

Towards a Green Jobs Strategy

Response from Friends of the Earth Scotland

September 2004

Friends of the Earth Scotland welcomes the opportunity to respond to the Scottish Executive's Green Jobs Strategy. We believe that it is essential that Scotland develops a more sustainable economy and particularly welcome the spirit of the explicit commitment to ensure that *'Scotland's economic growth in the new century does not perpetuate the environmental injustices of the past.'* In practice we would suggest that the Executive must also act to address the more severe environmental injustices likely to arise from the continued commitment to growth as a precondition for sustainable development - rather than a beneficial consequence.

Key recommendations

- **A holistic approach to greening of all jobs which would involve embracing ecological taxation and corporate accountability reforms is key to the delivery of sustainable development and environmental justice.**
- **The pre-occupation with pursuing economic growth exacerbates environmental injustice and instead the focus should be towards delivering sustainable economic development. Smart Successful Scotland and the indicators used to measure success should be revised to reflect this.**
- **It is critical that the Enterprise Networks be given revised roles and responsibility to deliver sustainable development and green employment.**
- **Public procurement should be used much more proactively as a lever to stimulate responsible purchasing and thus investment in pursuing a more sustainable economy.**
- **Clear targets should be set in specific sectors – such as energy efficiency - to give greater certainty to job-creating investments.**

Introduction

We note that there are significant opportunities within specific sectors for creating 'green' jobs and that these opportunities should be encouraged and pursued. However we also believe that **the overarching focus should be towards making all jobs become 'green' within the context of the development of a more sustainable economic framework more geared towards securing environmental justice.** Such a framework would enable the transition from a resource intensive, and inadequately regulated global market place, based purely on competitive principles and reliant on exploitation of natural or human capital, towards a system designed to meet social

need and ecological sustainability. Such a system would deliver higher social welfare and environmental standards and improved quality of life in and outwith work.

A key component of such a framework involves recognition that economic growth is not in itself an end goal. Viewing economic growth as an end in itself is often a driving factor in causing both environmental and social injustice - instead we should be seeking sustainable economic development. Amongst other things we need to see reform of the indicators of economic success to reflect real well-being. Within this, the commitment to sustainability in social and ecological terms must be paramount. It is not economic development which needs to be sustained but rather the social and ecological environment which must be sustainable to avoid unacceptable and often irreparable damage. Thus green jobs should not always imply growth in financial terms but facilitate:

- A focus on sustained jobs, through a multiplicity of enterprises of various sizes, rather than on short-term opportunities focused on large-scale developments. Building competitiveness through clustering as advocated by Michael Porter relies on creating and sustaining business networks with cross-fertilization of staff and ideas across business boundaries, rather than focusing on big businesses or major infrastructure developments.
- Improved quality of life rather than standard of living, such as by employment laws that enable working less and sharing the work around.
- Pursuit of ecological or environmental productivity (maximizing material and energy efficiency), rather than labour productivity. Here it must be noted that the international competitiveness 'imperative' for improved productivity is often false. In the large non-internationally-traded sectors, as Adair Turner argues in 'Just Capital', competitiveness will not be affected by environmental and social interventions, whilst overall welfare can be increased.
- Support for social enterprise as well as conventional private businesses to create jobs in response to community needs.
- Keeping finances in the community – and maximizing local economic multipliers rather than relying on inward investment (e.g. through an equivalent of the Community Reinvestment Act in the US that requires banks to invest in poor communities at least in proportion to their savings.)

There is a need to identify how we undertake a 'just transition' towards a more sustainable, green job based, economy. Part of the transition should be bought about not just by stimulating sustainable industries and sustainable jobs, but also by penalizing unsustainable industries and the jobs associated with them, without penalising the workers who are in those jobs. In a green jobs economy there will be fewer truck drivers, fewer car manufacturers, fewer manufacturers in defence or nuclear or oil based industries. These workers need to be phased out of current employment and into sustainable employment and there is a critical role for trade unions in delivering this transition.

Green Jobs Across the Economy

Question 1 – In which sectors do you see most scope for development?

Question 2 – Do you agree that the three “big wins” for Scottish business will be renewable energy, recycling and resource efficiency?

