

Renewing Our Economy

Proposals
for a
sustainable
recovery

allianceparty.org

The Alliance Party of Northern Ireland
Alliance

Contents

	Introduction	3
1	Energy efficiency	5
1.1	Home insulation	5
1.2	Efficiency in schools	5
1.3	Smart meters	5
1.4	Carbon-zero homes	6
1.5	Social Housing	6
1.6	Green apprenticeships	7
1.7	Rate rebates	7
1.8	A green agri-food industry	8
2	Low-carbon electricity	9
2.1	Large-scale renewable energy schemes	9
2.2	Marine energy parks	10
2.3	Community profit-share	11
2.4	Microgeneration	11
3	Low-carbon transport	12
3.1	Rapid transit	12
3.2	The cycle network	12
3.3	Park & Ride	13
4	Carbon capture	14
4.1	Creating woodland	14
	Notes	15

Renewing our economy

Proposals for a sustainable recovery

Northern Ireland is in recession. We are all in a period of great uncertainty, but also one of incredible opportunities: for change, for new growth, and for shaping our future. We must take advantage of these opportunities, but the Northern Ireland Executive lacks the energy and the innovation to do so.

The Alliance Party has an ambitious vision for a post-recession Northern Ireland. By investing in a Green New Deal, we would place Northern Ireland at the forefront of the low carbon revolution. A revolution that means **new jobs** and **a healthier, cleaner, more comfortable lifestyle** for us all.

Economic growth in Northern Ireland will never look the same again.¹ As an Executive report has just shown, there is **no going back to the 'golden era' decade**, and the current situation **'could hardly be more challenging.'**² Only the Alliance Party, which **continually calls for change where it matters most**, can confront this challenge with the courage to do things differently.

What is the Alliance future?

Imagine clean, quiet, 21st century town centres, where café culture has replaced concrete car parks. Imagine lower bills and a warmer home. Imagine older people no longer worrying about making it through the winter, and schools spending money on teachers and materials instead of wasting it on inefficient light and heating.

With our revolutionised electricity network, your home would be part of an 'intelligent grid' that uses smart meters to pay you for the energy you contribute from your own microgeneration unit. It sounds impossibly distant, but within five years large numbers of households and businesses would be generating their own power.

Our carbon-zero social housing developments would tackle the shortage of social housing and support the construction industry, while new renewables projects and public transport schemes would give us all a cleaner, healthier environment to live in.

Unwavering support for clean-tech innovations and green entrepreneurship would refresh a tired economy based on unsustainable growth.

The result?

More jobs, better jobs, and a role in leading the green revolution. We want Northern Ireland to become a manufacturing hub for clean-tech industries and to make the most of its vast potential as a centre for generating clean electricity from wind, waves and tides.

So what's stopping us?

We have already laid the foundations for economic transformation. Northern Ireland developed the skills, the experience, and, most importantly, the talented workforce it needs during centuries of shipbuilding, manufacturing, and technological innovation.

We already have the funds. Division costs us around £1 billion per annum in public expenditure, as outlined in the Alliance Policy Paper *The Costs of Division*.³ With a unified society, this money would be better spent and every penny would benefit us all.

We also have a share of the extra funding announced in the 2008 Pre-Budget Report and the 2009 Budget, including financing for energy efficiency, rail transport, environmental protection, and low-carbon industry, with a focus on offshore wind. The additional low-carbon and social housing finance available to Northern Ireland tops £85 million, and there will be millions more available from the European Investment Bank.⁴ Other areas of the budget will also provide extra capital, as the government accelerates infrastructure investment to stimulate the economy.

Our Executive can choose how it allocates these additional funds. We do have the power to set our own agenda.

What we lack is a leadership that looks to the future. The Alliance Party is the only party with the will to grasp this opportunity.

Division wastes money, time, and lives. Alliance works – for all of us.

Key Policies

- Undertake a widespread insulation programme to improve the efficiency of fuel-poor homes and every school in Northern Ireland.
- Construct 5,000 carbon zero social homes and support carbon-zero pilot projects.
- Install a 'smart meter' in every home and support local, renewable microgeneration.
- Offer loans to the agri-food industry to help it to reduce carbon emissions.
- Accelerate the industrial development of renewable energy schemes and promote innovation in industry and the universities, particularly in relation to marine energy.
- Construct a more ambitious transport system for Belfast, develop the cycle path network in towns and cities, and build more Park & Ride facilities.

