



FUTURE-PROOFING THE NATIONAL DEVELOPMENT PLAN

Proposals on how the National Development Plan 2007 – 2013 can help Ireland to tackle climate change

5 January 2007

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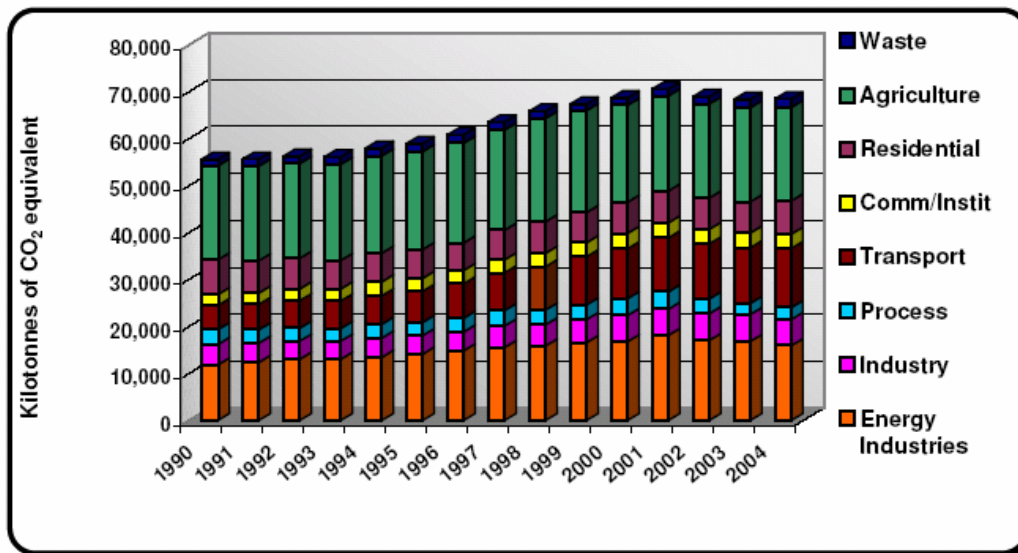
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1 The real cost of climate change

Climate change is the greatest challenge mankind has ever faced. Ireland will have no immunity from the effects of climate change if left unchecked: its economy will be crippled, its society devastated. Yet this country, which has in the recent past faced and overcome challenges such as mass unemployment and a crippling national debt, has so far completely failed to make the crucial changes needed to avert disaster.

Table 1 shows the main sources of Irish emissions. Agriculture remains the largest sector accounting for 29.6 per cent of emissions. However our emissions from the energy sector (23.2 per cent) are once again increasing ahead of our use of energy and emissions from the transport sector (18.4 per cent) are growing rapidly out of control.

