (Barnes and Phillips, 2000b), to help fund a whole raft of local projects (Morris *et. al.*, 1998; Morris *et. al.*, 2000). At the same time they are centres of academic excellence and can act as service providers to supply the required expertise (Phillips *et al.*, 1999). Due to their diverse and extensive research base they are able to form multi-disciplinary teams to support partnerships and help resolve sources of conflict that can so easily abort local programmes (Barnes and Phillips, 2000b). Indeed, unresolved conflicts in wide-ranging environmental partnerships can seriously impede a given project (Poncelet, 2001a). To avoid adversarial attitudes in environmental partnerships of a coalition of diverse interests (Walton, 1996), a University can draw upon a skills and resource base that emphasise the `win win` outcome so as to diffuse conflict (Poncelet, 2001b).

Local partnerships must be based around objectives that flow from the core activities of all concerned. This Project was based upon the UK Sustainable Development Strategy and the corresponding local and regional Strategies. This meant that local and regional partners were able to plan their activities so as to fulfil their Mission Statements. The careful planning of the programme, and thorough risk analysis, based upon extensive prior research to elucidate Best Practice, meant that few differences amongst the partners ever emerged. Universities are central in respect of such participatory research (Park *et al.*, 1993).

How will a successful partnership influence the core values and structures of the partners, such as a University? The relationship between a University and the wider community has been of no little academic interest of late (Jackson *et al.*, 2001). It has been pointed out that Universities must re-tool themselves to cooperate with and accompany the non-profit sector (Feeney, 2000). But for this to happen the machinery for transformation must exist with the University (Feeney, 2000).

An evaluation of the Project has shown that the key developments for a University have included:

1. Institutional change – the development of new capacities and attitudes;
2. Commitment to supporting local transformational approaches;
3. Converting research into curriculum - the Project has been of benefit to students through an enriched curriculum. The Institution increasingly incorporates sustainability into a range of H.E programmes (DETR, 2000d);
4. Mobilising, acquiring and sharing resources - Universities have significant experience in gaining access to external funding and can benefit from involvement in similar projects.

Key activities for rapid financial savings

For future, similar projects, some key activities for teams working with micro businesses should include:

1. Start with a major press launch, declaring the Projects' independence;
2. Survey business needs before and after project initiation to determine the best approach, and aid recruitment. This should include finding out how many need urinal controls and compact fluorescent lamps;
3. Recruit approximately 50 companies into an energy tariff consortium that could save £20 000 - £50 000 immediately;
4. Bulk purchase Passive Infra Red urinal controls and install these in every company that can use them – reduced water use could save £10 000 – £15 000;
5. Carry out a lighting audit in each business - could save £2 000 in each company. Apply for Lightswitch grants for every company - could generate £150 000 in capital investment;
6. Generate EEBPP heating plant and control audits for the companies that will benefit from these. Early introduction of this expertise will help deal with major areas of improvement and project staff can support through the planning stage as well as the implementation of the capital works;
7. Companies with material processes must carry out a process waste prevention audit;
8. Companies to reinvest savings in longer term efficiencies, e.g. buying recycled paper and recycling commercial waste;
9. Produce an environmental policy for each business as a framework for future action.
10. Newsletters and web-based case studies can be generated from these activities, preferably with locally known firms, with specific sector focuses (based on Census data, potential for improvement or environmental risk).

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