1 Energy efficiency

Less waste, better value

1.1 Home insulation

We would immediately implement a two-year insulation programme for 50,000 fuel poor households and thermally inefficient NIHE homes.⁵

Cost: £62.5m p/a over two years⁶

Saving: £15m p/a⁷

We would ensure that those most at risk are kept warm in winter and have more money to spend on what they need.

This scheme would ensure that those most at risk during the recession are kept warm in winter and have more money to spend on what they need. It would provide work for 50 insulation fitters for two years – along with support staff, 'green apprentices' and other trainees, around 100 new jobs would be created. Manufacturing would be supported through the increased demand for insulation materials, new boilers and radiators, double-glazing, and other construction materials.

1.2 Efficiency in schools

We would carry out an energy efficiency upgrade on every school within five years.

Cost: £40m initial fund⁸

Saving: £3.2m p/a⁹

Our measures would include installing low-energy lighting and heating, improving insulation, and encouraging an energy-saving ethos. We would enforce the recommendation that for each £1m spent annually on energy consumption by an Education and Library Board – or by the future Northern Ireland Education and Skills Authority – one full-time member of staff should be engaged in energy efficiency duties. This programme, alongside our home insulation scheme (*see above*), would create between 300 and 400 new jobs in total.¹⁰

The Alliance would also conduct a feasibility study to establish costs for upgrading the energy efficiency of Northern Ireland's hospitals, and would undertake this as a separate project as soon as possible. The Carbon Trust estimates that huge energy efficiency savings can be made in health care (up to 35% of energy costs for primary care buildings) if the right measures are taken.¹¹ These savings would mean more investment in front line care and the faster modernisation of Northern Ireland's NHS.

1.3 Smart meters

Within the next five years we would install 'smart meters' in every home. These meters are capable of monitoring a household's consumption of electricity, gas, and, in some cases, water. They can also inform the user of the best rates available, based on their own pattern of energy use.

Cost: Between £1.48m and £2.96m p/a over five years.¹² These figures represent 10% of the actual cost, which will be met by government. Industry will meet the remaining 90%.¹³

*Saving: At least £32.5m p/a*¹⁴

Smart meters would be the beginning of the 'intelligent grid' in Northern Ireland. They allow households to see exactly how much they are consuming and to match their energy use to time periods when it costs less. The meters let consumers switch easily to the cheapest energy provider ('supersmart' meters will shop around for the best deal based on consumption patterns) and allow people to see the immediate impact of any energy saving measures they have taken.

1.4 Carbon-zero homes

We support the government target for all new homes built from 2016 onwards to be carbon-zero, meeting Level 6 on the 'Code for Sustainable Homes'.

We would support the building of demonstration homes so that professionals and homeowners alike can see what works and choose the solutions that suit our own climate and landscape.

Low-carbon living is part of our future – the UK government has announced that all new homes must be carbon-zero (ie they must emit zero net CO₂) by 2016. This means significant but welcome change for the construction industry, and in this new, dynamic environment we want Northern Ireland to stay ahead of the game.

To help industry rise to the challenge, we would issue detailed guidelines on the construction of carbon-zero homes and advice on manufacturing the new materials used to build them, such as insulation made from recycled plastic or newspaper. Our aim is that local suppliers will meet local demand, cutting the emissions associated with transportation.

We would draw on relevant experience from across Europe, particularly Scandinavia, to ensure that we became familiar with the most advanced construction techniques before 2016. We would also modernise the legislative framework surrounding planning and construction, making it appropriate for the new low-carbon methods we will be using. Research grants for our universities will play a role in ensuring that our future homes are 'active houses' that use computer technology to regulate their own energy consumption.

We would support the building of pilot projects and demonstration homes in Northern Ireland so that professionals and homeowners alike can see what works and choose the solutions that suit our own climate and landscape. Once we had gained the necessary experience, Invest NI would support local companies in bidding for carbon-zero construction contracts across Europe.

1.5 Social housing

We would address the current social housing deficit by building 5,000 new carbon-zero dwellings, providing accommodation for those who have lost their homes and creating jobs and expertise in the construction and clean-tech industries.

