A Smart, Successful, *Sustainable* Scotland

the potential for green enterprise and green jobs

Report Prepared for WWF Scotland by CAG Consultants, May 2003

EXECUTIVE SUMMARY

The growth in the 'green' sector of the global economy, over the last decade, has been strong and consistent and it is now worth £100s of billions per annum. Given its natural resources, industrial capacity and skills' base, Scotland is in a strong position to exploit the new opportunities created by this and establish itself as an exemplar of green economic development, delivering great economic, social and environmental benefits to the country. To date, these opportunities have not been fully realised and Scotland has seen itself fall behind other comparable nations.

This report examines the potential for Scotland to create a truly green economy. It begins by defining what is meant by green economic development and outlining the potential market for green products and services. Case studies of good practice from across Scotland are highlighted, as is the potential to create 50,000 new jobs in Scotland through support for clean technologies.

The report then examines the drivers for green economic development and the role the Scottish Executive, the Enterprise Networks and the wider Scottish community have and could play in promoting greener enterprises. Despite some progress in integrating sustainability into the working of the Executive over the last 2 years, in this most crucial aspect of sustainable development, there has been a failure to move from a few isolated examples of good practice into a joined-up and integrated approach. The report highlights weaknesses in the remit and activities of the Enterprise Networks and the guidance they receive from the Executive.

The inconsistency of the Scottish approach is in sharp contrast to that adopted in Wales, where a core commitment to sustainable development made at the outset of the Welsh Assembly has translated itself into a coherent and pro-active approach to green economic development being taken by the Welsh Development Agency and other public institutions.

The report concludes with a series of recommendations aimed at supporting green businesses and job creation.

CONCLUSIONS

- The Scottish Executive should revise ***A Smart Successful Scotland*** to ensure that sustainable development and the encouragement of green businesses is at the heart of what the Enterprise Networks do. The Executive should issue new guidance to the Enterprise Networks to ensure that sustainable development is a core aim of their activities.

- A revised strategy would identify where the opportunities are for economic activity in a more pro-active way and help environmental protection and development to go hand-in-hand.

- The Executive and Enterprise Networks should be more proactive in encouraging diversification from unsustainable industries into those that produce greener goods and services.

- The skills' shortage in the green technology sector should be tackled through an integration of such skills into university and college curricula.

- The Enterprise Networks should fully integrate the green employment agenda into all areas of their work through staff training, greater investment in clean technology research, the proper appraisal of the sustainability impacts of proposals and a strengthening of the internal sustainable development network within Scottish Enterprise.

- The Executive should work with other public agencies in Scotland to ensure a greening of the public procurement process.

'The biggest challenge of the 21st century is to combine economic progress with social and environmental justice' **Jack McConnell, First Minister, 2002**

INTRODUCTION

The global economy, and that of Scotland, is changing at a rapid rate. This change is being driven by a variety of factors, including globalisation of world trade, consumer demands, the growth of e-commerce and other new technologies, government regulation and changes in fiscal regimes.

Within this complex and evolving economic system, the central challenge, as recognised by the First Minister, is to achieve sustainable development: meeting the needs for global development and the demands of a burgeoning world population while at the same time reducing our pressure on environmental systems and natural resources. Put simply, we have to maintain and enhance quality of life, in Scotland and across the world, while using fewer resources.

A key component of sustainable development is the greening of production and consumption. As a start to this process, there has been a range of responses from government and business in terms of regulation, public funded environmental improvement, increasing resource efficiency in business and the growth of new, cleaner technology industries. These are explored below.

Sustainable Development and 'Green' Jobs

Current patterns of production and consumption are outstripping the ability of natural systems to maintain their productivity. We are consuming non-renewable resources as if they were renewable and using renewable resources at unsustainable rates.

This has negative impacts for social and economic conditions as well as for the environment. Our levels of oil extraction will mean that the number of Scots currently employed in the sector is expected to decline steadily over coming decades. The collapse of fish stocks in the North Sea, putting at risk up to 20,000 Scottish jobs, is a direct result of over-exploitation.

The enormous economic value of the Scottish environment was underlined by a recent report from the Fraser of Allander Institute[1]. It has calculated that Scotland's natural resources, including our seas, farmland, lochs and woodlands, are worth at least £17 billion per annum to our economy. This figure, which the Institute believes is probably an underestimate, is equivalent to a quarter of the nation's Gross Domestic Product (GDP) and dwarfs the value of any single Scottish industry.

