ENERGY:
The Future for Ireland

Get used to it. The era of constant growth is over, by John Gibbons, with other articles on energy security in a changing world.

Bi-annual magazine of An Taisce, The National Trust for Ireland
A message from our Chairman
Charles Stanley-Smith

For the past 10 years An Taisce has been calling for the provision of an ‘Environmental Pillar’ in Social Partnership and continues to work with member groups of the Irish Environmental Network to ensure that this happens. At the time of writing Social Partnership is on hold and it may seem odd that we are still trying to put the Environmental Pillar in place but in these times of economic crisis it is important that the voices of the Environment are heard.

We are using and polluting the earth's natural resources at an alarming rate and we must ensure that those steps taken to handle the economic crisis do not exacerbate the ecological crisis.

In the first nine months of this year the human population will use more natural resources than the Earth can replace in a whole year. In the same nine month period it will also generate more pollution than the Earth can absorb in a whole year. In Ireland we will use our fair share by the 1st May.

With little exception, the Government and the other Social Partners ignore this and the Irish press ridicule anyone warning of this crisis as they ridiculed those like An Taisce that warned of the madness of the developer led and Government stoked frenzy of the last 8 years.

The Environmental Pillar will work with the other Social Partners to help guide how Ireland positions itself to prosper in the 21st century. If the Government simply reinvigorates a growth economy of 5% per annum, it will mean that our overuse of resources will continue and will double in 14 years. Do we really need to return to that level of growth or can we shift to a ‘Smart Green Economy’ that is based on renewables rather than resources, on proper planning and a population that is seeking a better quality of life.

We cannot return to the world-wide ‘Pyramid scheme’ that saw us living ‘High on the Hog’ on resources that belong to future generations and we will work with the Government and other Social Partners to help them with pragmatic solutions that ensure that we do not continue using and abusing our future generations.

An Taisce’s AGM. Notice of Meeting.

In accordance with section 11b of our Constitution, we are taking this opportunity to announce the An Taisce AGM in The Tailors’ Hall Dublin on Saturday 13th June 2009.

Notice of any motion proposed to be made at a General Meeting shall be delivered to the Honorary Secretary of the Company thirty clear days before the meeting at which the motion is to be proposed and shall be circulated with the notice convening the meeting. Such notice shall be signed by the Proposer and one Seconder, being Members of the Company, and no motion shall be entertained by a general meeting unless notice thereof has been given as aforesaid. Further announcements will be circulated to members in due course.
EDITORIAL

JUDY OSBORNE

Following the theme of the last magazine (summer 2008) which focused on the failure of an unregulated economic system and the lack of environmental consideration, this magazine focuses entirely on energy and how its supply and demand impact on every aspect of An Taisce’s work.

A number of articles feature the experience of our heritage officer regarding proper planning and development, a dispersed spatial pattern and unsustainable transport policies. In the area of the natural environment we see the impact of wind farms in bogland and the need to consider environmental assessment to ensure there are no unintended consequences. An Taisce’s Property Department have been walking the talk and ensuring our own property develops good energy conservation and a number of pieces from the education Unit illustrate the success of our projects in bringing our message to people through schools and the wider community.

If, as a nation, we don’t get energy policy right – if we don’t bring environmental awareness into every aspect of economic and social planning we will not emerge from the current shakeout in a fit state to enjoy any quality of life in the 21st century. It is this understanding that An Taisce, as part of the Irish Environmental Network, hope to bring to a renewed Social Partnership, and it is to support others who share this view that we have recently appointed a Local Association Officer Abby McSherry, who will be visiting every area of the country offering professional support and training to members. But more of this and all the Local Association news in the upcoming Annual report that comes with the AGM in June.

AN TAIisce MAGAZINE SPRING 2009

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Front Cover: Courtesy of SOMO consortium, a project of international cooperation between ESA and NASA.
ENERGY SUPPLIES

ENERGY
our future...

REPORT BY IAN LUMLEY

The current recession has produced a wave of pundits and economists putting forward solutions. Almost all of this fails to recognise that global economic models have resulted in accelerated resource consumption and adverse impacts, principally greenhouse gas generation which cannot continue.

A global economic slowdown - particularly in economic output from China - will slow down the level of anthropogenic greenhouse gas emissions relative to recent years but the fundamentals of the current unsustainable growth model and resulting generation of greenhouse gas emissions and other adverse impacts remain. There is a serious concern, not just in Ireland but globally, at a short-termist approach of propping up existing patterns of production and consumption, such as car use.

Remarkably, there is now a coherent consensus between the global scientific community and the environmental movement that the future requires radical decarbonisation of energy and transport, reversal of global deforestation and reduction in the impacts of agriculture, particularly for meat production. Indeed, the point has been reached where it is no longer tenable to consider the understanding of an environmental issue or environmental group secondary to the progress of 'development'. The environmental argument now represents the overriding consideration of achieving sustainable development.

Irish has a particular challenge because of its high per capita greenhouse gas generation in agriculture, power generation, consumption and transport so what should be the investment priorities?

Ireland is almost entirely dependent on imported fossil fuel for energy. This is compounded by inefficient power generation and car dependent transport contributing to unsustainable per capita emissions at 17 tonnes CO2 equivalent per annum. The scientific consensus is that global per capita emissions will have to be reduced to 2 tonnes and possibly under 1 tonne per capita by 2050. To put this in context, the coal burning power plant at Moneypoint produces 5 million tonnes of CO2 emissions per annum – more than 1 tonne per capita. 50% of Irish electricity generation is from gas but this is almost as bad generating 60% of the greenhouse gas generation levels of coal burning stations per kilowatt of energy.

The current Minister for Marine & Communications is seeking to achieve a level of renewable energy in excess of 30% or even 40% by 2020 but the required legislation, including alteration to the remit of State bodies such as Bord Gáis, has not been put in place. It makes little sense to have vague policies to promote ambitious renewable targets if the actual remit of the individual players in the power generation sector is not legally redefined to reflect this.

THE POTENTIAL OF GAS

Last year, An Bord Pleanála approved a 450MW combined cycle gas turbine (CCGT) power plant for the Quinn Group in Toomes, Co Louth, which would produce 1.4 million tonnes of CO2 emissions, adding 2% annually to national levels. CCGT is an outmoded form of power generation, dependent on finite natural gas resources, and wastes enormous heat as well as generating significant emissions. There are several other major CCGT power stations currently proposed lodged in the planning process as strategic infrastructure, including another proposal by the Quinn Group for a 450MW CCGT plant at...
Current Irish energy strategy may be summarised as a lot of talk about wind and renewables, while at the same time allowing a new generation of inefficient CCGT gas plants locking Ireland into long term supply and price unpredictability of imported gas, as well as massive CO2 emission increases. There is a place for gas in the coming decades in the energy mix but this should be limited to small scale ‘peaking’ plants of limited number and, more particularly, small scale combined heat and power (CHP) plants which, for example, would recover otherwise wasted heat providing for district heating systems for local housing.

An immediate moratorium is necessary on further CCGT plants intended to provide base-load. CCGT increases emissions, creates a dependence on imported gas and results in unpredictable exposure to future higher costs.

THE POTENTIAL OF WIND

With practical application of wind and tide power being some time away, Ireland is in the unique position to set a global lead in wind generation which is capable of supplying more than 50% of the national grid if appropriate distribution and grid connection can be achieved. However, achieving this needs the sort of radical initiative which built the Shannon hydro-electric scheme in the 1920s. At present there is only 920 MW of installed wind capacity in Ireland with additional development being seriously constrained by the electricity transmission grid. The largest permitted land development is at Bellacorrick, Co Mayo, beside the former Bord Na Móna power station with the turbines located on the adjoining areas of damaged bog-land. This cannot proceed because of lack of grid connection. Furthermore, wind energy capacity needs to be four to five times the ultimate annual base-load to the grid. This means that 15,000MW of additional installed capacity should be a reasonable and achievable target by 2020 distributed both on shore and off shore and with a location distribution to ensure optimum contribution to base-load in different wind conditions. This means significant turbine concentrations in a number of coastal regions and on shore.