As set out above we believe that the entirety of the Scottish economy has tremendous scope to be transformed to one based on ‘green’ employment. We do note however that there are several specific sectors that offer considerable scope, within the context of the Executive’s current consultation and framework, not just the three identified.

Tackling climate change – renewables

The urgent need to take action to tackle climate change should act as a catalyst for maximising job opportunities in renewable energy development and energy efficiency. The Scottish Executive’s existing commitment to secure 40% of electricity from renewables and the recent marine renewables investment announcement are a good basis for stimulating the development of jobs in this sector.

The European Commission estimates that a doubling of energy from renewables from 6% to 12% could create between 500,000 and 800,000 new jobs. The UK, and Scotland in particular, is ideally placed to capture many of these jobs. Scotland has skill bases in both the traditional heavy industry and new hi-tech sectors that would be necessary to develop and manufacture renewable technologies, with expertise already developed at the Vestas site in Campbeltown. Ocean Power Delivery estimate that a significant wave power installation programme in Scotland would lead to around 150 long-term direct jobs for each 10 MW/year of installed capacity[1] and potentially it is estimated that between 750 and 1000 direct jobs per 100 MW/year of export sales could result.[2]

On offshore wind alone it is estimated that net UK jobs from a 10-30% offshore wind contribution to demand would be between 24,215 and 75,655 FTE

We welcome the work of the SCHRI in supporting community initiatives and encouraging innovation in smaller scale renewable technologies. The recent development in Edinburgh and installation in Fife of the world’s first silent rooftop mountable wind energy system is an example of how micro innovation could have far reaching impacts. The successful pilot of rooftop turbines could lead to significant numbers of green jobs in the installation of this technology on any building in Scotland, or abroad. Executive funding schemes have facilitated this development. However, the future growth and spread of micro-renewables will require greater intervention in the market. One means to drive forward the micro renewable industry would be to start incorporating renewable technologies into building regulations. Greater support for communities to develop their own schemes is also essential including access to soft funding for community owned, controlled or benefiting industries.

Tackling climate change – energy efficiency:

Energy and resource efficiency should be pursued in their own right with a view to saving resources and using resources more efficiently as opposed to simply with a view to increasing the profitability and productivity of business. In parallel, employment within energy efficiency should not just be pushed in order to achieve better business profit margins, but to conserve energy and improve energy efficiency as aims in themselves, and means to achieve climate change targets. Market forces should be *reinforced* by policy and financial measures and energy efficiency programmes and initiatives. The assumption that businesses simply need to be informed about cost-effective means of saving energy is demonstrably wrong. A combination of regulatory interventions, financial incentives and information dissemination will be required.

The potential for energy efficiency and conservation in Scotland is large, and to achieve this potential significant numbers of green jobs will be created. The UK Government's Performance and Innovation Unit estimated in 2002 that the currently achievable, cost effective potential for energy efficiency in the UK was approximately 30% of final energy demand.[3]

It is not possible to estimate the exact number of green jobs that this would create without knowing the specific route which is taken to achieve these savings. Different energy efficiency programmes and measures have different employment intensity levels. Nevertheless, both experience and various research projects have shown that conserving energy and improving energy efficiency *will* create green jobs. The latest update on the progress of the Home Energy Conservation Act estimates that between 1999 and 2001 12,475 jobs were sustained in installation work and a 7129 elsewhere in the economy as a result of the reported investment in energy efficiency.[4] A study by the Association for the Conservation of Energy (ACE) into the employment impacts of 44 energy efficiency investment programmes in 9 EU countries showed that the programmes increased overall employment levels with very rare exception.[5] A joint research project into sustainable job creation in the EU carried out by a range of trade unions and environmental organisations in 1999 concluded that "every single euro invested in energy conservation (and renewables) creates more employment than one Euro invested in the conventional energy supply." [6]

The jobs created by energy efficiency programmes are often in sectors, locations and skill groups prioritised by employment policies, although this is not exclusively the case since in the industrial sector the job gains will mainly be for engineers, consultants and technicians. The first major type of green jobs created by other energy efficiency programmes is in project administration and the second in installation. The majority of the jobs created in installation are suitable for the long-term unemployed, but since this employment is low skilled, not unskilled, the necessary training schemes need to be set up. The ACE research referred to above recommended that information and education campaigns and innovative government led initiatives tend to combine high employment gains, low government expenditure and cost effective investment.[7] Many energy efficiency measures in the domestic and small business sector are geographically dispersed and responding is generally within the local economy.