There is therefore a need to ensure that *all* our economic activity maintains and enhances our natural capital and secures our long-term economic future. To achieve this, we need to transform the way we do business. The ultimate aim must be to create goods and services in ways that protect or enhance the natural environment, safeguard jobs and communities, and contribute to a good quality of life for all. In other words, to create a sustainable economy.

While that is the goal, most businesses in Scotland are far from being sustainable at present. The challenge is therefore to progressively 'green' our economy through improvements in our resource efficiency and the use of new, clean technologies. Such a transition would improve the

[1] Source: *Quarterly Economic Commentary, Spring 2003* Fraser of Allander Institute

performance of businesses and, as has already been shown in some sectors, create major new business and employment opportunities.

The 'green' economy is already a significant contributor to Scotland's economic wealth. In its work for the Southern Uplands Partnership, ERM[2] defined 3 main categories of 'green' economic activities, namely:

Public and not-for-profit activities aimed at environmental enhancement

This includes public sector environmental services (such as waste collection and water treatment), activities that protect the environment through regulation, planning and advisory services (e.g. the work of SEPA or SNH), repairing or enhancing the environment and the natural heritage, and environmental education

Commercial activities providing environmental goods and services

This sector encompasses environmental technology manufacturers, private sector waste management companies, renewable energy suppliers, consultants providing environmental advice and companies providing environmental improvement services including urban regeneration, remediation and landscaping. It should be borne in mind that the technologies covered by this sector include both those that are aimed at cleaner production in the future and those designed to clean up present and past environmental damage.

Activities improving the environmental performance of non-environmental sectors

Essentially, this involves action to address the negative environmental impacts of existing parts of the economy. Activities include action in the primary economy sector (e.g. fishing, farming, forestry, material extraction) that would improve environmental performance, such as the introduction of organic farming, greater use of native woodlands or the optimum harvesting of healthy fish stocks. It would also include activities in service and manufacturing industries designed to reduce environmental impact eg the appointment of environmental managers or the use of new technologies.

Employment Type	Estimate of Number Employed in Scotland
Not-for-Profit activities	16,800
Commercial Green Goods and Services	10,400
Improving Environmental Performance	7,200
Activities dependent on a Quality Environment	45,600
TOTAL	80,000

Table 1: Current 'Green' Jobs in Scotland (estimate based on figures in ERM Report)

The ERM report also acknowledges that a whole range of other businesses are either dependent on a high quality environment (from tourism to the production of high quality food) or are drawn to Scotland because of the perception of the country being an attractive place to live.

[2] Source: *Jobs and the Environment in the South of Scotland. Report to the Southern Uplands Partnership*, ERM, 2002

Extrapolating the figures produced by ERM across the whole country, there are already around 80,000 green jobs in Scotland (Table 1).

The Green Economic Challenge in Scotland

As noted above, sustainable development involves consideration of economic and social factors as well as environmental performance. While the Executive has a clearly defined social inclusion agenda, there is far less coherence in its approach to addressing the environmental impacts of business. As such, this report focuses on the potential for expansion in Scotland of the private sector 'green' economy (the second and third categories of green economic activity as defined by ERM) and the role of the Scottish Executive and the Enterprise Networks in promoting green businesses and green jobs across Scotland.

Firstly, it is worth considering the scale of this sector at the present time and the enormous potential for growth and job creation. The UK Government estimates that the global market for such technologies was worth US$515bn in 2000, with this set to grow to US$688bn by 2010. Across the UK, the sector already employs 173,000[3].

The potential for growth in employment in the green sector is massive. The European Commission estimates that a doubling of energy from renewable sources across the Community could create between 500,000 and 800,000 jobs[4]. Within the UK, it has been estimated that up to 700,000 direct and indirect jobs could be created by a green jobs programme, with major contributions from waste management, sustainable transport and better pollution control[5].

What is evident is that, to date, the UK as a whole, and Scotland in particular, has not realised anything like its potential to capitalise on green economic opportunities. The UK currently has a 4.7% share of the global market in environmental technologies. In comparison, Denmark, with one-twelfth the population, has a 1% share of the global market. While 15-20% of the turnover of the UK environmental industries is derived from exports, the comparable figure for Finland and Denmark is over 50%[6].