The current strategy for on shore wind development is ineffective and non-strategic, leading to a plethora of small scale applications across the country, achieving very little in the scale of generating capacity needed. More seriously, many of these sites are being badly chosen in areas with deep blanket bog cover. This is damaging some of the most important areas of biodiversity in Ireland and has already resulted in three peat slides, the in Derrybrien, Co Galway, in 2002, and in Co Leitrim and Co Kerry in September, 2008. The only effective means to change the large-scale capacity required is to identify optimum locations for large-scale wind energy clusters of up to 1000MW in areas of good wind speed combined with low population density and low ecological or landscape sensitivity. A number of Coillte forest areas emerge as prime contenders in this category. There is easily achievable large-scale capacity along the east coast, with the west coast being more difficult because of sea bed depths. Large-scale wind energy development both off shore and on shore needs major grid capacity to achieve distribution and inter-connectivity. This raises the difficult and controversial problem of major pylon routes being required to achieve the grid connection and distribution required for renewable energy, for example, in north-west Mayo, an area with potential conflicts with SAC and National Park designations. However, for off shore turbines, strategic planning should ensure the location of cables under sea for connection to the grid at major existing service locations such as Moneypoint.

A SUSTAINABLE NATIONAL ENERGY STRATEGY

All of the indications are that public and private investment capacity is going to be limited for not just the immediate but the long term future. It is crucial therefore, that investment in energy generation and transmission is initiated on a national strategic basis which optimises renewable capacity and does not waste resources in a new generation of base-load gas power stations. The current ineffective strategy of somehow hoping that significant renewable energy will somehow appear is not working. The initiative taken by President Obama in announcing plans for a US Super Grid for a new generation of renewable energy needs to be emulated in Ireland.
What powers our society?

THE MAIN SOURCES OF ENERGY IN IRELAND

Electricity demand in the Republic of Ireland has at peak periods exceeded 4,900 MW (the record is 4,906 MW in December 2007).

Electricity supply can be categorised in two ways. Fully dispatchable plant provides electricity that is readily available at any given time. Non fully dispatchable plant, such as wind turbines, results in intermittent availability because the generator has no control over the source. It is this intermittent quality that causes some doubts about the widespread use of renewable resources but it is worth noting that not all generation stations are 100% available at given times.

* Total fully dispatchable plant at any given time is 5,805 MW (with an additional 200 MW available from Northern Ireland).
* 508 MW in Ireland is hydro-electricity including pumped storage at Turlough Hill but the balance of generation – 92% is comprised of oil, gas, peat and coal plant.

> Fully dispatchable plant in Ireland is expected to yield 6613 MW by 2011 with the following mix:
  - Heavy fuel oil (806MW) at Tarbert (Kerry) and Great Island (Wexford);
  - Coal and Heavy Fuel Oil (845MW) at Moneypoint (Clare);
  - Distillate Oil (208MW) at Rhode (Offaly) and Tawnaghmore (Mayo);
  - Gas with Distillate Oil (3642MW) at Tynagh (Galway), Seal Rock Athlone Alumina CHP (Limerick), Marina, Huntstown Viridian, North Wall, Poolbeg (all Dublin) and Whitegate Bord Gas Eirean (Cork);
  - Gas (258MW) at Aghada (Cork), Peat (346MW) at Loughree, (Longford),West Offaly Power (Offaly) and Edenderry (Offaly); Hydro (508MW) at Liffey (Kildare), Ardnacrusha (Limerick), Turlough Hill (Cork) and Erne (Donegal)

> Non fully dispatchable comprises wind on a grand scale (large scale wind farms is sometimes termed as partially dispatchable) in comparison to extremely minor generation levels from other sources.

> Wind
  - Installed capacity is now 920 MW
  - A record high in wind generated electricity has occurred already this year on January 10th when 922 MW was confirmed by Eirgrid. Typically however in January the mean figure is approx 300 MW.
  - 1457 MW is in progress with connection agreements signed
  - 168 MW under connection offer
  - 7000 MW applications
  - Highest concentration are in the South East with 235 MW installed and 700 MW committed

> Small Scale CHP
  - Eirgrid are assuming approximately 5 MW per annum over the next seven years
  - Current installed capacity is less than 120 MW
  - 106 MW waiting for connection (including a 72 MW waste-to-energy project)
  - Targets: 2010 ~ 400 MW; 2020 ~ 800 MW

> Biomass/Landfill
  - 30 MW installed
  - 47.5 MW to be installed
  - Target: 30% at the three peat plants (no new capacity)
  - Grants currently available from Sustainable Energy Ireland (SEI)

> Small Scale Hydro
  - 22.6 MW installed
  - 0.65 MW to be installed

> Ocean Energy Strategy Targets
  - 75 MW in 2012
  - 500 MW in 2020
  - Ocean energy can be configured to supply baseload electricity. Efficiencies at present are undeniably low but improving at a rapid pace with high levels of research and technological development.

> Geothermal Generation
  - Whilst there is no electricity generated from geothermal sources some geothermal heating schemes are operational in Ireland.
  - In Ireland and the Philippines geothermal generation provides almost 20% of national electricity demand.
  - The largest singular plant is in California with a 750MW yield.

> Bord na Mona Plans at Dorrygroomagh
  - Combined Cycle Gas Turbine 450 MW by 2013
  - Open Cycle Gas Turbine 170 MW by 2014

> Small Scale Hydro
  - 22.6 MW installed

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2009 is the 150th anniversary of Queen Victoria’s royal assent on August 30th 1859 of the Sale of Gas Act, which was a provision of standard measures for London, Edinburgh and Dublin. It was designed to regulate the gas sector in the wake of many complaints about poor service from multiple suppliers. Competition between suppliers had been supported by Parliament from 1830.

150 years later, Doha, the capital of Qatar, became the home of the Gas Exporting Countries forum modeled on OPEC. GECF was recently formalised with a charter at the annual ministerial meeting in Moscow. Amongst its members are Russia, Iran, Algeria, Venezuela and Qatar with Norway holding observation status. The fifteen full members control and own 73% of global gas reserves. In the wake of the meeting, and fully aware of declining gas resources, Russian Prime Minister, Vladimir Putin stated that the days of cheap gas are over.

SUPPLY RISK

At the present time, European Countries receive 25% of their gas from Russia via a pipeline in the Ukraine however, due to financial debts and disputes between those two countries, supply has been threatened and indeed cut off on numerous occasions in the recent past. A further threat to supply comes in the form of depletion and production peak of natural gas in other stable areas such as our own coast at Kinsale and Corrib, Scotland and Norway. Experts suggest that by 2030 Western Europe will be almost entirely dependent on Russian gas. Is this secure? How long can it last?

Currently over half of our total energy needs are generated from gas so, what is to be done? 150 years after the first gas regulation legislation, will 2009 be the year in which innovative and visionary policy will be implemented to guarantee a reduction in our reliance on gas and ensure that renewables and local electricity generation will play a more central role? The Gas Capacity Statement 2008 published by the Commission for Energy Regulation indicates that this will not be the case. Projected gas supply sources assume that gas will continue to be critical to our supply and show reliance on Shannon LNG gas imports for two thirds of our gas from 2012.