Table 1: Relative contributions to greenhouse gases by sector 1990- 2004



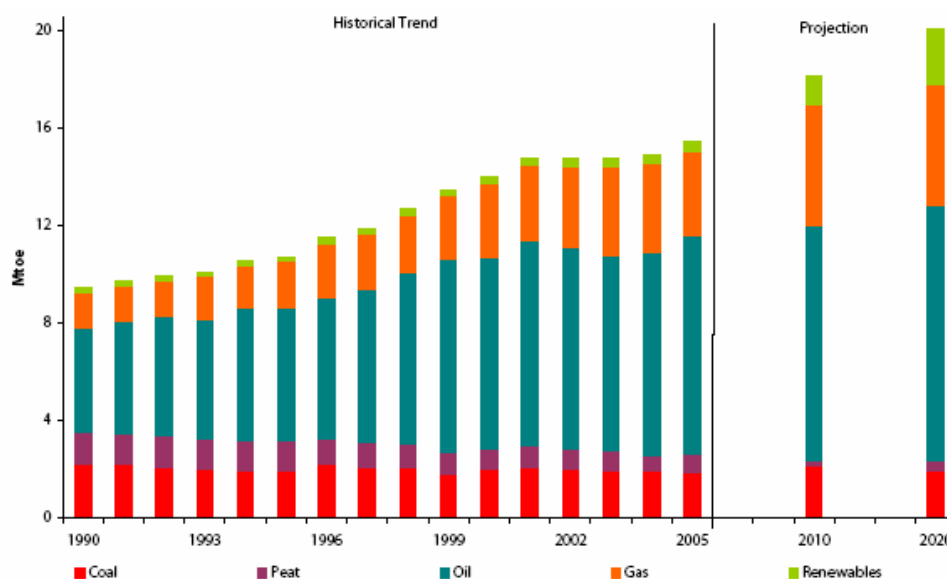
Source: EPA

At the recent UN climate change negotiations in Nairobi Ireland committed, under a European Union Initiative, to reduce emissions by at least 15 per cent below the 1990 levels by 2020. However our emissions are still increasing and are likely to be 30 per cent above 1990 levels by 2010. To reach our 2020 target we will then face the monumental task of having to reduce emissions by at least 35 per cent within just a decade.

Buying our way out of that kind of emissions reduction through the purchase of carbon credits will not be an option. At conservative market price estimate of €20 per tonne of carbon, our current level of excess emissions would cost us half a billion euro per annum.

The bill is likely to be higher still as official projections see Ireland's energy and transport emissions *rising* by 30 per cent – not falling – as we move towards 2020. (See Table 2) This would add to the cost of failing to address climate change a bill of at least an additional €250m per year.

Table 2 Total Primary Energy Demand forecast to 2020



Source: Sustainable Energy Ireland, December 2006

The Government is refusing to admit the scale of the problem. It has been unwilling to look beyond the first Kyoto commitment to 2012 because doing so would highlight the failings of current policy. Although Ireland has signed up to longer term cuts at EU Heads of Government meetings and at the UN negotiations, the Irish Government has failed to set such long term targets at home.

The Government's Energy Green Paper contains no long term commitments, while the Climate Change Strategy review fails to commit Ireland to the radical reductions which the scientific community has clearly said that we now have to make. Fianna Fail and the Progressive Democrats are leaving it to a future Government to tackle the problem. By delaying our response they are leaving Ireland with a much more difficult and more expensive task. The Stern Report has shown it makes economic sense to introduce actual reductions in emissions sooner rather than later.

The Stern report also means the Government can no longer be either ignorant or in a state of denial about the issue. What we are seeing instead is a deliberate and dishonest avoidance of responsibility.

The investment decisions that Ireland will make in the next National Development Plan (NDP) will determine much of our emission levels in the next decade and whether we will be able to make even deeper cuts later on. It is vital that the NDP is designed in a way which meets this climate change future.

The Green Party in Government will insist on changes to the plan to help reduce emissions and cut the future cost of combating climate change in this country.

2 The costs arising from the first National Development Plan

The economic costs of climate change are already being felt by Irish taxpayers and companies. Some €290 million of Irish taxpayers' money has been set aside to pay our climate change bill for the period that ends with the first phase of the Kyoto protocol in 2012.

The real cost could be a multiple of this amount. The Government is banking on the price of carbon staying low on international markets and on Ireland achieving some reductions as a result of the latest revised Climate Change Strategy (see Appendix 3). Unfortunately, neither assumption is likely to hold up: The EU is now amending the trading rules to push up the price of carbon on the emissions trading market. The Government's forecasted reductions under its strategy include hypothetical cuts in transport emissions whereas, in reality, the level of these emissions is actually increasing by eight percent per annum.

The Environmental Protection Agency (EPA), in its 2003 Climate Change Scenarios for Ireland report, shows that climate change is already starting to bring real cost implications as a direct result of changing weather patterns. As well as the cost from carbon trading we will face environmental and economic costs from changes to our agriculture and forestry systems, and from flooding in low-lying areas.

The last National Development Plan 2000-2006 was a great opportunity to steer Ireland in a more sustainable direction. However, the €57bn that was spent often went to projects that delivered increases in emissions. We have built infrastructure that will cost us dearly in the long run when the cost of fossil fuels and greenhouse gas emissions are certain to rise.

There was a major spending imbalance in favour of roads over public transport. This helped transport emissions to rise some 150 per cent over the last 15 years. Last year capital expenditure on roads was six times that of spending on public transport. Under the last National Development Plan we spent €10.5bn on housing but failed to insist on proper energy efficient building standards. We start the new plan period with the Minister for the Environment still unable to introduce even the most basic energy labelling scheme for all new homes.

3 The failure of the first National Climate Change Strategy

The National Climate Change Strategy 2000 was meant to reduce emissions but the scorecard below shows how none of the actual commitments were met.