At the same time, across Scottish industry, our resource efficiency levels are still far less than those of many competitors. For the UK as a whole, £12bn-worth of energy is wasted each year by inefficient businesses.[7] In addition, our development in this sector is being limited by lack of skills in crucial areas.

Our failings are therefore twofold:

- We have failed to properly address our potential to become a key player in the green technology industry, despite huge advantages over other nations in terms of our resources, skills' base and industrial capacity.
- Our business across all sectors is uncompetitive in terms of resource efficiency compared with that of many other developed nations, cutting profits and leaving businesses vulnerable to environmental taxes and regulation.

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[3] Source: *Global Environmental Markets and the UK Environmental Industry – Opportunities to 2010*, JEMU, DTI, 2002

[4] Source: *Sustainable Jobs*, SERA, 2002

[5] Source: *Working Future?,* FoE, 1994

[6] Source of all Figure: Joint Environmental Markets Unit, DTI,2002

[7] Source: Action Energy

To take a specific example, the growth of the wind energy industry has been phenomenal. From being a marginal activity of interest to a few researchers a quarter of a century ago, wind power has blossomed into a multi-billion pound enterprise. In Denmark, which took a coherent approach to developing wind power, involving the state in partnership with private enterprise, it is now the fourth biggest export earner, worth around £2bn per annum. Denmark now stands in a strong position to exploit the massive predicted future growth in wind power (the market could grow to up to £630bn by 2020) and to diversify into other renewable technologies.

Scotland has a great deal of potential to meet the challenge of the green jobs' revolution and diversify from unsustainable into sustainable economic activity. An obvious example is the potential to use the skills' base developed in north-east Scotland during the oil boom years to create new markets in wave power generation.

It is calculated that almost 50,000 new 'green' jobs could be created in Scotland over the next 10-15 years (Table 2) with many thousands more by further greening of the economy in future decades. This employment would be in a wide range of new and existing enterprises and the total figure represents a conservative estimate since no figures were available for some important sectors, eg wind power. New industries, such as wave and tidal power, would exploit Scotland's existing industrial and technological base. Other jobs would be created by expanding public transport and sustainable waste management, while more still would come from moving towards organic food production.

Sector	**Potential for new jobs (fte)**	**Source**
Marine Energy/Wave Power	24,000	Scottish Executive/AEA Technology
Recycling	4,500	Jobs in the Environment Support Unit
Public Transport	11,000	Estimate, based on FoE report *Less Traffic, More Jobs* (1995)
CHP	3,000	Estimate, based on FoE/ESD report *Delivering Climate Protection* (1998)
Solar Water Heating	350-400	Scottish Renewables Forum
Energy Efficiency	1,700	Estimate, based on FoE/ESD report *Delivering Climate Protection* (1998)
Organic Farming	1,200	Estimate, based on Soil Association figures for the UK.
TOTAL	45,800	

Table 2: Likely job creation from cleaner technologies

So what are the factors that enable businesses to properly exploit the opportunities presented by green technologies? The UK Government's Joint Environmental Markets Unit (JEMU), based in the DTI, identifies the following[8] as important:

- Creating the right legislative and fiscal framework and setting targets for adoption of technologies
- Investment in research
- Support from government in establishing new green businesses
- The creation of links among research institutions, government and business
- Creating the right skills' base and industrial capacity to exploit new technologies

The first and second of these factors is jointly the responsibility of Scottish, UK and European government. The third, fourth and fifth are areas where the Scottish Executive and the Enterprise Networks can play a significant role. The performance of the UK and devolved administrations in relation to these factors is examined below.

CREATING THE RIGHT CONDITIONS FOR GREEN GROWTH: THE UK FRAMEWORK

As acknowledged by the UK Government[9], a key driver for the growth of green businesses is the regulatory and fiscal regime set out at European and UK level. European Directives on a variety of issues, from Wastewater to Producer Responsibility for Waste, have set out environmental responsibilities for companies that have helped to stimulate new markets for cleaner technologies.

Regulation and Fiscal measures have also played a significant role in the UK in recent years. Regulation and legal sanction, by public bodies such as SEPA, of emissions to land, water and air have helped reduce emissions and promote Best Practical Environmental Options (BPEO) for existing businesses, thereby creating demand for a range of products.