It is worth noting that the Shannon LNG project has not yet begun and there is no start date. If this commercial development does not go ahead the current national strategy for energy, and in particularly the use of gas for electricity generation, would require complete reworking.

In fact this might be the best thing for all of us!
Can Liquid Natural Gas (LNG) contribute to Ireland’s energy mix?

**REPORT BY ELIZABETH MULDOWNEY**

LNG is natural gas (mainly methane) converted to liquid. In this form it is easier to store and transport from its source.

**THE PROCESS OF CONVERSION AND TRANSPORT**

This is reliant on a complex infrastructure at the loading point known as an LNG Train. Put simply this is a title for purification and liquefaction facilities. The gas is transformed into liquid by lowering its level of temperature to -163°C. Purification must be carried out in advance as various particles present in the gas would freeze during the process and block machinery units. Such a plant, in addition to a loading terminal, costs in the region of 3 billion euro to construct.

The liquid gas is loaded onto special LNG carriers (0.25 billion euro to build) to be shipped to global markets which will soon include Ireland.

The regasification (i.e. changing the liquid back into its original gas format) takes place at an import or receiving terminal such as the one proposed in the Shannon Estuary between Tarbert and Ballylongford in Co. Kerry. New readers may be interested to read an article about the planning problems associated with this proposal in last summer’s issue of this magazine which can be seen on antaisce.org website.

Gas flows into the Irish pipeline system from Shannon LNG are expected to begin in 2012.

**TRADING IN GAS**

Qatar, Trinidad and Tobago, and Egypt are currently the top three producers of LNG in the world. It is worth noting that increasingly LNG is traded under short-term contracts which leads to spot shipments diverted to whoever promises the highest returns (netbacks). The netback level depends on natural gas prices and LNG transport costs i.e. distances to be covered. Because of the expected re-tracking to the trend of increasing gas prices in the medium term, these spot shipments and their bids are sure to increase and it is unlikely that a market as small and as isolated as Ireland will be in a position to bid for minimal deliveries. It simply will not be worth the while of the vendors/transporters. If on the other hand the price is paid, it is highly possible that the extra costs will be passed onto the consumer. The consumers in this case include Bord Gais Eireann and Eirgrid or other operators of gas powered electricity generators. The end user is the consumer of gas and electricity i.e. business and domestic. The question to be answered is whether or not this is a prudent route for Ireland to follow in respect of energy mix.

In its 1999 Review of Natural Gas Transmission Capacity Requirements to Year 2025 Bord Gais Transmission stated that “...the construction of an LNG terminal or interconnection with France or Wales...were discounted on the grounds of cost. Interconnection with a country other than the UK is not feasible for Ireland, given its particular physical location, and the cost of construction of LNG facilities is a significant factor.”

Elizabeth Muldowney, recently appointed as An Taisce’s Energy & Transport Officer, studied Economics and Spanish in NUI, Galway followed by a Masters in Economic Policy in NGS, Galway followed by a Masters in Economic Policy with a focus on energy. Working with Amarach Consulting with a focus on energy. Working with Amarach Consulting, Elizabeth managed the 2005 IBEC Energy Costs Survey project and is responsible for the development of the Energy Management Action Programme website and support training pilot scheme with Plastics Ireland. Elizabeth worked with various business organisations in energy management consultancy. Contact energy@antaisce.org or call 087 282 3842.

**NOTE**

Report by Elizabeth Muldowney

An LNG Tanker clearly showing the storage pods in which the liquid gas is stored.

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CONNECTIONS TO THE GRID

The facility to apply for construction and generation licences to connect to the grid from the Commission on Energy Regulation (CER) is called a Gate. The first round of licenses, Gate 1, is complete. Gate 2 is closed though applicants await a response and Gate 3 is currently open for applications. The order of offers from CER for connection will be based on the capability of the transmission system to cope with the load and the least technically complex projects will be awarded first by September 2009. It is expected that there will be a roll-out of 3000 MW from December 09 - to June 2011 with 6000 MW of conventional generation in the queue.

EXTENSIONS TO THE GRID

Further development of the transmission system will be required to ensure that all planned generation can be connected. The system needs significant reinforcement and planning applications to build new power lines by Eirgrid are likely to become more common.

There are currently government plans and proposals for new transmission lines in Meath/Cavan, Donegal and Galway (Connemara). The latter two are recently planned projects and are undergoing examination by An Bord Pleanala under the Strategic Infrastructure Act. An Taisce has submitted comments to the Board regarding the Donegal project and are in the process of analysing the Connemara planning application with a view to a further submission in March of this year. Both projects involve construction on or near pristine bogs and in the case of the Donegal project a certain amount of tree felling will be necessary.

The Meath/Cavan transmission project involves the erection of large double sided pylons across swathes of farm land and the local farming communities have staged strong and logistically coordinated protests.

INTERCONNECTORS WITH OTHER JURISDICTIONS.

There is already an interconnector with Northern Ireland running from Armagh to Louth and a second between Tyrone and Cavan is nearing completion.

Interconnection with Wales is currently in the planning process with an application from Eirgrid to construct a 500 MW submarine interconnector with landfall at Rush North Co. Dublin. It is proposed that this be linked to the national grid at a substation in Woodland Co. Meath connected by underground cables from Rush.

Second, third and perhaps fourth interconnectors are at pre-planning application stage. These, sized at 350MW, are being designed and proposed by an asset investment company, Imera, focused on the development of offshore networks and high voltage direct current cables. An Taisce’s main concern about these interconnectors is that they are being examined as individual projects as opposed to assessing the overall impacts of both. We believe that in the interest of a cohesive national energy strategy, the plans should be examined as a whole to maximise economic efficiency and minimise negative environmental impacts. A submission regarding this has been lodged with An Bord Pleanala and an oral hearing is scheduled for mid to late March 2009 which we will attend.

That the transmission and interconnection projects are necessary is not argued. They are essential to ensure our exploitation of wind and other indigenous renewable energy resources. However, a more holistic approach in the case of the interconnectors, and a less detached and more community based and transparent style of communication regarding the Meath/Cavan project, is very urgently required.
IRELAND'S Unsustainable Peat Exports

In January, 2008, an Irish Times report on a trade mission led by former Taoiseach, Bertie Ahern to South Africa revealed that the first deal done was the selling of peat through a Clones, Co Monaghan-based company called Harte Peat as mushroom compost to South Africa and as material for mopping up oil spills in Mozambique. In a press release from the Irish Department of Trade, Enterprise and Employment, this was described as an “environmentally friendly” product. In all of the publicity, the deal was presented as good news for Irish trade, development and the environment.

Nobody seemed to have looked at the legal status of this peat extraction from Ireland, let alone its sustainability and contribution to Greenhouse Gas emissions from the extraction process and transportation. Attempts by An Taisce to raise the legal and environmental issues surrounding the whole deal with the Department of Trade, Enterprise and Employment have not produced any resolution to these issues.

THE IMPACT OF PEAT EXTRACTION

Peat extraction of an area more than 30Ha requires environmental impact assessment as required by the EU Habitats Directive.

The results from the EPA-funded BOGLAND project suggests that about 2.5 million tonnes of carbon is released to the atmosphere from damaged Irish peatlands, equivalent to the amount of carbon emitted by cars on Irish roads every year.
The trade in peat

Submissions to the Department of Enterprise, Trade & Employment requesting information on the legal status of the peat material being promoted for export have met with the response that legal compliance under planning, environmental or other legislation, including EU Directives, is not the ‘responsibility’ of the Department and that ‘the precise level of peat exports to Africa will be determined solely by the exporters and their customers.’ Furthermore, the Department claims ‘that the extraction and use of peat is a well established commercial activity,’ and ‘the export of Irish peat to overseas markets has been ongoing for many years.’