Irish Target

“As part of the EU target, Ireland has agreed to limit the growth in greenhouse gas emissions by 13 per cent above 1990 levels”

Status – Ireland’s emissions are running at 23 per cent over 1990 levels – and rising

Taxation

“Appropriate tax measures, prioritising CO2 emissions, will be introduced from 2002 on a phased, incremental basis across a broad range of sectors and in a manner that takes account of national economic, social and environmental objectives”

Status – A carbon tax was promised and then dropped

Energy

“Measures supportive of ceasing coal use at Moneypoint by 2008“

Status – Proposal dropped, the carbon intensity of our electricity rose in 2005

Transport

“Further rebalancing of VRT and annual motor tax to favour more fuel-efficient cars”

Status – Not achieved, postponed until 2008 at the earliest

“Fuel efficiency, demand management and modal shift in transport”

Status – Average car fuel efficiency has decreased, and there has been no new demand management measures nor a pronounced modal shift

“Fuel economy labelling for all new cars“

Status – labelling handed over to SIMI (Society of the Irish Motor Industry)

“Restrictions on out-of-town retail units”

Status – Government welcomes Ikea to the M50

Agriculture

“Development of short-rotation biomass and anaerobic digestion of animal wastes for energy generation.”

Status – Practically non-existent

Built environment and residential sector

“Improved spatial and energy use planning – (Residential Density Guidelines, the National Spatial Strategy, Strategic Planning Guidelines).”

Status – Watered down, and undermined by decentralisation programme

“Sustainable building will be encouraged through adjustment of the New House Grant to require that standards of energy efficiency are met, and support for low energy projects in all categories of housing.”

Status – Not Achieved

“For pre-1991 building stock, energy rating will be introduced; in the case of local authority housing, schemes to upgrade the stock will address energy efficiency and focus on alleviating fuel poverty where appropriate.”

Status – not Achieved

3 Climate proofing the next National Development Plan

The Green Party in Government will be insisting that all Government policies go through a process of 'climate change proofing', but we are particularly concerned that the NDP – with its tremendous potential to impact across a wide range of large public sector investment projects – be properly drawn up and monitored to lessen its effect on climate change.

The model of 'climate change proofing' being used by the World Bank Global Environment Facility and being promoted by the Asia Development Bank could be used here. All NDP investments would have emissions allowances and reduction targets which would be closely monitored throughout the lifetime of the plan.

The Asia Development Bank commissioned a series of case studies on climate change proofing and its conclusions were published in 2005. Major findings include:

- (i) For capital infrastructure projects climate change proofing should be incorporated at the design stage and should become part of the process of Environmental Impact Assessment at project level.
- (ii) National Strategic Development Plans should be proofed to enhance "adaptation". Investment decisions must consider climate change impacts and be adjusted accordingly to reduce the need for adaptation at a later date. This will mean taking into account impacts of flooding on road building or housing projects and incorporating higher levels of rainfall into the design parameters. We need to ensure drainage systems have the capacity to deal with higher levels of rainfall and that we do not divert rivers or build on natural floodplains.

PRACTICAL PROPOSALS

We would modify our National Development Plan in five crucial investment areas.

TRANSPORT

We will alter NDP investment priorities to favour public transport. We believe this will also achieve a higher social, economic and environmental return. We also need to reduce the actual demand for fossil fuel-powered transport and increase the share of zero carbon transport by promoting walking and cycling through better planning of urban areas. We would also provide safe routes to school programmes for every school in the country under the new plan.

ENERGY

We will propose the introduction of a mandatory percentage bio-fuel requirement on all fuel oil suppliers to replace the existing tax exemption scheme.

We would introduce a similar scheme to that which exists in Denmark, whereby any energy efficient measures for a public building, which can be shown to have a payback period of less than five years, will automatically be agreed for approval.

We will support the introduction of a new smart electricity metering scheme in every house in the country which will allow households to switch off unnecessary electrical devices during expensive peak electricity demand periods and sell back to the grid any surplus electricity generated from their own renewable micro generation units.

We would extend the feed-in fixed price tariff support system to off-shore wind, wave and tidal projects.