Increasingly significant, the use by the Government of environmental taxation has been shown to have a positive impact on the green economy. The Climate Change Levy, Landfill Tax and Aggregates Levy are all examples of where market mechanisms have been used to drive businesses along a more sustainable path. The use of fiscally-neutral measures (for example the Climate Change Levy is offset by a reduction in employers' National Insurance Contribution) is designed to stimulate employment while penalising use of non-renewable resources, a 'win-win' situation. The Levy has also raised funding for investment into research on new cleaner technologies, another crucial factor in stimulating the green economy.

The measures outlined above are all-significant in moving Scotland towards sustainable development and may appear largely out the hands of the Scottish Executive. However, there is much that devolved administrations *can* do. The Executive can guide policy over a wider range of areas including education and skills, the environment and most importantly, economic development. The Executive can (and has) set targets for specific sectors, helping create a market for green products. Commitments to eliminate Fuel Poverty by 2016, to set new Building Standards, to enhance organic farming or to increase the use of renewable energy above the UK average, have all served to promote green business in Scotland and are welcome.

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[8] Source: *Global Environmental Markets and the UK Environmental Industry – Opportunities to 2010,* JEMU, DTI, 2002

[9] Source: *Global Environmental Markets and the UK Environmental Industry – Opportunities to 2010*, JEMU, DTI, 2002

The Executive is responsible for public procurement spending of around £5 billion per year which could have enormous market influence.

A Review of the Economic Development policy of the Scottish Executive in promoting Green Jobs

Despite the progress that the Executive has made over the last year in embracing Sustainable Development and Environmental Justice, and the target setting outlined above, it appears that in the crucial area of economic policy, little has changed. In the Executive's ***Meeting the Needs*** sustainable development document, only one of the indicators links business to environmental impacts and there are no indicators for the stimulation of green technologies.

In its review of progress on sustainability in the government's spending plans, ***Building a Sustainable Scotland***, the Executive still seems to view sustainability very largely in terms of narrow economic growth. The report from the Enterprise and Lifelong Learning Department (ELLD) focuses to a great degree on Education, not Enterprise, and has little to say about green economic development. The report accepts that *'more work needs to be done to mainstream sustainable development (into the ELLD) and to ensure that the activities it supports do not have an unduly negative impact on the environment. A more planned and proactive approach will enable us to make better assessments in the future.'*

In the remit set out for the Enterprise Networks in ***A Smart, Successful Scotland*** (2001), sustainable development does not feature significantly in either the three themes (Growing Businesses, Global Connections and Learning and Skills) or the 12 priority challenges outlined. Instead, sustainable development is reduced to an acknowledgement that 'Growing Businesses' has to be consistent with the *'principles of sustainable development'*. Clean technologies are not recognised at all as a 'key sector' for success and the skills' shortage in the green technology sector[10] is not identified as an area for action.

The only target related to green business set out in the document is for Scottish Enterprise to work with a limited number of companies on improving their environmental performance through accreditation to recognised environmental standards. While welcome, this does little to address the economic opportunities of green technology.

This lack of integration of, and ambition for, sustainable development in ***A Smart Successful Scotland*** also translates into other key strategies and activities. PACE (the Partnership Action for Continuing Employment) currently only works to react once redundancies are announced, whereas there could be potential for the partnership to help diversification into clean technologies. In addition, the Regional Selective Assistance provided to companies does not involve any assessment of environmental impacts of the capital projects funded, although this is now under review for larger projects. Finally, the Executive's ***Review of Scottish Cities*** continues to view sustainable development very much in terms of the Waste, Energy, Transport (WET) Strategy and as something that is separate from mainstream economic activity.

The Role of the Enterprise Networks

Perhaps, unsurprisingly, given the framework set out for Scottish Enterprise and Highlands and Islands Enterprise in ***A Smart, Successful Scotland,*** the current approach to green business and

[10] Source: *Sustainable Jobs*, SERA, 2002

sustainable development taken by the Enterprise Networks could be viewed as inadequate and lacking in coherence.

The Networks have indeed undertaken some impressive work on environmental management and environmental performance with companies across Scotland, with examples of good practice including the Business Environment Partnership (BEP) and work in the Borders, Glasgow, Dunbartonshire and Grampian. Other work has focused on greening tourism, with the Borders again being involved in a number of interesting initiatives. At the macro scale, Scottish Enterprise has delivered a number of large-scale land decontamination initiatives such as at Ravenscraig and Gartcosh.