Apart from the issues of the legal status of the extraction areas, the promotion and facilitation by the Irish Government of peat export from Ireland to Africa is an example of perverse and unsustainable trade. It is promoting an extraction process which is environmentally damaging in the country of origin, generates transport emissions and undermines the development of more sustainable solutions to meet compost needs in South Africa and other countries.

An Taisce’s RESPONSE

An Taisce has made a complaint to the Legal Affairs Unit of the European Commission on the systemic breach of the EIA Directive and is advising sister environmental and development organisations in the affected export countries to raise the matter with their own governments and local Irish embassies.
"UNLIKE THE WHITE MAN AND HIS NOTION OF PROPERTY AND PROPERTY RIGHTS, THE ABORIGINE CANNOT OWN LAND, CANNOT OWN THE EARTH. FOR WE ALL BELONG TO THE LAND. EVERYTHING IN NATURE IS PART OF THE FAMILY. NO ONE IS A STRANGER FOR KANYINI (CONNECTEDNESS) KEEPS THE SPIRIT ALIVE THROUGH AN UNCONDITIONAL LOVE AND SENSE OF RESPONSIBILITY FOR ALL THINGS. ABORIGINE PEOPLE PRACTICE KANYINI BY LEARNING TO RESTRICT 'MINE-NESS AND BY DEVELOPING 'OUR-NESS'."

BILL NEIDJIE WROTE OF THE LAND AND OF LIFE IN 1986:

All my uncle gone
But this story I got him
They told me…
They taught me…
And I can feel it.
I feel it with my body
With my blood.
Feeling all these trees,
All this country
When this wind blow you can feel it.

You can look,
But feeling…
That make you.

Feeling makes you,
Out there in open space.
He coming through your body.
Look while he blow and feel with your body…
Because tree just about your brother or father…
And tree is watching you.

Earth…
Like your father or brother or mother.
Because you born from earth.
You got to come back to earth,
When you dead…
You’ll come back to earth.
Maybe little while yet…
Then you’ll come back to earth.
Maybe a little while yet…
Then you’ll come to earth.
That’s your bone,
Your blood.
Its in this earth.
Same for tree.

### 27 WAYS TO SAVE ENERGY in the home

<table>
<thead>
<tr>
<th>Curtailment</th>
<th>Energy saved (percent)</th>
<th>Increased efficiency</th>
<th>Energy saved (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transportation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor vehicle use</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Cut your energy use by driving with one</td>
<td>Up to 4.2</td>
<td>Buy a more fuel-efficient car (80.7 vs. 50 mpg EPA average-adjusted composite)</td>
<td>13.5</td>
</tr>
<tr>
<td>other person</td>
<td></td>
<td></td>
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<tr>
<td>After driving</td>
<td>Up to 3.2</td>
<td>Get frequent tune-ups, including oil filter changes</td>
<td>3.9</td>
</tr>
<tr>
<td>Combine errand trips to one-half of your</td>
<td>Up to 3.7</td>
<td>Buy low-rolling resistance tires</td>
<td>1.8</td>
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<tr>
<td>current release</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cut highway speed from 70 to 60 mph</td>
<td>Up to 3.4</td>
<td>Maintain correct tire pressure</td>
<td>1.2</td>
</tr>
<tr>
<td><strong>Inside the home</strong></td>
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<tr>
<td>Heating and air conditioning</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Heat: Turn down thermostat from 70°F to</td>
<td>2.8</td>
<td>Heat: Install attic insulation and ventilation</td>
<td>Up to 5.0</td>
</tr>
<tr>
<td>68°F during the night</td>
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</tr>
<tr>
<td>A/C: Turn up thermostat from 76°F to 78°F</td>
<td>0.6</td>
<td>A/C: Install attic insulation and ventilation</td>
<td>Up to 2.0</td>
</tr>
<tr>
<td><strong>Water heating</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turn down water heater</td>
<td>0.7</td>
<td>Install a more efficient water heater (875-7 unit)</td>
<td>1.5</td>
</tr>
<tr>
<td>thermostat from 140°F to 130°F</td>
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<tr>
<td><strong>Lighting</strong></td>
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<tr>
<td>Do not leave one 60-watt bulb on all night</td>
<td>0.5</td>
<td>Replace 60 percent of all incandescent bulbs with equally bright compact fluorescent bulbs</td>
<td>4.0</td>
</tr>
<tr>
<td>Replace two 100-watt kitchen bulbs with 75-watt bulbs</td>
<td>0.3</td>
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<tr>
<td><strong>Refrigeration/Freezing</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Turn up the refrigerator</td>
<td>0.5</td>
<td>Install a more-efficient washer (replace a 19–21.5 cubic foot top-freezer unit bought between 1989 and 2000 with a new Energy Star unit)</td>
<td>1.9</td>
</tr>
<tr>
<td>thermostat from 35°F to 30°F</td>
<td></td>
<td></td>
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<tr>
<td>and the freezer thermostat from -5°F to -10°F</td>
<td>1.3</td>
<td>Install a more-efficient washer (replace a 2001 or older non-Energy Star washer with a new Energy Star unit)</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Clothes washing and drying</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Change washer temperature settings</td>
<td>1.2</td>
<td>Install a more-efficient washer (replace a 2001 or older non-Energy Star washer with a new Energy Star unit)</td>
<td>1.1</td>
</tr>
<tr>
<td>from hot to warm, warm to warm, cold</td>
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<tr>
<td>rinse to warm rinse, cold rinse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Line-drying (do not use dryer)</strong></td>
<td>1.1</td>
<td></td>
<td></td>
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<tr>
<td>0 months of the year</td>
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<tr>
<td><strong>Color TV</strong></td>
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</tr>
<tr>
<td>Watch 25 percent fewer hours of TV each day</td>
<td>0.6</td>
<td>Purchase (or trade in) 50&quot; Projection HD TV instead of a 41&quot; Plasma HD TV</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Households and individuals, at home and in non-business travel, consume 38.0 percent of total energy in the United States, more than the industrial sector alone (32.5 percent), and the commercial/service (17.8 percent) and non-household transportation (12.7 percent) sectors combined.

The failures of past communication campaigns for energy conservation and the failures and successes of public awareness campaigns show that it is much more effective to focus campaigns on a very small number of specific actions that can make a real difference. A necessary first step is to identify which actions are the most effective.

A behavioral analysis of U.S. energy consumption yields a short list that shows the most effective immediate and low cost actions individuals and households can take, as well the most effective actions with higher initial costs. The results are likely to be similar in Ireland.
Maximising the Tailors Hall's role in Minimising Carbon Emissions

In 2007 the building that houses the Tailors’ Hall was 300 years old having been originally built in 1627 and rebuilt between 1703-07. As part of planning for its future, An Taisce with the support of Sustainable Energy Ireland and others, commissioned a report on the energy needs of the building, the role of renewable energy in the building and the carbon footprint of the building.

It is important to An Taisce, as an organisation that champions daily the need to combat climate change, that all the buildings in its care are environmentally sustainable as well as in good conservation condition. The Tailors’ Hall is a National Monument, a Protected Structure as well serving as the national headquarters of Ireland’s oldest environmental charity. This poses both challenges and opportunities in implementation of energy conservation measures.

The energy report was completed in 2009 by Paul Arnold & Associate’s, Power Therm, Cullean Engineering and co-ordinated by Kulkarni Teo who approached us with the idea. The work was supported by a grant from SEI, with the findings summarised below.

- The Tailors Hall as it currently stands represents huge savings in embodied energy, due to being built more than 300 years ago from locally sourced materials, hand produced, transported by environmentally friendly means to the site and built using environmentally sustainable methods. Building Conservation is among the "greenest" of all the building arts as it saves the embodied energy in the building.