BUILDINGS

The Green Party will insist that all new building projects carried out under the new National Development Plan meet new higher energy efficient standards. These will set heating demand and carbon emission levels 60 per cent below existing standards and will require a 30 per cent renewable component in any heating system. Green Party councillors are already introducing such standards in local area plans in Fingal, Dun Laoghaire and Wicklow.

We would introduce a new National Insulation Programme especially targeted at older homes where the unnecessary loss of heat energy is highest. If all houses built before 1970(541,553) cut their emissions by 10 per cent, there would be a CO2 reduction of 444,000 tonnes of CO2 emissions each year.

The EPA Progress Report (2003) on the implementation of the National Climate Change Strategy states that there are 415,000 buildings in the non-commercial public sector, 650 of which are of a "significant size" with emissions estimated at 2.9Mt per annum. A 10 per cent cut in emissions from this building stock would reduce our Kyoto overshoot by .29Mt per annum.

We will promote the inclusion of alternative energy systems such as combined heat and power, district heating, solar and other renewable heating systems into the design of all NDP social housing and other public building programmes from the outset.

PLANNING

We need to amend the National Spatial Strategies to ensure that new infrastructure development is concentrated in a smaller number of central locations that can provide a real alternative location for investment away from the Greater Dublin area.

We will introduce a new requirement that all NDP projects be analysed in terms of climate change contributions and impacts. This should be built into the EU Environmental Impact Assessment (EIA) process.

We would require all NDP supply and works contracts to be subject to Green Procurement Guidelines based on energy efficiency and CO2 reduction across the board in all relevant contracts. It is important that strict Green Procurement Guidelines apply to the NDP so that all contractors, particularly those dealing with the supply of building materials, lighting, heating systems and insulation materials, are in compliance.

The EU's Sustainable Development Strategy requires that Member States introduce Green Procurement Guidelines by the end 2006. Ireland is lagging behind on this issue. Although there are approximately 450 purchasers across all government departments, there is no single policy or lead agency currently in place to deal with this issue within the public sector. We would appoint a single agency with the responsibility for ensuring that all NDP spending meets green guidelines.

RESEARCH AND INNOVATION

We want to set aside 5 per cent of the NDP to establish a new innovation fund that would support tangible products, services and technologies in new and emerging environmental market areas. Providing funding to support product and technological development will provide a 'double dividend'. Increased business opportunities will be available for Irish export companies and by improving products and services, Irish companies will have the means to reduce emissions and consequently their exposure to CO2 costs into the future.

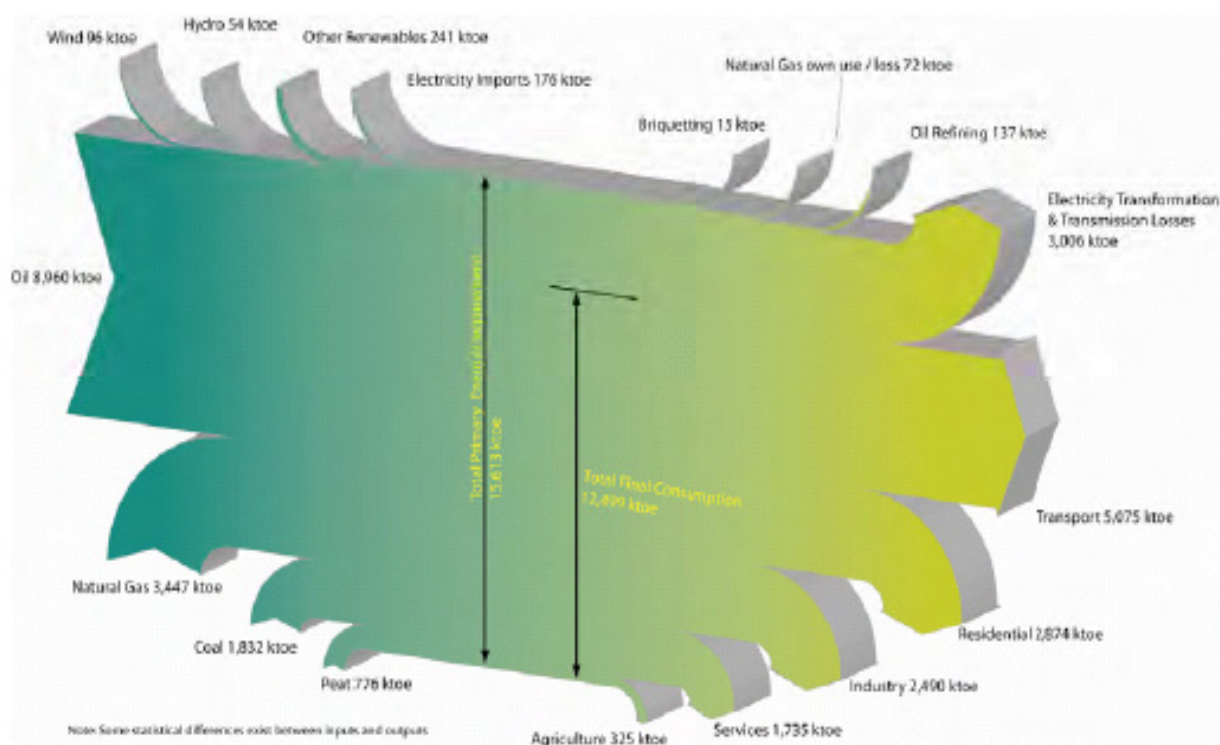
Currently research and development expenditure from the state in the energy area is processed through Enterprise Ireland, the Higher Education Authority, the IDA and the Department of Communications Marine and Natural Resources Energy Research Council. We want to see co-ordination in such investment. We would also mandate Science Foundation Ireland to invest in renewable energy and energy efficiency research. We also need greater co-operation between universities and industry from the early stage of new research projects to ensure that all developments have the fastest possible commercial application.