*Cost: £55m*¹⁵

*Saving: £4.5m p/a*¹⁶

We want to fund one of the most ambitious carbon-zero housing projects in the British Isles. With increasing numbers of families at risk of losing their home, it is vital that more social housing is made available as soon as possible. Building new zero-carbon homes will stimulate the market for clean-tech products and allow manufacturers, fitters and construction workers to gain the experience they need to take advantage of future growth in the green economy.

These new homes will be built to the highest standards of efficiency and will incorporate microgeneration devices such as solar panels and ground-source heat pumps so that they meet the highest grade on the 'Code for Sustainable Homes', Level 6.

We would show the private sector that government is prepared to lead the way towards a better quality built environment, stronger environmental protection, and long-term savings for those who live in a dwelling rather than short-term savings for construction companies.

1.6 Green apprenticeships

Our energy efficiency, construction and microgeneration initiatives would be accompanied by a green apprenticeship scheme. It would ensure that people unemployed as a result of the recession are given the opportunity to learn new skills that are guaranteed to be in high demand in the future.

As a result of the recession, a number of apprenticeships have been cut short. We would channel existing training funds not currently being used for traditional apprenticeships towards green apprenticeships associated with our construction and energy efficiency programmes and with the evaluation of homes for their Energy Performance Certificates. With a strong training programme in place to ensure our construction workers and fitters are the most skilled in Europe, we will be able to take advantage of the huge number of green employment opportunities that will be available when the economy recovers.

We must create a new generation of skilled workers to partner the new generation of green technologies, giving people of all ages the chance for a fresh start.

Now is the time to create a new generation of skilled workers, to partner the new generation of green technologies.

1.7 Rate rebates

We support the 2010 introduction of a temporary rate rebate, followed by a permanent rate reduction, for owners whose homes meet Level 4 and above of the 'Code for Sustainable Homes'.

Following the 'polluter pays' principle, we would continue to incentivise measures that support a low carbon economy while reducing what households spend on energy. Rate reductions for those who make their homes more efficient will be supported by green taxes at a UK-wide level. This scheme will ensure sustained demand for skilled workers who are qualified to make homes greener.

1.8 A green agri-food industry

Through Invest NI, we would offer targeted support to the agri-food industry in order to encourage green innovations and the marketing of environmentally friendly food products.

Cost: An extra £20m in low-interest loans to the industry

Northern Ireland will experience greater economic growth in the future if it makes a concerted effort to green its most important industries now.

Northern Ireland should play to its strengths in order to take advantage of the upturn and the expected dynamic growth in the market for green products.¹⁷ The agri-food sector is our largest manufacturing sector, with sales of over £2.5 billion and nearly 19,000 jobs.¹⁸ Food production, distribution and storage accounts for 20% of the UK's greenhouse gas emissions, and so companies expect a marked increase in consumer preference for environmentally friendly products over the coming years.¹⁹

Northern Ireland will experience greater economic growth in the future if it makes a concerted effort to green its most important industries now. We want to see our food products becoming the first choice for consumers with a conscience.



Local cheese for sale at St George's Market, Belfast.

2 Low-carbon electricity

Harnessing our natural resources

2.1 Large-scale renewable energy schemes

We would go far beyond the current Executive in supporting and accelerating the development of the large-scale renewable electricity industry in Northern Ireland. Our measures would include:

- *simplifying and modernising the legislation surrounding renewable energy projects, streamlining the planning process*
- *setting more ambitious targets for generation through on and off-shore wind and marine (tidal and wave) power and using a new banded Renewables Obligation Certificate programme (as introduced on 1 April this year) to help meet these targets²⁰*
- *launching consultations into the use of geothermal power in the Rathlin, Lough Neagh and Larne areas, which have large, accessible geothermal reservoirs²¹*
- *using gas or biomass fired CHP (combined heat and power) generation at industrial sites, hospitals, and suitable large housing developments²²*
- *launching a Northern Ireland research and development centre for renewable energy, for which we would seek EU funding*
- *campaigning for an agreement on knowledge sharing across the EU through an intellectual property bank for low-carbon technologies*

Given our region's abundance of marine and wind energy, failing to give our renewables industry all possible support would be, at the very least, irresponsible. Yet development is still being stifled by complex planning legislation and governmental failure to give industry a stable climate in which to invest for the future.²³ More building activity and less red-tape will create jobs and establish Northern Ireland as a leader in the field of renewable generation, particularly if we are supported by EU funds and expertise. Our innovators should be free to focus on making technological breakthroughs rather than on jumping through administrative hoops.

