



The Social and Economic Benefits of Climate Action

We believe that tackling our unsustainable habits and investing in measures to tackle climate change will not only reduce emissions but can also lead to improved lifestyles, better equality and improved social justice. Our '42% Better' report looks at a range of measures that cut emissions in line with the targets in the Climate Change (Scotland) Act while delivering added social and economic benefits. This briefing looks specifically at three of those measures: the energy efficiency of homes, how we travel, and peoples diets.

Energy Efficiency in Homes

Investments in energy efficiency typically reduce future energy costs so much that they more than repay the initial investment. Investment can also improve public health, bring people out of fuel poverty. Energy efficiency also has significant job creation benefits.

Research in the UK and New Zealand has shown that tackling fuel poverty through improving insulation and providing efficient heating reduces the number of children and working adults taking time off for illness by 15% and 25% respectively.¹ An evaluation of the Warm Front programme in the UK found that interventions to provide people with dry, warm homes and no worries about fuel bills halved the incidence of anxiety and depression ("common mental disorder").² On the basis of this evaluation it can be suggested that eliminating fuel poverty in Scotland would prevent 180,000 cases of common mental disorder each year, as well as directly reducing material poverty.

Improving the energy efficiency of our buildings is also good for employment. Research from the Wuppertal Institute in Germany suggests that energy conservation would generate 370 jobs per TWh, including indirect effects³. This compares favourably to new fossil fuel power stations. According to the developers, the proposed new coal plant at Hunterston would employ 160 people in the long term. Including construction jobs it might create 25 jobs per terawatt hour (TWh) of electricity generated.

An EU study produced for the Energy Saving Trust found that there are three main reasons why investment in energy efficiency has such a positive impact on job creation:

- The manufacture and installation of energy efficiency measures is labour intensive compared to energy supply. This accounts for an employment gain of between 10 to 30 person-years per million pounds spent. And nearly 60 person-years if job creation is made a priority.
- Cost effective energy efficiency measures result in consumers spending additional money in the more labour intensive general consumption sector (where a greater share of spending buys services rather than goods or commodities). This effect can generate an additional 70 person-years per million pounds spent over the lifetime of the investment.

¹ Somerville et al., Housing and health: does installing heating in their homes improve the health of children with asthma?

<http://www.ncbi.nlm.nih.gov/pubmed/11114752>; Howden-Chapman et al., Effect of insulating existing houses on health inequality: cluster randomised study in the community. <http://www.bmj.com/content/334/7591/460.full>.

² Green & Gilbertson, Warm Front, better health – health impact evaluation of the Warm Front scheme: <http://www.apho.org.uk/resource/view.aspx?RID=53281>

³ Wuppertal Institute, Germany. www.kas.de/wf/doc/kas_13931-544-1-30.pdf

There is a Better Way

- Work in the manufacture and installation of energy efficiency measures is accessible to people suffering the highest rates of unemployment given that it is manual labour and distributed across the country. Where programmes are designed to help those in fuel poverty, the work is concentrated in areas where unemployment tends to the highest.⁴

Green Buses

Modern buses – particularly hybrid electric vehicles – emit up to 36% less carbon dioxide than older models, so bringing the bus fleet up to date would clearly have a positive impact on greenhouse gas emissions. In addition, particulate pollution in Scotland's major cities is estimated to cause some 2000 deaths a year, so more reliable buses would reduce the mortality and health costs known to result from air pollution.

The UK bus industry is currently suffering a downturn, with order books reportedly down by 40% compared to the same period in 2009. Alexander Dennis Ltd (ADL), based in Falkirk, is one of the largest manufacturing employers in Scotland's central belt. Approximately half of the firm's 1800 employees are based at the Falkirk plant, and it is estimated that each job at ADL supports another 2.4 jobs within the local community. So altogether, ADL's Falkirk operation keeps over 3000 people in work.

A stimulus package – a bus scrappage scheme if you will – would bring direct benefit to the bus manufacturing industry while benefiting the poorest inhabitants of Scotland's cities who, not having access to a car, rely on buses.⁵ More comfortable, modern buses should also result in greater passenger numbers, with additional benefits for the economy as well as further emissions reductions.

In addition to greener buses, increasing the share of journeys undertaken by walking, cycling and public transport to 50% (the same as in the Netherlands) could cut obesity rates in Scotland in half, with massive savings to the National Health Service in Scotland, which already spends around £170million a year tackling obesity or health problems – such as heart disease - caused as a direct result. Improving cycling rates alone to Dutch levels could save up to 1,600 lives a year as a result of the net health benefits of greater physical activity.⁶

Improved Diet

As suggested above increased physical activity can contribute significantly to improved health and reduced obesity. But the other side of the equation is diet. Diets high in meat, fats and sugar, and low in fruit and vegetables are both unhealthy and environmentally unsustainable. Reducing meat consumption to levels that can be sustained through grass-fed domestic production would have both environmental and social benefits, reflected in the longer term in substantial reductions in required levels of health-care spending. In addition much could be done to improve the quality of food provided by schools and hospitals. East Ayrshire's schools programme offers a good example in this regard, as do school meals in Rome.⁷

Conclusion

This briefing details just three of the policies that Friends of the Earth Scotland believe could deliver greenhouse gas emission reductions while improving public health, stimulating the economy and reducing poverty. We hope you will join us in calling for action on these issues during the next session of Parliament

Francis Stuart

Parliamentary and Policy Officer

fstuart@foe-scotland.org.uk

0131 243 2701

⁴ Energy Saving Trust (2007), Sustainable Energy and Job Creation

⁵ According to the 2001 UK Census 4/5 of the poorest 10% of households don't have access to a car.

⁶ Transform Scotland Trust, Towards a Healthier Economy, <http://www.transformscotland.org.uk/GetFile.aspx?ItemId=108>

⁷ See <http://www.sustainable-scotland.net/conference2008/documents/RobinGourlay.pdf> and <http://www.docstoc.com/docs/54413182/Roberta-Sonnino-C-Creative-Public-Procurement-Lessons-from-Italy--green-food>