APPENDIX ONE

ENERGY STATISTICS 2005

The annual publications from the Sustainable Energy Ireland statistical unit provide an excellent up to date picture of Irish energy emissions. The following are extracts from their 'Energy in Ireland 1990 -2005' document published in November 2006.

TABLE 3 Flow of Energy in Ireland 2005



Energy use in Ireland increased by 3 per cent in 2005 while energy-related carbon dioxide (CO₂) emissions increased by 3.2 per cent signalling a re-coupling of energy and CO₂ emissions. The factors contributing to this re-coupling include:

- 73 per cent increase in peat consumption in electricity generation
- 9 per cent reduction in gas consumption in electricity generation
- 5.6 per cent increase in electricity end use

Energy-related CO₂ emissions by industry increased by 5.7 per cent in 2005

Transport primary energy growth in 2005 was 8.2 per cent.

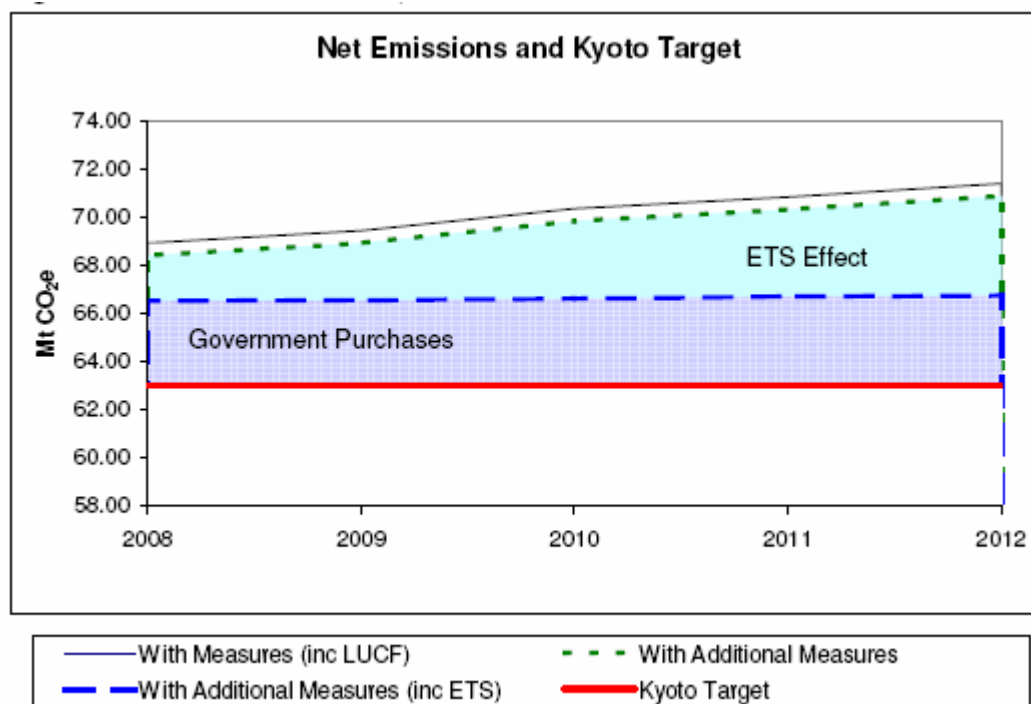
Electricity generation from renewable only accounted for 6.8 per cent of gross electricity consumption in 2005.