While our Executive has yet to set new renewables targets, Scotland aims for 50% of its energy to come from renewable sources by 2020.²⁴ Although Scotland's renewables industry is more mature than ours, we believe that our own 2020 target should be a challenging 55%. This would be achievable with the energetic promotion of efficiency measures and renewables that we propose.

Our goal is for Northern Ireland to be a net exporter of clean electricity. As other EU states seek to meet their own 2020 emissions targets, it will become one of our region's most valuable resources.

Our goal is for Northern Ireland to be a net exporter of clean electricity. As other EU states seek to meet their own 2020 emissions targets, it will become one of our region's most valuable resources.

2.2 Marine energy parks

In suitable areas along the coast, we will establish marine energy parks – areas approved for the development of marine energy ‘power stations’. These will ensure that we make the most of our natural assets, with Northern Ireland becoming an international centre for marine generation.²⁵

With ambitious policy making, Northern Ireland, with its incredibly rich marine energy resources, would become an international leader in wave and tidal power generation.

With the SeaGen experimental generator in Strangford Lough, Northern Ireland is already known for its expertise in marine (wave and tidal) energy development, and is currently collaborating on marine renewables projects with the Republic of Ireland and Scotland. With ambitious policy making, Northern Ireland would become an international leader in this area.

One of our priorities is ensuring that our manufacturing industries and universities are at the forefront of marine energy innovation, so that we maximise the economic benefits of a coastline ideally suited to this type of development. As well as creating fully consulted, ready-to-develop marine energy parks, we would ask the UK government to agree new banding for the Northern Ireland

Renewables Obligation scheme. We would award 2.5 Renewables Obligation Certificates per MWh of marine energy instead of 2, providing even more incentive for energy providers to invest in marine energy research.²⁶



The North Coast. Many proposed methods of marine power generation have low visual impact.

2.3 Community profit-share

We will investigate the feasibility of community profit-share schemes for communities in the vicinity of renewable energy projects.

We want those who are directly affected by such schemes, whether wind or water related, to feel the immediate benefits of growth in the green electricity market. This as-yet unfamiliar industry will soon be recognised as one that gives us the positive aspects of industrial development without the usual negative side-effects of air and water pollution.

2.4 Microgeneration

We would increase the level of local microgeneration by making loans available for the installation of photovoltaic solar panels, combined heat and power (CHP) generators, ground-source heat pumps, wind turbines, biomass boilers, and anaerobic digesters.

Cost: £30m in loans to be paid back over time through the 'smart meter' electricity billing system

New technologies make microgeneration a much more attractive alternative than it was ten years ago – for example, photovoltaic cells do not need direct sunlight to generate electricity, and anaerobic digesters now efficiently turn agricultural and food waste into biogas, heat, and odourless fertilizer. With smart meters installed in every home, the intelligent electricity network will make it much easier for households to sell any surplus electricity back to the grid. Many businesses and farms would become energy self-sufficient, with large associated reductions in running costs. Subsidised feed-in tariffs, or the price the owner of the microgenerator is paid for their contribution to the grid, would incentivise their installation.²⁷

In 2008 the Executive, despite high levels of public demand, abolished the Reconnect scheme that had made grants towards the installation of microgeneration devices available to homeowners. Alliance would regain the lost momentum in the move towards decentralised renewables, and we would ensure that our loan scheme was managed more responsibly than recent Executive projects such as the failed Wind Energy for Rural Businesses scheme.²⁸

'Smart meter' managed microgeneration loans will not only lead to more jobs in manufacturing and installation – they will guarantee that microgeneration technologies and the savings they offer are available to everyone, and not just to those wealthy enough to source suppliers and pay for installation.

With smart meters installed in every home, the intelligent electricity network will make it much easier for households to sell any surplus electricity back to the grid.

3 Low-carbon transport

Cheap, clean, convenient

3.1 Rapid transit

The proposed rapid transit system for Belfast does not go far enough. We would construct a much more ambitious light rail network linking all areas of the city to the major dormitory towns.