- The existing traditional design of the building is to minimise energy inputs. For example the building is orientated to the south with large windows to capture solar energy and daylight and has relatively few openings of any kind on the north side.

- Ventilation is an essential part of maintaining the building to save its 300 year old timbers from dry rot and to maintain the lime mortar walls from deterioration.

- The thermal value of the walls depends on a minimum level of heat being maintained in the building to keep them dry.

The report recommended a number of possible actions.

- Ensuring the walls are drier. This requires that the brickwork is repointed with the appropriate lime render.

- Fitting removable secondary glazing rather than replacement of sash windows by double glazing which would detract from the character of the building. The potential of shutters is to be considered.

- Improving roof insulation space with hemp or wool insulation 225mm -250mm settled thickness and possibly upgrading the insulation of the suspended wooden floors. Digging up and insulating the basement stone floors is not considered worthwhile due to high loss of embodied energy and adding insulation to the walls would be inappropriate for a heritage structure.

- Replacing the boiler with a gas condensing one

- By reviewing light and small power electrical usage to allow for specification of small PV panels and/or wind turbine to be considered though there could be problems finding suitable location to mount them.
13th International Conference of National Trusts,
Dublin Castle, 13th-17th September 2009

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For Information contact,
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Dublin 8.
Email icnt13@antaisce.org
www.antaisce.ie
www.internationaltrusts.org
POLICY OPTIONS

The need for frameworks is strongest in dealing with the climate crisis. Unless we do something there will be a runaway process of global warming that we cannot stop, leading to increased temperatures of 6 degrees. The last time this happened, 251 million years ago, it caused the extinction of 95% of all species. (see Mark Lynas’ book ‘Six Degrees’)

Prevention of this catastrophe will have to involve taking CO2 out of the atmosphere in order to cool the planet. In theory this could be achieved while allowing some further small carbon emissions if these were more than offset by removals of CO2 into carbon sinks. However, in practice, to achieve a ‘carbon removal economy’ we need to reduce current emissions close to zero as well as enhancing the actions of carbon sinks.

The conventional wisdom for reducing current emissions is to extend systems like carbon taxes or ‘cap and trade’. However, ‘cap and share’ is another option to replace or complement these policies.

Cap and Share focuses on the control of carbon emissions upstream. The other approaches operate ‘downstream’ by assuming that 6 billion people and tens of thousands of companies can be persuaded to reduce their carbon footprint individually. A reduction at this level must happen, but the most effective way is to control the few companies that actually introduce carbon into the world economy, rather than try to control the billions of end-users. This would be done by requiring the fossil fuel suppliers to buy

The Cap and Share Climate Framework and Global Development

ABSTRACT OF WORK BY BRIAN DAVEY

Recent economic collapses show a need for global frameworks to regulate markets and in the long run sustainable markets can only work within the ecological capacity of the planet. At the same time, the inevitable costs of limiting the demand on the Earth’s resources must be fair and transparent. Only within this framework can market forces be freed to do their work.

Further information

Cap and Share
Share the income

Cap the carbon
 feasta
permits before they are allowed to bring fossil fuels into the
economy. Such permits would reflect the greenhouse gas content of
the fuel to be sold. The permits would be limited in number and the
number brought down as quickly as possible - that's the “cap”.
Because the cap will increase energy prices, vulnerable people
will need help to adjust to higher prices, otherwise, without the
money to meet their higher bills, they would be driven out of the
market. Thus the income generated from selling the permits
needs to be “shared”.
The poor are least responsible for the climate crisis but suffer
most from it. It’s fair that they share equally in the permit income
especially as cap and share is basically selling the right to use a
resource (the atmosphere) that belongs to us all.
There are two ways to do this. The first (favoured by some US
activists) is Cap and Dividend where the permits are auctioned
centrally and the resulting money is distributed to the popula-
tion. The second is Cap and Share where the citizens receive the
permits directly and sell them via post offices or banks to the
energy suppliers. Some fear that Cap and Dividend could see the
carbon money siphoned off by governments unless it was admin-
istered by an independent Sky Trust. Cap and Share is more
transparent and the public get to sell the permits themselves.
KICK STARTING THE GLOBAL ECONOMY
Whichever system is chosen, the result would be income flow to
the planet’s poorest. Ultimately the climate crisis is caused by
the carbon-intensive lifestyles of developed countries not by the
low impact lifestyles of poorer people. Globally most people
would gain more from their permits than they would lose from
higher fuel bills. People would pay if they used more than their
fair share and would get paid if they used less.
Calculations based on South Africa in a global Cap and Share
scenario with CO2 at €25/tonne, would see 70% of people bene-
fit. Incomes of the lowest fifth would increase by 25-50%. Only
the top fifth would lose out, by a small amount and only when
carbon costs have increased further.
Cap and Share will redistribute income as well as kick re-start-
ing the global economy with a strong incentive for energy effi-
ciency and renewables. Richer countries would benefit from
this, while in poorer countries the money flowing to the poor
could help start sustainable micro-businesses of the type promot-
ed by Grameen Banks. This income stream will not continue for
ever because carbon emissions must be got down to zero in a
short space of time so the seeding of a bottom-up, carbon-free
economic development process using the revenue needs to be
now or never.
GETTING THERE
The climate governance framework for cap and share must be
legislated for by governments of course, but waiting for this may
mean we wait for ever. We need to spread the ideas and build the
necessary networks and structures in a grass roots process and
then ask the governments to “switch on” an idea that is almost
ready to be up and running.

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house revealed

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info@eneclann.ie
Get used to it: the era of economic growth is over.

Setting a permanent ‘floor price’ for motor fuels would send a clear price signal that reducing our chronic oil dependence is the only game in town.
The facts are as follows: oil discoveries actually peaked in 1965 and have been in continuous decline ever since. Production lags several decades behind discoveries, and now the decline of oil production is itself in train. It’s a one-way ticket from here.

Overall, output from the world’s oil fields is declining by between 6.7 and 9 per cent a year, according to the agency. New discoveries and alternate fuels simply cannot keep up with the profligate 3.6 million barrels an hour that are now burned globally.

Yet just a couple of years ago the same IEA was itself still in denial about the depth of the looming energy crisis. Lead author of the agency’s report, Fatih Birol, says that, even assuming a ramping up of investment in oil exploration, “global conventional oil will come to a plateau around 2020.” He’s being polite. For plateau, read precipice.

Our two centuries of industrial and technological development have been built on access to cheap energy. Without dirt-cheap oil, food production could never have sustained a world population even half today’s level. It is also the black blood of globalisation and international commerce. “The world has never faced a problem like this”, according to a US Department of Energy report. “Without massive mitigation more than a decade before the fact, the problem will be pervasive and will not be temporary.” Oil peaking will, it says, “be abrupt and revolutionary.”

It will take industrial civilisation at least 10 years ahead of peak oil to avoid disruption and collapse on a scale not experienced in recent centuries.

That means right now, in 2009, is when we have to begin radically reinventing our relationship with energy. The very best a rapid move to renewables can achieve is to cushion the blow as cheap oil runs out.

Get used to it: the era of constant economic growth is over, and we face a near future where hyperabundance will be anything but the norm.

We got an appetiser of peak oil last July, when prices approached $150 a barrel. Rising petrol prices so spooked US motorists that, in a matter of months, the wheels fell off their decade-long infatuation with SUVs. Fear is a powerful antidote to complacency. Like adrenalin, fear may be as short-lived as it is powerful.