The Executive consultation focussed on energy efficiency in the commercial sector. Undoubtedly, in addition to the opportunities in the domestic sector there are job opportunities within the commercial sector since this is a sector with large potential for energy efficiency improvements. While homes and appliances have tended to improve in energy efficiency since the early 1970s, energy use in the UK commercial sector has increased by almost 70% since 1973[8] and now accounts for one-sixth of all carbon emissions.

Directive 2002/91/EC of the European Parliament on the Energy Performance of Buildings, is a useful current case study into the creation of green jobs, particularly in the commercial sector. The Directive, which has to be transposed into national law by 4 January 2006, specifically requires the creation of green jobs in the guise of independent inspectors who will carry out various requirements of the Directive, such as energy auditing of buildings. However, if Member States believe that they have insufficient qualified or accredited experts they may derogate implementation for three years. This will simply delay the problem since until the Directive is in place, there is no incentive to train people in skills which are as yet un-needed. In the future care must be taken to avoid this problem and to consider a staggered approach to the implementation of such programmes. In relation to this specific Directive, Member States should be encouraged not to derogate with some understanding given in the early years of implementation while the necessary personnel are trained.

The consultation paper makes only brief reference to regulation, and yet the gradual strengthening of building regulations could also lead both to improvements in energy efficiency and associated green jobs. Current building regulations for new build and extensions are of a relatively high standard. Yet the major challenge, and opportunity for green jobs, lies in improving existing buildings through extending building regulations to cover renovations.

The number of jobs created through local energy efficiency investments stimulated by the Home Energy Conservation Act has already been mentioned. . Despite many local authorities being far behind the early aspirational targets of this legislation, thousands of jobs have already been created. If the weaknesses of this Act were to be addressed, more money dedicated to it, targets re-evaluated and increased and the co-ordination of local authority energy efficiency actions improved, it is clear that many thousand more green jobs could be created.

Many current initiatives in energy efficiency will certainly create additional green jobs. Cases in point are the Executive's £20m fund for public sector energy efficiency improvements, consultation on the introduction of energy auditing, the inclusion of thermal efficiency standards in the tolerable standard and fuel poverty targets. FoES welcomes these initiatives.

The main barrier to the growth of the energy efficiency industry in Scotland and the UK is the lack of certainty compared, for example, to the renewable energy industry. National and local energy efficiency targets would go a long way towards remedying this problem. Whereas the renewable energy industry has the benefit of

the market certainty provided by government targets, the energy efficiency industry is still operating in a world of uncertainty. In order for the industry to invest in new products, research, and in order to stimulate new markets, targets must now be set at both local and national levels.

Investments in domestic sector energy efficiency, to tackle fuel poverty facilitates programmed increases in energy costs across the economy to drive beneficial investment in efficiency and productivity. Work by Templet [9] observes that energy intensity and energy waste are significant predictors of per capita personal income and that higher energy prices are *positively* related to production output. States that waste energy generally tend to have simplified and less diverse economies. Energy waste also generates greater pollution which discourages other businesses from establishing in such an area, reducing diversity and lowering incomes.

It is important that energy efficiency is driven by price as well as technological and other support if it is to deliver emissions reductions as well as additional employment. Otherwise, where efficiency rises it effectively cuts the cost of energy, leading to increased consumption and responding on other goods which may also be resource or energy intensive. This is a particular concern with energy efficiency of vehicles, which has been outweighed by increased use and growing speed, weight and size. This rebound effect is minimized if unit prices rise.