Cost: £590m, plus the costs of extending the system to nearby towns and increasing the number of routes within the city itself²⁹

Saving: £129m p/a, plus reduced segregation costs and revenue from increased economic activity³⁰

It is shortsighted to settle for a rapid transit system initially incorporating only three routes. To plan for future economic growth and for the international switch to a low-carbon economy, we should put in place a transport system that will properly support the modernisation of Belfast's economy.

An extensive light rail network will:

- make it cheaper and more convenient for people to work in the city centre
- reinvigorate the urban economy as easier access encourages redevelopment
- ensure that people from every part of Belfast have fair and equal access to jobs
- break down social barriers, lowering the cost of segregation

There will be ample return on the government investment through economic growth, accelerated regeneration, a cleaner, healthier and safer built environment, and the greater convenience offered to locals and tourists alike. Such a major project would provide hundreds of jobs during the construction period.

We must also take into account that, in the future, the only sustainable way to fund major road construction will be by introducing tolls. Tolls will keep motorways clear of traffic jams, making them more efficient for those on long journeys and for road freight; public transport will be toll free, making it an even more attractive option.

3.2 The cycle network

We would immediately expand the cycle network in urban areas of Northern Ireland, providing schoolchildren and commuters with a safer, healthier and cheaper way of travelling to school or work.

Cost: £50m, to be diverted from shortsighted road construction projects

Saving: £34.6m p/a plus reduced healthcare costs³¹

With fossil fuel prices set to increase as resources become scarcer and demand higher, cars will become increasingly unaffordable. This will result in financial difficulties for many if our transport network is not reformed. Instead of tying ourselves into expensive and polluting car use for years to come by investing solely in roads, we would support cycling as a healthier and more pleasant way to make short journeys.

Cycle paths make cycling safer, so parents could feel secure letting their children cycle to school. Their construction would create jobs without contributing to the future problems we can expect from more urban roads. On top of this, providing more opportunities for people to cycle will help to address the growing problem of obesity, reducing healthcare costs.

Cycling will bring us cleaner and quieter town centres, with more space for pedestrians and on-street retail and entertainment, benefiting the tourist industry and encouraging town centre regeneration.

Cycling will bring us cleaner and quieter town centres, with more space for pedestrians and on-street retail and entertainment, benefiting the tourist industry and encouraging town centre regeneration.

3.3 Park & Ride

We would construct more Park & Ride facilities at railway stations and bus stops to encourage greater use of public transport. These can be completed relatively quickly and are particularly important during a recession, when people need less expensive transport options.

Park & Ride facilities allow people who live in rural areas to benefit from the public transport system. The recession also offers an opportunity to introduce people to the under-used railway network. We support the construction of a passing place on the Coleraine to Londonderry stretch of railway line, which will permit trains to pass each other going in opposite directions, allowing increased frequency and flexibility of services between Northern Ireland's two principal cities.



A French tram provides fast, comfortable urban transport.

4 Carbon capture

4.1 Creating woodland

We support the Woodland Trust's recommendation of doubling Northern Ireland's woodland cover from 6% to 12%, so that it matches the UK average. But our time scale is more ambitious: we want to achieve this by 2030 rather than 2058, providing Northern Ireland with a vital carbon sink (a means of capturing carbon) and enhancing the quality of our environment.

Woodland gives us better leisure opportunities, greater biodiversity, and makes Northern Ireland a more attractive tourist destination.

Woodland improves our experience of the countryside. It provides us with better leisure opportunities, greater biodiversity, and makes Northern Ireland a more attractive tourist destination. Most of our native woodland has been destroyed, meaning that our percentage tree cover lags behind the rest of the UK and Europe.³² Trees lock away the CO₂ that we emit, preventing it from contributing to climate change, and so helping us to hit our targets for a low-carbon economy.

Accelerating the planting of woodland will create jobs and allow us to put our marginal land to better use. Wood can also produce electricity through wood pellet burners such as the one currently operating in Enniskillen. We would also investigate the possibility of growing more high-value native hardwoods for use in manufacturing and construction. The UK is the world's second largest net importer of forest products (by value)³³, and with consumers concerned about the ethics of much international logging, there may be market opportunities for native timber certified by the Forest Stewardship Council (FSC) as sustainably managed.²⁵



A stream in Banagher Glen, where one of our few pockets of ancient woodland remain.