Finance Minister, Brian Lenihan could give our straitened State coffers a timely fillip by setting a permanent ‘floor price’ for motor fuels. As well as raising cash and lowering emissions, this would send a clear price signal that reducing our chronic oil dependence is the only game in town.

Every spoonful of oil burned in Ireland is imported. As shortages bite, who exactly are we counting on to continue supplying our energy, at any price?
Windfarms, Bogs, and Climate Change

REPORT BY ANJA MURRAY

Greater use of renewable energies, in combination with greater efficiencies in energy use, is hugely important in combating Climate Change. Likewise, the need to protect natural habitats becomes more urgent as Climate Change kicks in. This is because biodiversity and natural habitats, such as upland peat bogs, serve to protect us from some of the worst impacts of Climate Change. Bogs lock up enormous quantities of carbon in peat, preventing it from being released into the atmosphere to exacerbate climate change. Bogs also act like giant sponges for rain water, regulating water movement in the landscape and preventing flooding in many towns and villages. For these ‘ecosystem services’ to function, bogs must remain intact. To maximise benefit from these free services, we need to prevent damage to our upland bogs, such as that caused by wind farm construction.

On the 23rd September 2008, a landslide of wet peat bog slid down from Corry Mountain in County Leitrim. The slide caused devastation to the upland bog habitat, with several hectares of bog literally sliding down from the mountain to expose the mineral clays several metres beneath the surface. This slide occurred as a direct result of the construction of a road in upland blanket bog to service the construction of new wind turbines on Corry Mountain. Hundreds of tonnes of wet peat then flowed down through the valley of the Owengar river. Having visited the site almost three weeks after the event, I found that a lake of muddy peat was still smothering the river, which had previously been a good trout fishery. The stream bed was entirely engulfed with peat, no longer recognisable as a river valley. This was after a clean up operation by the Fisheries Board and the Council, and the removal of many tonnes of wet peat from the valley.

An Taisce has addressed the issues of illegal dumping of peat deposits from the slide with the Department of the Environment, the EPA, and Leitrim County Council. At the time of printing none have yet given adequate response to concerns expressed, nor provided the information requested. Other serious legal implications which An Taisce is pursuing include extensive loss of protected bog habitat; damage to protected species; and now failure to provide information in accordance with the Access to Information on the Environment Directive. An Taisce continue to call for a full assessment of the landslide, its cause, the appropriateness of the response, and for a national response which ensures no further incidents of this kind are permitted.

Both the Leitrim and Kerry bog slides have taken place since the European Court of Justice ruled in July 2008 that Ireland consistently failed to conduct Environmental Assessments correctly. The ruling cited the Derrybrien bogslide in County Galway in 2003 as a consequence of these systemic failures.

An Taisce, in conjunction with Friends of the Irish Environment, the Irish Wildlife Trust, the Irish Peatland Conservation Council, Cavan Leitrim Environment Network, and Derrybrien Development Society, have called on the Minister for the Environment to put a moratorium on wind farm development on upland peat bogs until a set of mandatory guidelines are in place which ensure that the Minister can be satisfied that devastating incidents of this kind will not occur again. It is crucial to address the challenges of climate change and biodiversity loss in combination. Rather than see conflicting challenges, we must combine all efforts to the mutual strengthening of both objectives.

For more information about the above mentioned ECJ judgment (case C215/06) go to http://eur-lex.europa.eu/en/index.htm
Click on ‘simple search’ option and enter the case code: 215/06
It can also be found in the Official Journal of the European Union C260 on the 11.10.08, page 3.
ON FRIDAY, 22ND AUGUST THIS YEAR, LOCAL PEOPLE HARVESTING THEIR TURF ON THE SLOPES OF BALLINCOLLIG HILL, NEAR TRALEE, NOTICED THAT A SECTION OF THE BOG HAD BEGIN TO MOVE DOWNHILL, TOWARDS THE GLASHOREAG STREAM.

The movement continued on Saturday and Kerry County Council was notified as the peat was threatening to engulf a bridge (B1 on map). The Council hastily constructed a couple of dams, which acted as siltation ponds and slowed the flow. One farmhouse (H1) was cut off for a number of days, while a second house (H2) was in danger of being engulfed, forcing the residents to move out. The bog flowed ca 3 – 4 km down the streambed.

The stream is a spawning area for salmon and trout and considerable damage was done, including the killing of a large number of fish. It is part of the Smerlagh River Catchment and the fishery has had to be closed to allow stocks to recover.

The high rainfall in the area over the summer months this year has been blamed for the disaster, but construction of a wind farm under way in the area is a key factor that has contributed to the slide.

Tra Investments sought permission for a wind farm of 15 turbines in 2002 in an upland valley, on the slopes of Ballincollig Hill. The higher parts of the site are fairly well drained but the lower sections are much wetter and there is a deep layer of peat. The applicant has estimated that the peat depth varies from 0.4 metres to 2.9 metres and is underlain by clay. There is an existing wind farm (23 turbines) on the opposite side of the valley, in Tursillagh (see map)

Local residents objected to the development for a number of reasons, including possible effects on the stability of the peat. The application was granted and they appealed to An Bord Pleanala, stating ‘A major disaster is imminent on the scale of the one in Derrybrien in Co. Galway’. As a result, the applicants were requested to provide an additional report from a hydrogeologist assessing the impact of construction works on soil stability.

The report submitted by the applicant dealt with the construction of roads, turbine foundations and other infrastructure. Previous wind farm developments had tended to remove the bog down to the clay, which gave a good foundation. However, this changes drainage patterns and weakens the turf and the report recommended a return to the ancient practice of constructing the road directly on the bog. This does not interfere so much with drainage or lead to having to dispose of large quantities of peat. The ‘toughers’ of old were formed by laying tree branches on the surface to provide support but the modern version is to put down a geosynthetic liner and to place a layer of angular coarse material, overlain by a finer version of same.

At the time the bog slide took place a road was being constructed, using the above method, onto some of the deeper bog. The slippage started in the area where work was under way and part of the road foundation was swept along on top of the moving bog.

The incident needs to be investigated fully to determine what exactly happened and how similar situations can be prevented in the future. The existing wind farm, on the other side of the valley, did not have any such problems and may have given the false impression that the area was quite safe.

There are many questions to be answered, such as the role of the increase in rainfall this summer and the suitability of this method of road construction on deep bog. The bog itself is being actively worked, using machinery such as the ‘sausage machine’, which can disturb the lower layers and render it less stable. The developer and the local authority are carrying out investigations into the cause of the bog burst, which could have implications for other developments on high altitude bogland.

Acknowledgements
Thanks to Maurice and Edmund Harrington for information and a tour of the damaged area.
TRANSPORT PLANNING

Subsidised Inter-Regional Aviation Continues

For those happy to remain indifferent to global climate change and the current €20 million DoEHLG Change campaign to get us to confront our individual carbon footprints, there is good news. The subsidising of air travel between Dublin and the six regional airports is to continue. This confirms what national policy seems to be about, which is paying token deference to concern about climate change while getting on with the real business of increasing investment in fossil fuel transport infrastructure. Under EU Competition law, governments are restricted from subsidising airports, airlines and air services, but there is a loophole where it can be argued that particular routes which would otherwise be unviable can be justified. The European Commission provided a ‘get out’ clause under Council Regulation 2408/92 which allows the subsidy of regional air services to an ‘airport serving a peripheral or development region’; or ‘on a thin route to any regional airport’ within the territory of an individual state.