Recycling/resource use

As part of Scotland's drive to increase recycling there are huge opportunities for capitalizing on job prospects both in collection and sorting of waste, and in manufacturing of recycled products. Compared to unsustainable waste disposal options of landfilling or incineration, recycling presents many job opportunities. Incinerating 10,000 tons of waste creates 1 job, landfilling the same amount creates 6 jobs while recycling the same 10,000 tons creates 36 jobs. A report by the think-tank Demos suggested that an intensive recycling programme in Britain would result in 15,000 jobs in collection and sorting and between 25,000 and 40,000 jobs in manufacturing and processing - a total of between 40,000 and 55,000 jobs.[10]

A particular benefit of recycling over single use of resources is that the jobs generated in remanufacture of resources can be created close to where the wastes arise, rather than where primary resources are extracted. Thus for an economy like Scotland's - a net importer of resources- there will be a positive redistributive effect. This can be reinforced as manufacturing industries can also be stimulated to relocate to make use of the new sources of input resource. In other words, the direct job creation benefit of recycling instead of landfill or incineration is only the tip of an iceberg.

The implementation of a number of European Directives relating to waste presents opportunities to develop jobs in Scotland. The Waste Electronic and Electrical Equipment (WEEE) directive provides opportunities in collection, refurbishment and treatment of electrical waste, most of which is currently disposed of to landfill.

Improving resource efficiency is an important component of a move towards a more sustainable economy, however only if overall resource use is controlled as well. Our comments regarding energy efficiency and the rebound effect apply also to resource efficiency.

The net effects of a shift to reuse and recycling is also positive in both national and international environmental justice terms. The injustice of landfills and incinerators close to disadvantaged communities can be reduced, whilst reduced demand for resources whose extraction is environmentally and socially damaging will reduce injustices felt severely by communities in countries like the Democratic Republic of Congo (torn apart by civil war over control of timber and mineral resources) and Papua New Guinea (suffering severe social and health impacts from massive mining operations).

Resource use can also be addressed strategically by efforts to replace products with services. Extended producer liability for products in use and disposal is a key tool for delivering this. The WEEE directive is an example of how progress can be made to deliver such measures in practice. The possibilities of shifts to service are much wider than generally perceived and include possibilities such as leasing of carpets, and chemicals.

Transport

Significant investments in public transport are essential to tackle the growth in the use of vehicles and the resulting air pollution and climate change emissions. This would provide many opportunities for job creation in this sector. Based on UK data it is estimated that 11,000 new jobs could be created in Scotland in public transport.[11]

A report highlighted by the Union International des Transports Publics [12] notes that public transport generates twice as many jobs per passenger kilometer as the car (5600 jobs per billion passenger kilometers by public transport as compared to 2740 by car in urban areas). It must be noted that there is a broad consensus that investment in road construction does not benefit the economy overall, but merely redistributes jobs around the country (as recently confirmed by evidence presented by the Executive at the M74 inquiry).

It is essential that a commitment to green jobs also means reducing support for jobs in environmentally destructive industries. Nowhere is this so clear cut as in the case of air travel. There it is a misplaced assumption that facilitating air travel is good for the economy but economic evidence suggests that in fact easier and cheaper air travel leads to a net loss of spending in the Scottish economy, as Scots' spending overseas outweighs tourists' spending in Scotland.

Agriculture:

Studies show that labour use is on average 10% to 30% higher on organic farms than conventional.[13] Given that 70% of UK organic produce is imported and the UK remains one of the fastest growing organic markets in Europe, with demand

growing at 33% per year, [14] there are considerable opportunities for maximising job opportunities from developing Scotland's organic agriculture sector. Based on data for the UK a report for WWF [15] suggests that 1,200 fte jobs in organic farming could be created in Scotland. The development of GM crops in Scotland would threaten these job opportunities as a result of the risk of contamination and thus loss of organic status for organic producers.

Financial Institutions

This sector is already one of Scotland's economic success stories. But the scope for green jobs in this sector is growing as 'socially responsible investment' (or SRI) becomes a part of mainstream financial practice. This can be further enabled support for corporate accountability measures and by supportive public sector investment policies (such as for local authority and other public sector pension funds).

Voluntary sector

The voluntary sector is often overlooked as an employer. Recent estimates by CAG put the envt not-for-profit sector employment at almost 17,000 in Scotland. To put this in context the motor trade employs less than 45,000, agriculture, forestry and fisheries combined around 57,000, and mining, quarrying and utilities 43,000.