Notes

1. This has been made clear by the 2009 Budget. The UK has committed to reducing carbon emissions by 34% below 1990 levels by 2020 with the world's first binding carbon budget. Help for the economy to adapt comes in the form of £4bn in new capital for renewable energy projects from the European Investment Bank, and a total of £1.4bn in fresh funding for low carbon industries and green jobs.
 2. *Forecasting Future Skill Needs in Northern Ireland*, Oxford Economics in association with FGS Consulting, for the Northern Ireland Department for Employment and Learning (April 2009)
 3. *The Costs of Division*, The Alliance Party of Northern Ireland (June 2009)
 4. According to the Barnett Formula, Northern Ireland will receive £15.35m of the £535m sum to be spent on energy efficiency, rail transport and environmental protection, and £28.7m for constructing social housing, as announced in the Pre-Budget Report. According to the Budget, we will receive a £40.2m share of funds for supporting low-carbon industry, with the government singling out offshore wind, low-carbon technology development and energy efficiency in homes and businesses as the key beneficiaries. As also announced in the Budget, the European Investment Bank will make available £4bn in capital to UK renewables projects.
- The Barnett Formula is the means by which any changes in UK public expenditure are apportioned to Scotland, Wales and Northern Ireland. Currently, for areas governed by the Formula, Northern Ireland is allocated 2.87% of any funding increase or decrease. For the most part, the devolved administrations have full discretion on how to spend any additional monies they receive.
5. Robin Wilson, an independent researcher and founder of the think-tank Democratic Dialogue, suggests that there are 137,000 NI homes that don't meet the thermal comfort standard (*article forthcoming*). There are 114,400 NIHE and Housing Association dwellings in Northern Ireland. While the Liberal Democrats are proposing to insulate 4.6% of households in England (1m out of 21.73m households – 2006 figures), Alliance would insulate 7.5% of Northern Irish homes (50,000 households from a total of 670,000 – 2006 figures). This higher proportion reflects the higher level of fuel poverty experienced in Northern Ireland.
 6. In the Pre-Budget report, it was estimated that it would cost £2,500 to insulate a single home, so for 50,000 homes this gives a figure of £125m spread over a two-year period.
 7. The Pre-Budget report estimates that those households who benefit from an insulation scheme would save approximately £300 a year through reduced energy bills.
 8. The Liberal Democrats propose an initial fund of £1bn to insulate schools and hospitals in England. Northern Ireland has 5% of the number of schools in England (*Green Road Out Of The Recession*, Liberal Democrats (December 2008)), which suggests that a fund started with £40m would be adequate to kick-start the programme (given that hospitals are not included in our initial scheme). Money saved in the first and subsequent years from reduced energy bills would contribute to the fund for improving the energy efficiency of additional schools and public buildings.
 9. Primary schools each spend on average £6,300 per year on energy, and secondary schools each spend £39,000-£55,000 per year (BRE 2006a). The Carbon Trust estimates that with investment in efficiency measures and behavioural change, 15%-20% energy savings can be made annually, regardless of the size of the school. For Northern Ireland's 873 primary schools and 223 secondary schools (excluding Special, Hospital and Independent schools; figures from the NI Department of Education), this would represent an approximate end-of-programme maximum saving (20%) of £3.2m each year. Note that with integrated schooling, we would need fewer schools, allowing huge savings of both money and carbon emissions.
 10. Construction industry estimates suggest that two fitters can insulate two houses a day. To insulate 50,000 households over two years, with 250 working days a year, would require 50 fitters. The schools insulation programme would require further insulation fitters and, in addition, other skilled workers (electricians, boiler fitters, and so on). Support staff and extra manufacturing work would create almost as many indirect jobs as direct jobs.
 11. The health sector is one of our most significant consumers of energy, with the Carbon Trust estimating that energy savings of 35% could be made from primary care buildings and savings of 20% from hospital buildings. The work involved would be more complex than the insulation of schools or government offices and would require extensive planning.
 12. The Northern Ireland housing stock is estimated at 739,000 dwellings (Housing Statistics 2007-08, Department for Social Development in Northern Ireland), and the cost of installing a meter ranges between £100

and £200 (The Energy Saving Trust; figures based on a UK-wide roll-out).