The Networks have also worked to provide a bridge between research into clean technologies and business, most notably through their SISTech Partnership with Heriot-Watt University and their collaboration with the Intermediary Technology Institute in Energy in Aberdeen.

In terms of internal processes, Scottish Enterprise has established a Sustainable Development Champions network. Each of the Local Enterprise Companies (LECs) has appointed a member of staff to act as a focal point for work on these issues and these staff meet on a regular basis to share good practice. This network is currently chaired by the Chief Executive of Scottish Enterprise Glasgow.

Despite these steps, there is a lack of clear direction on these issues, in part due to the lack of a clear direction given to Scottish Enterprise and HIE by the Scottish Executive. This translates into a lack of recognition of the potential for green business within their operating plans.

While the dedication and ability of those involved in the Sustainable Development Champions network is not in question, all those involved are currently constrained in the amount of time they can devote to the network and thus it appears that the network is only effective at the margins rather than at the heart of Scottish Enterprise.

More fundamentally, there is, at present, very limited means by which the full sustainability implications of projects that the Enterprise Networks are involved in can be appraised. While there is an internal document used for project assessment (which makes limited reference to environmental impacts), there is no process to ensure a proper sustainability appraisal of projects and the application of this kind of appraisal is patchy at best. This process contrasts sharply with other public bodies involved in promoting private enterprise. For example, European Funding bodies are required to undertake a far more detailed appraisal of environmental and social impacts of projects under consideration.

A further area where action should be considered is in relation to staff training and awareness raising. Most business advisors in Scottish Enterprise undergo a training programme that contains little or nothing about the environment or sustainable development, although it is understood that the Network is currently developing training for business advisers on business efficiency including material on sustainability.

There is also a need for clear and challenging targets around support for new green business and on greening existing enterprises and a need to extend the welcome, if limited, funding that is provided to links between the Enterprise Networks and research institutions working on new green technologies.

What is possible: the Welsh example

The contrast between Scotland and Wales is stark. Despite far more limited powers, the Welsh Assembly has pioneered a coherent and integrated approach to sustainable development. Sustainable development has been set as a core duty of the Assembly and this has translated itself into a far more pro-active approach to green business.

In '***A Winning Wales: National Economic Development Strategy of the Welsh Assembly Government'*** (2002)**,** the Assembly sets out its economic development vision as '*to achieve a prosperous Welsh economy that is dynamic, inclusive and sustainable'* and that *'economic growth is not sustainable where the interests of the environment and our established communities are disregarded'*. A key objective of the strategy is *'dynamic development of the country's green economy, including sustainable agriculture and energy production'.*

A Winning Wales commits the Assembly to considering the use of sustainability appraisal techniques to revise and update the strategy and accepts that GDP is an imperfect measure of economic welfare. It sets out a range of aims round sustainable tourism, waste, energy and public transport and states that the Agency will work in Partnership with others to promote sustainable development through Community Plans and encourage business to adopt environmental best practice. It concludes that *'Wales can be a showcase for sustainable economic development. The green economy can be a catalyst for a sustainable economy as well as generating significant opportunities in its own right'.*

Based on '***A Winning Wales',*** the Welsh Development Agency's '***Learning to Work Differently'*** strategy sets out a range of objectives aimed at achieving 'sustainable economic growth' and the Welsh Development Agency (WDA) is developing a range of practical guidelines to help deliver this policy. The WDA accepts that it can assist sustainability directly through working with and supporting businesses as they move towards more sustainable patterns of production and consumption and that it can help identify and develop new products. It has pledged to encourage all businesses to adopt good practice and to promote the role of technology in helping businesses move towards more sustainable development.

The role of the wider Scottish community in promoting the green economy

The Scottish Executive and Enterprise Networks on their own cannot, of course, deliver a green economy or green jobs. It requires concerted effort across the board.

The public sector has a significant role to play, most particularly through purchasing policy. The reforms of local government underway at present, offer opportunities through the concept of Best Value for greater consideration of environmental issues when making procurement decisions.

The business community itself also has a role. Some Scottish businesses, such as Scottish Power, have been rightly praised for their approach to environmental performance and environmental reporting. In addition, it is commitments made by major companies such as Scottish Power that have helped created demand for new green technologies. The Vestas operation in Campbeltown is a good example of this (see Case Study).