Ireland still imports 90 per cent of its energy supply needs and continues to be highly dependent on oil, a significant CO₂ generating fossil fuel. 57 per cent of the fuel mix in Ireland is being met from oil.

APPENDIX TWO

NATIONAL ALLOCATION PLANS AND EMISSION TRADING SCHEMES

The following table from the EPA highlights the relative scale of carbon trading that both the Government and the companies involved in the European Emissions Trading system will have to engage in to the end of the first phase of the Kyoto Protocol in 2012.



Source: Ireland's national allocations plan 2008-2012

The Government's second National Allocations Plan for the Emissions Trading Scheme (ETS), for the period 2008-2012, was published in July 2006. Even with the abatement measures and with the GHG emission limit allocations in place for high energy users under the emissions trading scheme, Ireland will still have an emissions overshoot of nearly six metric tonnes per year.

APPENDIX THREE

EMISSION REDUCTIONS IN THE REVISED CLIMATE CHANGE STRATEGY

The following reductions in greenhouse gases are projected to occur as a result of measures to be contained in the Government's Review of the National Climate Change Strategy, which was put out for public consultation in July 2006

Measure	Average annual reduction 2008-2012 Mt
CAP Reform – full decoupling	2.40
Afforestation	2.08
Renewable Energy Directive ⁶	1.30
Landfill Gas power generation or flaring	0.70
EU/ carmakers voluntary agreement	0.48
Building Regulations Part L & EPBD ⁷	0.30
Dublin traffic measures (e.g. Port Tunnel)	0.27
Biofuel excise relief	0.25
Implementation of Landfill Directive	0.06
Modernisation of natural gas network	0.06
Motor taxation / fuel labelling	0.05
Total	7.95

Measure	Average annual reduction 2008-2012 Mt
F-Gases Regulation	0.024
Leakage reduction at large surface sites on natural gas distribution network	0.027
Landfill anaerobic digestion with methane decomposition	0.267
Landfill Methane capture with usage as fuel	0.197
Commercial BioHeat Boiler Deployment Programme	0.160
Greener Homes Scheme	0.020
Integration of land-use planning and transport investment	0.075
Promotion of eco-driving in road transport	0.130
Total	0.900

Source: National Allocations Plan 2008-2012, July 2006

APPENDIX FOUR

DETAILS ON HOME INSULATION FOR PRE-1979 HOUSING

Source ESRI, 2003, Irish National Survey of Housing Quality.:

	Number of houses	No wall insulation	per cent	Has roof insulation	per cent
Housing built before 1970	541,553	309,953	57 per cent	366,565	68 per cent
Housing built between 1971-1990	386,900	46,428	12 per cent	344,341	89 per cent
Local Authority			18 per cent		72 per cent

Average emissions per dwelling in 2004 was 8.2 tonnes CO₂. If all houses built before 1970 (541,553) cut their emissions by 10 per cent, there would be a CO₂ reduction of:

- Emissions in 2004 of 541,553 pre 1970 dwellings: 4,440,734.6 tonnes
- 10 per cent of 4,440,734 tonnes = 444,073 tonnes

Thus, a scheme that cut the emissions by 10 per cent for dwellings built before 1970, would cut emissions by 444,073 tonnes per annum – a 12 per cent reduction of our CO₂ overshoot.

If all houses built before 1979 (761,503) cut their emissions by 10 per cent, there would be a CO₂ reduction of:

- Emissions in 2004 of 761,503 pre 1979 dwellings: 6,244,325 tonnes
- 10 per cent of 6,244,324.6 tonnes = 624,432 tonnes

Thus, a scheme which cut the emissions by 10 per cent for dwellings built before 1979 would cut emissions by 624,432 tonnes per annum a 17 per cent reduction of our CO₂ overshoot.