13. The Energy Retailers' Association has indicated that industry is willing to bear most of the cost of smart meter installation, as the meters will reduce their infrastructure and billing costs in the longer term.

14. Assuming an average annual energy bill (see BERR statistics: <http://stats.berr.gov.uk/energystats/qep221.xls>) of £902 p/a (this is the figure for Direct Debit customers – pre-payment customers pay an average bill of £1049 p/a) and an annual saving of 5% (the Energy Savings Trust estimates that smart meters would reduce the average bill by 5%-10%) we reach a conservative figure of £32.5m p/a in savings (for a housing stock figure of 720,000, assuming some vacant/second homes) once all the meters are in place.

15. 60% of construction costs, or £11,000 per dwelling, would be government funded. The Liberal Democrats allowed £10,000 per dwelling to meet 60% of costs; we allow an extra £1000 per dwelling to cover the extra cost associated with upgrading the buildings from the Liberal Democrat aim of Level 5 on the "Code for Sustainable Homes" to the highest level, Level 6. Our estimate for the necessary extra allowance is based on *A Cost Review of the Code for Sustainable Homes*, a report compiled by Cyril Sweett for English Partnerships and the Housing Corporation (February 2007).

16. Carbon-zero dwellings generate as much power as they use. This is possible because they are extremely energy efficient – they are intelligently designed to recycle heat so that a minimum is lost, and so that any heat available from the immediate environment can be captured. They are also very well insulated, fitted with energy efficient appliances, and use a minimum amount of water. Those who live in carbon-zero dwellings will therefore not have energy bills. If the average energy bill is £902 per year (see note 11 above) then for 5000 carbon-zero households, savings would be around £4.5 million each year.

17. Northern Ireland is already well-placed to become a leading exporter of green food products, particularly given the positive market associations that exist between Ireland and clean, green, rural environments. Innovations such as hard-wearing grass varieties that allow livestock to winter outdoors will reduce costs for farmers and decrease emissions. Using cutting-edge energy efficiency technology will help to give our industry a competitive advantage in a tough market. 'Today, green products and services are only a niche market, but they are poised for strong growth. Already, 33 percent of consumers say they would pay a premium for green products, and 54 percent care about the environment and want to help mitigate climate change. Entry into the green market can also improve a company's reputation, thereby increasing the value of its brands.' – 'Helping "green" products grow', Sheila M. J. Bonini and Jeremy M. Oppenheim, *The McKinsey Quarterly* (October 2008)

18. See <http://www.northernireland.gov.uk/news/news-deti/news-deti-july-2008/news-deti-230708-new-industry-advisory.htm>

19. See http://www.wrap.org.uk/retail/food_waste/index.html - much of the emissions from food are caused by food waste, although there are still significant cuts to be made from production and transport. See also The Carbon Disclosure Project's Information Request ('UK Companies See Major Opportunities Coming From Climate Change', Carbon Disclosure Project (October 2008)).

20. The Renewables Obligation is the UK government's mechanism for incentivising the generation of renewable energy. Energy providers are required to source a certain percentage of their energy from renewable sources, with the proportion increasing as time goes on. If they don't receive a certain number of Renewables Obligation Certificates (ROCs) from the purchase of green energy, they must pay an equivalent amount into a fund, the proceeds of which are paid back on a pro-rated basis to those suppliers that have purchased the correct number. Banded ROCs give more value to energy from certain sources, thus offering greater support to more experimental technologies. For example, in Northern Ireland providers currently receive one ROC for every megawatt hour of wind energy they use, but two for the equivalent amount of wave or tide energy. Therefore by using the less developed tidal energy, providers can hit their renewables target with half the number of megawatt hours. In the Pre-Budget Report it was announced that this scheme had been extended by 10 years to 2037 to increase investor confidence in renewables.

21. According to a report that the Department of Enterprise, Trade and Investment has chosen not to publish. See 'Ground Energy: Report Buried', Noel McAdam, *The Belfast Telegraph* (30 December 2008) at <http://www.belfasttelegraph.co.uk/news/environment/ground-energy-report-buried-14122873.html>.