Conclusions and Recommendations

After a slow start, the Scottish Executive has moved to integrate the principles of sustainable development into its working in a much more significant fashion over the last year. However, in the crucial area of economic development, sustainable development and the green jobs agenda is still, at best, an afterthought. This is despite the fact that the concept of 'Environmental Justice' promoted by the First Minister would seem to be directly connected to the green jobs agenda.

As the basis for the work of the Enterprise Networks, '***A Smart Successful Scotland',*** has little or nothing to say about sustainable development or the potential for green jobs and the green economy. It is hard to see how the statement that sustainable development is a crosscutting theme in the work of the Networks is anything other than aspirational.

A coherent approach to sustainable development in economic policy is therefore required. There is a need for clear guidance from the Executive and a clear statement of intent, as well as a range of measures designed to ensure that the activities of the Enterprise Networks across the board engage with the green jobs' agenda. Specifically it is suggested:

ACTION BY THE EXECUTIVE

Revise 'A Smart, Successful Scotland' – it is clear that the role for the Enterprise Networks set out in *A Smart, Successful Scotland* does not embrace the sustainable development agenda as defined by the First Minister or the Executive. Action is therefore needed. It is recommended that *Smart Successful Scotland* be revised and sustainable development fully integrated into a new vision for the Enterprise Networks. Failing this, the Enterprise Minister should offer new guidance to the Enterprise Networks, requiring them to fully embrace sustainable development and focus on their ability to support more sustainable businesses.

Be more proactive in encouraging diversification - at present the Partnership Action for Continuing Employment (PACE) works only to react once redundancies are announced. By being encouraged to take a more pro-active approach, helping businesses develop into sustainable enterprises, great economic and social benefits could be achieved. From Aberdeen to Grangemouth, Scottish communities are considering how best to secure long-term employment in sectors outwith existing industries such as oil and petrochemicals. The Scottish Executive should be active in helping this process and utilising the impressive skills' base in such areas for new technology developments.

Education and Skills - there is a clear skills gap at present in relation to what is required by green businesses. Sustainable development has to be better integrated into the mainstream courses in Scotland's universities and colleges. In addition, there is a need to raise awareness of the potential of green technologies among the business community in Scotland and to further promote good environmental performance among existing businesses.

ACTION BY THE ENTERPRISE NETWORKS

Capacity-building training for Enterprise Networks' staff – while there are undoubtedly members of staff across the Enterprise Networks with a good understanding of, and commitment to, sustainable development, there is a need for understanding of the green jobs' agenda to be increased. To enable this, Scottish Enterprise and HIE should embark on a

programme of staff training and awareness raising, building on the new business efficiency training. Sustainable development should be seen as part of the induction training provided to all staff.

Greater investment in links between business and research – it is recognised that bridging the gap among research institutions, government and business is essential to the promotion of new, clean technologies. Whilst the Executive and the Enterprise Networks have made some efforts to address this issue, more needs to be done. If Scotland is to be at the forefront of development of the next wave of green technologies, then action has to be taken now.

Sustainability appraisal of proposals – there is a need to fully appraise the sustainability impacts of the broad range of proposals that the Enterprise Networks considers. Support from the Enterprise Networks should be made conditional on companies undertaking a green audit.

Reforming the Sustainable Development Champions' Network – despite the obvious achievements of the Champions' network, its operation is hindered by pressure on staff time. To address this, each of the Local Enterprise Companies (LECs) should designate an existing staff member (or appoint a full-time sustainability co-ordinator) whose core remit would be to take forward the green business agenda. In addition, each LEC should designate a member of senior management with responsibility for this agenda. The network meetings should carry on and should continue to be chaired by a member of the Senior Management team of Scottish Enterprise.

OTHER STEPS

Greening procurement in the Public sector – the public sector in Scotland spends billions of pounds every year on infrastructure, goods and services. At present, few institutions consider the wider environmental and social impacts of what they purchase. ***Meeting the Needs*** (2002) acknowledges that *'there is scope for, and advantage to all our public bodies, taking a target-based approach to sustainable procurement'*.