Consistent funding and support for this sector from the Executive could have remarkable multipliers in job creation terms through positive impacts of advise and campaigning on the other sectors listed above.

Question 3 – What further opportunities are there for businesses to use recycled materials in their production processes?

The opportunities for use of recycled materials are only just being tapped. The SISP project is revealing how few businesses have systematically examined their waste management and material sourcing practices to maximize opportunities for reuse and recycling. Tough policies on waste planning and rising landfill/incineration tax would catalyse action and development e.g. of waste exchanges. The first generation of changes are not completed (replacing existing materials) and second (and third) generations of process and product redesign scarcely begun. A Scottish body (a Resource Sustainability Institute for Scotland) should be established to support businesses in moving towards zero waste and emissions through application of principles of industrial ecology

Question 4 – Are there other business opportunities we should explore?

18% of GDP is via central and local government purchasing [16], thus public procurement offers great opportunities to enhance sustainable purchasing, with impacts for specifying environmentally preferable solutions, promoting local producers/suppliers for example to reduce transport distances and thus supporting

the provision of local jobs and local economies. We welcome the recent guidance on best value which clarifies that local authorities are required to consider sustainable development objectives, and that simply pursuing the 'lowest price' is unlikely to contribute to those objectives. However, past experience suggests that such guidance has not always been followed in practice. The implementation of this new guidance must be carefully monitored and the relevant statutory provisions enforced. Practical support should also be provided to ensure rapid dissemination of new best practice.

Procurement policy can also help with development of an holistic approach to green jobs by eg excluding companies which have broken environmental laws from bidding for public contracts for three years; or requiring companies supplying the public sector to undertake environmental and social reporting alongside financial reporting.

Question 5 – Is there sufficient awareness of the support and advice services already available to businesses on resource efficiency.

Awareness is low, not because of a lack of ambition by the service providers but because of the lack of incentive to look for such services that arises from the relative cheapness of energy and other resources for most businesses. In this circumstance, the opportunity costs of seeking and implementing advice (in management time required) outweigh the apparent financial benefits, even where there are cost-effective investments available.

The effectiveness of such services and support in certain European regions, such as Nord-Rhein Westphalen should be used as a benchmark for learning and new aspirations.

Question 6 – How best can we raise awareness in the business community of the savings and productivity gains to be had by improving resource efficiency.

There are some good initiatives in place, ranging from facilities of like the SME toolkit, Business Environment Partnership, industrial symbiosis programme and the work of WRAP. However with a focus on voluntary initiatives and the lack of any strategic framework for resource use in the business sector, akin to the National Waste Plan, fewer opportunities in this sector have been created. The Government's commitments on renewable electricity generation demonstrate that, clear Government targets in conjunction with other business and education support, tougher enforcement of emissions standards to stimulate better thinking on waste and ideally price incentives achieved through ecological taxation can stimulate much more far-reaching business developments.

Supporting business in accessing new opportunities

Q7 – Is there sufficient awareness of developing opportunities

Past experience suggests that a number of opportunities have previously been missed, and therefore it is essential that much greater pro-active planning at an earlier stage would enable Scotland to better capitalise on such opportunities. With fridge recycling/disposal Scotland was ill-prepared to respond to the European obligation and benefit from the job opportunities presented. In the case of the impending WEEE Directive things are more promising as infrastructure is already being put in place by individual companies, aware of the opportunities presented, to deal with this.

Q8 – How can we best ensure that businesses are aware of these opportunities?

Key measures include procurement standards; enhanced dissemination via regulators (planning authorities and SEPA) and measures to insert them into general business education.

Q9 – Are there barriers to businesses wanting to expand into, or start up in, the ‘green’ sectors?

The most severe barriers arise because of the failure to internalize environmental externalities into prices, thus meaning that unsustainable alternatives remain cheap. Unwillingness to fully enforce environmental regulations exacerbates this problem. Further, the voluntary approach of CSR allows greenwash to dominate the market (the theory of asymmetric information explains why cheap greenwash outcompetes more expensive but to the consumer indistinguishable internalization of externalities by companies. As a result dominant market players close off green niches to new market entrants. Poor labeling standards further add to consumer confusion over real impacts of products. As a result high market demand for environmental and social standards, as revealed repeatedly by research into ‘green consumers’ by the Coop bank and others, is rarely translated into genuinely green products.