22. CHP typically achieves efficiency levels of over 80% because, being locally situated, it avoids the losses from waste heat and transmission associated with conventional power stations. This method is particularly suitable for hospitals or large industrial installations that require heat year-round. For every unit of energy produced, emissions levels are less than 50% of those associated with a conventional coal-fired power station. Use of CHP

offers significant financial savings and is one of the cheapest low-carbon generators to install.

23. It is a great shame that the UK, one of the wealthiest EU states and the state with the most abundant sources of renewable energy, currently generates so little of its power from renewables and has a comparatively conservative 2020 target of 15%. See www.energy.eu.

24. See Scotland's renewables policy at <http://www.scotland.gov.uk/Topics/Business-Industry/Energy/19185/17612>.

25. The purpose of a marine energy park programme is to ensure that suitable areas are identified and all necessary consultation and planning procedures undertaken by the government. This accelerates their subsequent development by private companies. We would liaise with both the UK government and the Crown Estate, which is the body responsible for administering the seabed around the UK, to ensure that Northern Ireland makes the most of marine energy opportunities.

26. The formation of marine energy parks would mean that rapid progress could be made in the marine energy field, but nevertheless our consultation procedure would ensure that full consideration was given to the impact on industries such as fishing and tourism, as well as on the environment. *For information on ROCs, see note 21 above.*

27. It is projected that feed-in tariffs should be up to 6 times the price paid to industry per kWh, that the tariff would decrease as microgeneration technology becomes less expensive, and that they would be funded by government auctions of carbon emission permits under the EU Emissions Trading Scheme (ETS). A microgenerator is defined as one which has a capacity of less than 50kW.

28. See the *Review of the Wind Energy for Rural Businesses Project*, Department of Agriculture and Rural Development (December 2008), which identifies several serious failings in the implementation of this project. It was funded by the EU, and provides an example of how the Executive often fails to make efficient use of EU grants.

29. According to the feasibility study commissioned by DARD from Atkins and KPMG (published April 2008), a light rail system would have capital costs of £590m. The report did not find that demand would be sufficient to support a light rail system; however, given the lead times for the project and the challenging emission reduction targets facing us, it would be unwise to tie Belfast into such a low-volume mass transit system. Behavioural change or new legal restrictions aimed at reducing carbon emissions could produce much greater passenger demand. Northern Ireland must be ready to accommodate dramatic lifestyle change.

30. A commuter who travels from the greater Belfast area into the city centre five days a week using public transport instead of their car makes an approximate average annual saving of £1890.30 (see the Department for Regional Development press release, '16 September 2008 - Transport Minister urges employers to help tackle congestion'). The total number of people commuting into Belfast in 2015 is expected to be 91,000 ('Development Brief: The Demand and Supply of Skills in Belfast', Belfast City Council (November 2008)). If 75% of the total number of commuters uses the light rail system, these commuters will save a total of £129m per year.

31. Given that a motorist can save almost £1500 a year by taking public transport instead of their car for a 3 mile round trip commute into Belfast City Centre, it could be expected that a cyclist would save £2000 a year doing the same journey (assuming that £500 of extra savings would be made on transport fares). If 10,000 more schoolchildren cycled to school instead of being driven, and 10,000 more employees cycled to work instead of driving, then commuters could expect to save a total of £34.6m per year. This estimate takes into account school holiday periods.

32. While 12% of UK land is wooded, this compares with an average of 44% in other European countries (*A Vision for Woodland in Northern Ireland*, The Woodland Trust (2008)).

33. Figures for the import of forest products from *Making a Lasting Impression: The Impact of the UK's Wildlife Trade on the World's Biodiversity and People*, Carol Inskipp for WWF/TRAFFIC (May 2003) – more recent figures were not available at the time of going to press. The total value of UK wood product imports in 2007 was £2.6 billion, with pulp and paper excluded (*UK Wood Production and Trade (Provisional Figures)*, Forestry Commission (May 2008)).

Disclaimer: All figures given in this document and used in the calculations outlined above are approximate, based on the limited information available in the public domain. The Alliance Party of Northern Ireland quotes all figures in good faith.

Published in June 2009 by The Alliance Party of Northern Ireland
88 University Street, BELFAST, BT7 1HE
028 9032 4274
alliance@allianceparty.org

www.allianceparty.org

Design by Saltline Graphics