The changes to local government brought about by the new Local Government in Scotland Act (2003) offer an opportunity, through Best Value, to embrace a wider definition of 'value for money' than was possible under Compulsory Competitive Tender (CCT). In addition, the development of Community Plans and the new role envisaged for local authorities as community leaders, present a chance to bring together a whole range of public sector institutions to promote greener procurement and help support businesses with higher standards of performance. Some work on Best Value and sustainable development is underway and the Scottish Executive should work with local government and other public bodies to mainstream this agenda for direct purchases and through the Private Finance Initiative (PFI).

The Welsh example demonstrates many of the factors required to embed sustainability into the mainstream economic agenda. It is not a perfect approach, and one that is still evolving, but it does demonstrate the paucity of imagination of the Scottish Executive in developing ***A Smart, Successful Scotland.*** It also serves to illustrate that this is a real and practical agenda that is already far more advanced within other parts of the UK.

Scotland is a country with an enormous set of advantages in going down this road. We have an engineering skills base that is adaptable to work on clean technologies. We have enormous

natural potential to generate clean energy and we have a great deal of academic and research expertise in the area.

To build a 'Smart, Successful and ***Sustainable*** Scotland', the Executive and the Enterprise Networks, together with public sector institutions, have to take a bold and imaginative approach and extend sustainable development beyond WET into something that underpins our basic economic activity. The achievement of this will have enormous benefits for the people of Scotland, now and in the future.

We need to move from demonstration projects and pilots into seeing this as at the core of what we do. The vision should be that, in a decade's time, other European nations would cite Scotland as *the* example of green business in the European Union. As a nation, we have the resources to achieve this.

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VESTAS WIND TURBINE PLANT, CAMPBELTOWN

The Highlands and Islands area of Scotland contains some of the best renewable energy sources in Britain but these have been, until recently, substantially untapped. Exploiting this resource constitutes a significant economic opportunity for the area that also contributes to sustainable energy use.

A new, world-class wind turbine manufacturing plant has recently been developed in the south of the Kintyre peninsula in Argyll. The 100,000 square foot factory is on the site of the former RAF Machrihanish base. The factory now employs over 150 people and it has also created a number of spin-off jobs and economic activity. The plant has been secured against international competition through the efforts of the local enterprise company Argyll and Islands Enterprise (AIE) and Highlands and Islands Enterprise (HIE) for which Argyll is a priority area.

The plant is operated by Vestas-Celtic Wind technology Ltd, the Scottish entity of the Danish firm, Vestas, which is a world leader in wind power generation. Vestas' managing director, Tom K. Pederson, said, "*Vestas has followed its usual practice of establishing jobs in rural areas, close to the wind resource. The wind energy market in the UK and Ireland is expected to amount to almost £6 billion over the coming ten years and we aim to capture a fair share of this".*

The £12 million project is a significant boost for the Kintyre economy. AIE invested £9.4 million, which included £3.5 million of European Union Highlands and Islands Special Transitional Programme funding. AIE used the funds to redevelop the site of the new factory and to erect the wind turbine building, which was then leased to Vestas. Vestas, in turn, has invested a further £3 million in equipping the plant with its production equipment. A further £665,169 infrastructure investment was recently committed by AIE, allowing Vestas to expand its manufacturing operations to respond to the growing market for larger 2MW turbines. The Machrihanish factory is responsible for construction of towers and generator cabins for turbines and for final assembly. Manufacture of the turbines' nose cones is being subcontracted and is expected to go to another Scottish firm.

One of the most positive aspects of the development has been in making use of skills of those made redundant by economic restructuring and decline of the local ship building industry. The company has a record of training and developing its workforce and, in this case, it has been able to recruit many staff from the former Campbeltown Shipyard. It has trained these workers in adapting their existing skills in engineering, welding and metal work for the requirements of turbine manufacture.

AIE chief executive, Ken Abernethy has commented that, *"Since establishing a base at Machrihanish last year, Vestas has gone from strength to strength to become one of the area's main economic drivers. Besides creating high quality jobs, the Vestas plant will help to improve the area's infrastructure. The local economy has already seen significant spin-off benefits*". Scottish Power's Alan Mortimer sees the opening of the plant as *"a huge vote of confidence by both government and private sector in the future market for renewable energy in Scotland".*

In May 2003, a further 100 new jobs were announced for an offshore fabrication yard at Nigg, Easter Ross and 60 new jobs at Arnish near Stornoway, both as subcontracts from Vestas in connection with offshore wind farm off East Anglia.