This concept has been dressed up under the euphemism ‘public service obligation’, and allows a national government to subsidise aviation services to regional or other airports on an entirely arbitrary basis. For a number of years, flights between Dublin and six Irish airports have been subject to a major subsidy. Galway, Derry, Sligo, Donegal and Knock are all run by Aer Arann, with the exception of Kerry, which is run by Ryanair. The most recent available figures show €15 million per annum subsidy for the six routes, with the highest being granted for the Knock-Dublin route, amounting to a subsidy of €98 per seat for a Knock-Dublin single journey. This is on top of all of the other hidden subsidies given to aviation in general through zero fuel duties and development promotion grants for airports.

Meath County Council Jeopardising Future of Green Transport links for county

The future of the urgently needed and eagerly anticipated extension of the railway line to Navan is being jeopardised by the elected members of the Meath County Council as they undermine the coherent planning policy in the county by giving planning permissions for major developments on unzoned land which lead to the creation of unsustainable car based development.

In order to restore the railway, a critical mass of development is needed along its corridor. This will help fund the creation of this new communications link and also provide the passengers that will be its lifeblood. By ignoring this need the County Councillors are demonstrating that strategic planning in Meath has collapsed. An Taisce’s views are backed by three recent planning decisions by An Bord Pleanala refusing permissions for major developments – the most recent for a business park at Kilbride, Clonee, in a zone which was “unzoned” and “unserviced” and “prejudicial to public health” because of a lack of sewerage provision; the second was a commercial park, again on unzoned land, at Barstown and the final one, the Royal Gateway Business park between the existing N3 and new M3 route. By supporting this kind of development Meath County Council is guilty of promoting car based developments at a time when it is widely accepted that in view of global warming we should be moving away from such choices.

Zoned land exists along the Dunboyne-Pace rail line, in Navan and in Ashborne and the development of Business and Commercial parks is needed there, so why are the County Councillors insisting, against their own County Development plan, on giving planning permissions which are unsustainable and will lead to an increase in global warming gases? Could the ill-informed criticism of An Taisce by elected members of the council be driven by the random accommodation of individual landowners interests and an indifference...
Is increasing speed limits compatible with the Climate Change strategy?

The Department of the Environment is investing €20 million in a Climate Change Awareness Programme called ‘Change’, most of this spent on TV advertising. It is based on the principle of trying to make us all feel guilty and responsible for climate emissions, logging into the personal carbon counter and taking practical actions. Perversely, the campaign began in 2008 with the use of an outdoor advertising campaign for which many of the locations were billboards which had been illuminated without planning permission. The campaign is now moving into nitty-gritty details as to the actions needed to confront Irish climate emissions which, on a per capita basis, are among the highest in the world. Apart from using low energy light bulbs, switching off electrical appliances on standby, the campaign is now recommending car drivers to reduce driving speeds from 100kph to 80kph. This is based on clear scientific data that driving over 80kph increases fuel consumption, CO2 emissions and NOx emissions.

However, nobody seems to have broken the news to the NRA and the Department of Transport. In August, 2008, the NRA advertised a redesignation of the N6, N7, N8 and N9 under Section 8 of the Roads Act, 2007, to motorway status and increase in speed limits from 100kph to 120kph. This was approved by the Minister of Transport on 24th September, 2008 and accompanied by a press release trumpeting the impact of the designations in shortening journey times.

Subsequent requests to then Department of Transport under the EU Access to Information on the Environment Directive, 2003/35/EC, for information on the environmental evaluation on which this was based, have not been met. Is it possible that there was no environmental evaluation and no quantification or calculation of the additional tonnage of CO2, NOx emissions or additional noise impact?

Equally significant is the effect on increasing car speed limits on the competitive attractiveness of the public transport, rail or bus alternative. Even with the investment over the last decades, rail speeds in Ireland are low by European standards, particularly on the single track routes to Sligo, Galway and Waterford which retain their 19th century alignments.

Additionally, allowing cars to travel significantly faster than buses, which are constrained operationally to an 80kph speed limit, makes bus travel less attractive. All of this combines to undermine one of the core principles of Irish National Greenhouse Gas policy for transport, namely to reduce transport emissions (which have increased by 170% over 1990 levels) by improving modal share between private car and public transport.

If the “Change” programme is to have any credibility national car speeds should be reduced to 80kph immediately.

Bartstown commercial park was refused on the following grounds:
1. It would contravene the provisions of the Meath County Development Plan on the locations for industrial or business enterprises in the countryside.
2. That the applicant failed to demonstrate the location requirement in this ‘rural, unzoned and unserviced location’.
3. The proposal would lead to the creation of an unsustainable car based development” in an area “lacking public transport provision”.
4. It would be “prejudicial to public health because of lack of sewerage provision”.
5. As Phase 1 of a larger proposed scheme, an Environmental Impact Statement should have been provided.

Phase 1 of Business Park at Kilbride was refused by An Bord Pleanala on the following grounds:
1. It would contravene the provisions of the Meath County Development Plan on the locations for industrial or business enterprises in the countryside.
2. That the applicant failed to demonstrate the location requirement in this ‘rural, unzoned and unserviced location’.
3. It “would lead to the creation of an unsustainable car based development” in an area “lacking public transport provision”.
4. It would be “prejudicial to public health because of lack of sewerage provision”.
5. As Phase 1 of a larger proposed scheme, an Environmental Impact Statement should have been provided.
TRANSPORT POLICY

The launch of the An Bord Pleanála 2007 Annual Report by John O’Connor, Chairman, in December, 2008, reflected great credit on the status and work of the Board in promoting sustainable development and good planning. The Chairman was particularly strong in criticising excessive and inappropriately located rezonings, as well as singling out particularly problematic categories of development, like large nursing homes in unserviced, greenfield, rural areas. These are issues on which An Taisce has been enormously active in the planning process, marking another significant year where major planning decisions for car-based business park development, particularly in Co Meath, were overturned as a result of appeals by An Taisce.

Regrettably, An Bord Pleanála’s progressive role in acting as an appellate body in dealing with local authority Decisions to Grant is not matched by its treatment of road, aviation, energy and infrastructural projects. The Board continues to permit road and aviation schemes in the National Development Plan or even, in the case of the New Ross by-pass, for a scheme not contained in the National Development Plan. At this time of unprecedented pressure on resources the largest single investment in the State is going into the construction of the N3 motorway and inter-regional dual carriage-ways between Dublin and Galway, Limerick, Cork, Waterford and partially to Wexford. Expenditure for a further €20 billion between now and 2010 is expected. While this is achieving the desirable by-passing of towns and villages, it is to a level of cost and investment way beyond what is necessary and based on false assumptions for inter-regional ability and travel saving.

Fossil fuel based road and air transport doubles

THE ROLE OF EUROPEAN DIRECTIVES IN DECISION MAKING

REPORT BY IAN LUMLEY

Bike racks are common in the USA. The Irish distributor of these (RSS) is offering two free racks for a 6 month trial to any interested bus company. Contact An Taisce offices for more details.

IAN LUMLEY
An Taisce’s Heritage Officer
THE LEGAL REQUIREMENT TO ASSESS THE FULL
ENVIRONMENTAL IMPACT OF NEW SCHEMES

Applications for individual road schemes are subject to the legal provisions of the Environmental Impact Directive. This sets out legal requirements for description of the project and provision of quantifiable data on environmental impacts and mitigation measures. However, the provisions of the Directive are not being implemented, because either the national court system does not have the competence to do this, or the European Commission does not have the political will. The entire national road programme has been put through the planning system over the last decade on the basis of inadequate outline design and build schemes that contravene the information provisions of the EIA Directive (for example in the design of bridges) and consistently fails to provide both the baseline data and mitigation measures to reduce downstream emissions.

The evaluations of the Environmental Impact Statements are based on figures for additional traffic generation which are simply not tenable on resource consumption grounds. Arguments for benefits of increased travel times between regions are not achievable because they would be nullified by the downstream congestion and sprawl in and around the urban centres if the growth figures projected were achieved.