Q10 – What support do businesses need to overcome these barriers?

Q11 – Are there gaps in existing support?

Q12 – How can Government best support companies wishing to explore these opportunities?

The key measures are effective eco-taxation, and reporting, labeling and accountability standards that allow consumers to act in accordance with their demands for high production standards. The case of tobacco shows how clear labeling needs to be even for products that directly damage the health of the user.

Similarly clear labeling for products that damage the environment is needed. Energy efficiency labelling of appliances has shown good practice can work, although there is a strong case for tougher intervention to eliminate the worst products and raise the floor.

An exciting possibility for stimulating 'green' markets and thus 'green' jobs would be to pilot the development of a 'sustainability loyalty card' using smart-card technology. This would allow consumers to build up points – by consumption choices and good practice eg recycling volumes - that could be cashed in against (for example) green energy or public transport ticket purchase.

In terms of direct support it is critical to look at the whole process of developing and commercializing products and services – so that gaps in funding and support are identified and filled (eg as recently identified in the pre-commercial phase for marine renewables).

A shift to services, and particularly to social market services can be facilitated through support for tools such as timebanks, or LETS. There is massive potential in this arena, with very large local economic multipliers. Such social enterprises can be supported directly and better enabled through reforms in tax and employment rules.

To help guide support in such ways, the measures and indicators of economic activity and wellbeing must be reformed: and in particular GDP growth must be rejected as a gross and misleading guide to the allocation of resources. The phenomenon of 'jobless growth' reveals how unhelpful this measure can be. Research into effective and meaningful indicators of economic wellbeing for Scotland must be a high priority for Executive support.

We welcome the proposal that the Green Jobs Strategy will supplement the strategic direction given to the Enterprise Networks as the 'main economic development delivery agents'. There is a clear role for the Enterprise Networks to be at the forefront of identifying, communicating and supporting the development of new opportunities. We believe that it is essential that the Enterprise Networks be charged with delivering green businesses with sustainable development as core within their remit. We are concerned in this respect at comments from the Enterprise that would wish to disengage from role of promoting social businesses opportunities.

We recommend that the executive revise Smart Successful Scotland in order to ensure that the Enterprise Networks have sustainable development and green business development as a core aim.

Role of Government

Q17 – Are we using the levers at our disposal effectively enough to lead by example and help stimulate demand for the products and services offered by the ‘green’ sector?

Q18 – Is there more we could be doing to stimulate demand?

Friends of the Earth Scotland believes that the potential for sustainable procurement and purchasing by the public sector is much greater than currently achieved, both in the dissemination of current best practice, and in raising the scope and impact of procurement to support sustainable and ethical Scottish businesses. Much more could be done to highlighting good cases, but also to monitor and ensure implementation of existing and new purchasing guidelines.

Moreover government procurement under public-private partnerships and the PFI must be similarly directed to ensure that green jobs are supported,

Measuring Impact

Q19 – Do you agree with our suggested approach – a focus on measuring overall economic impact in terms of growth and sustainability

Q20 – Can you suggest realistic alternatives for assessing the impact of the Green Jobs Strategy?

A focus just on macro-economic indicators would be as inappropriate as a focus only on micro-level ones. Moreover a focus on growth is not compatible with a focus on sustainability.

New indicators clearly need to be added to the suite of sustainable development indicators. Resource productivity indicators should be introduced, but linked to ecological footprint indicators that can relate resource dependency to absolute levels of environmental impact and to the distribution of those impacts, so as to enable assessment of the implications for environmental justice.

Micro- and sector-level indicators should be introduced for specific initiatives as it is often impractical, even with the benefit of expensive econometric modeling, to determine the overall impacts of a particular scheme at the macro level. Moreover, the creation of ‘green jobs’ benefits sustainability even if they are not additional to the economy as a whole, and this gain can be measured at the micro scale.

However we accept that the development of a valid suite of indicators to measure impact is not a simple task, and will require an iterative process of refinement.

Note: FoES is grateful to ACE for its support in helping us prepare this response.

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