LOCH TORRIDON CREEL FISHERY

The Loch Torridon and Inner Sound of Rona fishery is located in the north-west of Scotland in a remote rural area, low in population and rich in environmental quality and natural heritage. The local community relies heavily on fishing and marine-based activities, with the fishing and fish farming in the loch making a significant contribution to employment in the area.

The Loch's shellfishery recently became the first Scottish fishery to be awarded the Marine Stewardship Council sustainability label. For over 30 years, the fishery has been catching Norway lobsters (also known as langoustine and Dublin Bay prawns) using baited creel pots deployed on lines. However, in 1994, the Inshore Fishing Act removed the three-mile limit that banned the use of mobile gear, thus endangering the sustainability of local fishery. This opened the fishing grounds to trawlers and a period of conflict between creel fishers and trawlers ensued.

In response to this threat to the Loch's biodiversity and the fishery that this sustains, creel fishers in the Loch sought to close the area to other fishing methods. In 2000, the Scottish Executive announced that a 'Closed Area' would be established in the Loch for an initial period of five years. Local fishers wanted to take part in a localised management system with the aim of ensuring long-term productivity and fishing in the area is now conducted under a voluntary code that was drawn up by the fishers, ***'The Torridon Management Plan'***. The local fishers have now set up a company to collectively supply live Norway lobster, research markets, control handling and arrange airfreight to European markets (most of the catch is exported weekly to Spain). This has resulted in greater price stability and relatively secure markets.

The Marine Stewardship Council (MSC) has noted that, just two years later, this management arrangement has clearly been shown to work with the fishery being independently recognised as sustainable. Brendan May, Chief Executive of the MSC commented, *"At a time of great concern for the industry throughout Scotland and Europe, it is extremely heartening to see fishermen and regulators dedicated to conserving the future of their industry in such a positive way. The MSC eco-label provides the industry in Loch Torridon with recognition of their good management and an opportunity to add real value to their product in an increasingly competitive global market place. In a world of bad news about fish stocks, this shows there is still real hope for the future*".

The Loch Torridon Creel Fishery Escape Panel Project, part-sponsored by WWF, recently won a Highland Marine Innovation Award for its project to fit escape panels in all creels used by boats landing prawns with the fishery, and demonstrate the results to other fishermen.

ALLOA COMMUNITY ENTERPRISES LTD

Alloa Community Enterprises was founded in 1984 when a group of volunteers in Clackmannanshire successfully raised funds to furnish a half-way house, providing training and support to assist long-stay patients in a nearby psychiatric hospital to regain their place in society. Today, ACE is regarded as the most successful community recycling business in Scotland. It now employs 15 full-time staff and owns a fleet of 10 vehicles.

The company was launched with the help of a small business grant and one employee. Its first venture was a furniture project. Furniture recycling remains the company's core business but since then ACE has diversified into a range of other areas of recycling including glass, aluminium cans and textiles. ACE has built up relationships with various market organisations including Cheshire Paper, Berrymans and United Glass.

Today, the company collects around 6,500 tonnes per annum and may be the biggest collector of consumer glass in Scotland. In partnership with Clackmannanshire Council and Stirling Council (and later Falkirk Council), ACE launched a scheme to extract CFC gases from redundant refrigerators. Each local authority collects refrigerators from households and delivers them to a central point. They are collected in bulk from designated centres by ACE and transported to their depot for degasification.

ACE provides the only Scottish processing centre for British Alcan. Cans are delivered from all over Scotland, contaminates are extracted and the cans are then baled for transportation to BA's smelting plant. ACE also runs its own network of collectors who use aluminium recycling to fund their own charities. ACE has launched a pilot kerbside sorted collection scheme. Plans are to extend the scheme to the whole of Clackmannanshire.

ACE was recently the only Scottish organisation to win an award at the National Recycling Awards, for best community project for recycling. The award is given to projects which can demonstrate how successful recycling has brought real benefit to the community and which set an example for others to follow as good practice. It is the current UK Community Recycling Organisation of the Year.

Alloa Community Enterprises' General Manger, Tony Cassidy, has commented, *"The community sector needs to be heard and listened to. Everybody now recognises that the future landfill diversion targets cannot be achieved without community projects such as Alloa Community Enterprises, working in partnership with local authorities and business".*

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