In any case it is only a matter of time before the next oil crisis develops or the EU forces serious emission controls to be implemented. Then road travel speeds will have to be reduced to 80kph, which is the optimum speed for both fuel conservation and greenhouse gas generation. This makes the current proposal to increase most of the inter-regional road limit speeds from 100kph to 120kph all the more untenable.

RECENT DECISIONS

In December 2008, the Board granted permission for part of the Galway Outer Bypass without considering an alternative, less damaging scheme and without any traffic modelling for implementing only part of a proposed scheme.

Just before Christmas 2008, the Board granted permission for the New Ross bypass. This, in fact, was a proposal to abandon the original long planned New Ross bypass route south of the town in favour of a 900m long high-level bridge across one of the most scenic areas of the Barrow, 4km south of the town. This was despite the fact that there was only an outline A3 drawing for the bridge and a lack of justification for the scale and location of the scheme on cost or capacity grounds. However, one very obvious impact of the scheme (apart from its cost stated that at the Oral Hearing to be in excess of €300 million, but more likely to be in the region of half a billion euro) would be its environmental impact in increasing car and road goods transport and making emissions and sustainable transport targets in the southeastern region much more difficult to achieve.

No one wants to confront the reality of climate change and the need to reduce emissions in excess of 90% by 2050.
This year, An Taisce’s Environmental Education Unit launched another new project. It concentrates on the Energy Theme of the already hugely successful Green-Schools programme. We are delighted to partner with ESB Independent Energy (ESBIE) and see a fantastic future for this project. The project aims to link Green-Schools, working towards their energy flag, with a business in their local area. In this way, schools can learn about any energy saving initiatives the business has created. In turn the students can give the business ideas on how to save energy if they are starting out with no experience. The schools involved will all have experience in promoting energy efficiency so they can be a great help to some of our businesses. Registered schools will get the opportunity to see, learn and also develop new ideas in the area of best practice in energy management. Students can then submit case studies which will be entered into a competition to win prizes for their schools.

So far 60 schools have registered for the programme and that number is growing everyday. Some of the many businesses already on board include Dell, Boston Scientific, Tesco and The Cul Green Campaign in Croke Park. There are many benefits to the businesses involved. In addition to getting linked to local schools and communities, involvement will help to promote energy conservation awareness amongst colleagues and staff, possibly leading to a direct impact on energy bills!

The Green-Schools Energy project was launched in September by Eamon Ryan, T.D., Minister for Communications, Energy and Natural Resources in Our Lady of Victories Infant School, Ballymun. Since then, linking between businesses and schools has been taking place all around the country, and we can’t wait to see the results!

If your school or business would like to get involved please log on to www.esbie.ie and register today or contact Joanne Scott, Project Co-ordinator on 01 4002217 or projectadmin@antaisce.org

The project aims to link Green schools with a business in their local area
A NEW AN TAIisce PROGRAMME TO HELP US REDUCE OUR IMPACT ON THE ENVIRONMENT AND SAVE MONEY ON OUR HOUSEHOLD BILLS.

Green Home is a new environmental programme that is being developed and run by the Environmental Education Unit of An Taisce in partnership with the Environmental Protection Agency (EPA). The programme is funded by the EPA under their National Waste Prevention Programme and aims to support and direct householders as they take actions that reduce their impact on the environment while saving money on household bills.

Any individual can visit the website www.greenhome.ie and become a member of Green Home. Members can access up to date environmental information and learn some simple tips on how to minimise waste, reduce energy use and conserve water; enabling them to save money on household bills in the process. In addition householders can learn about more sustainable modes of transport. Participants can fill out simple surveys on the themes of waste, energy, water and transport to see how green their home is. The programme is activity and action based and members are encouraged to download action plans from the website on the themes of waste, energy, water and transport to see how green their home is. The programme is activity and action based and members are encouraged to download action plans from the website on the themes of waste, energy, water and transport. The action plans provide a number of tips on ways to save money while at the same time help to preserve the environment. The higher ideal is that Green Home participants will all contribute in a very positive way towards helping to reduce our carbon emissions. Survey results enable the Green Home Team to measure any participant behavioural change and this provides essential feedback information on the effectiveness of the programme.

Schools play a very important and active role in the programme and Green Home is currently involved with 40 Green Home schools around the country. Students take on the role of informing and encouraging their families to carry out more ‘environmentally responsible’ actions which they have learned through the Green-Schools programme. Their parents, grandparents, family members and all other householders in the community are invited to partake in this Programme at many levels.

Phase 3 of Green Home that commenced in September 2008 also involves a pilot scheme for community groups in Co. Roscommon with the support of Roscommon County Council. Upon completion of the programme, community groups and Green Home schools will receive a Green Home flag at a special awards ceremony in recognition of their achievements. Green Home is also working in partnership with Wicklow County Council and Bray Town Council on a new environmental initiative called ‘Green Estates’ the aim of which is to enable residents to become more environmentally aware and for the five estates involved to take ownership of their environment.

The programme is free of charge and it is envisaged that participation in the programme will contribute towards building a stronger sense of community. Since the first pilot phase of the programme in November 2006, over 9,000 families in a number of communities around Ireland have been given the opportunity to participate and over 2,000 members have signed up to the website. To become involved in the Greenhome programme log on to www.greenhome.ie or ring 01 4002205.
National Spring Clean
1st – 30th April

Ireland’s most popular and recognised anti-litter initiative - Organise an event to clean up your area.
For more info and to receive a free clean-up kit visit

www.nationalspringclean.org
Or call: 01 4002219
Under the Green-Schools programme schools throughout Ireland have already examined how wasteful people can be with products, water and energy so they understand the importance of conserving resources to protect them and so ensure that they last longer.

Fossil fuels are an energy resource we use all the time to heat our homes, to clean our water and to power our cars. The transport sector in Ireland consumes significant resources and energy. In 2006, energy use in transport was over 99% dependent on oil products, all of which were imported, raising issues of security of supply. In 2006, transport consumed 34% of Ireland’s primary energy demand, and was responsible for a higher level of CO2 emissions (34%) than any other sector, namely industry, residential and services sectors. The transport sector recorded a 7.1% growth in energy related emissions in 2006, making it the fastest growing sector.

Children are the pedestrians, cyclists, commuters and drivers of the future, and traffic related problems are expected to escalate, therefore our future generations that will have to deal with the repercussions of these problems. That’s where the Green-Schools Travel programme steps in. The ultimate aim of the Green-Schools Travel programme is to encourage more pupils, parents and teachers to walk, cycle, park ‘n’ stride, use public transport and car pool instead of using the private car on the school run. These modes of transport don’t use fossil fuel and are more efficient than one person per car.

Schools have an important part to play in reducing transport emissions. In 2006, 46% of school children were being driven to school. At the same time, only 24% of children were walking, and 2% cycling. This compares to 1981 when 41% of children walked and 7% of children cycled to school. Only 16% of children were driven to school in the same year.

The Green-Schools Travel programme was piloted in 50 schools in the Greater Dublin area between 2005 - 2008 to great success, with an average drop in car numbers of 9.5% (and a decline of up to 25% in some schools), and an average increase in walking of 6%. Remember every single kilometre not driven in a car reduces carbon dioxide emissions by 145 grams.

The success of the pilot programme and funding from the Department of Transport means the programme is now being rolled out nationwide. 270 schools (over 70,000 pupils) are now taking part in the programme in 2008-2009.

We also have long running partnerships with the Dublin Transportation Office and Local Authorities to deliver the Green-Schools message. Many schools have implemented a number of initiatives to promote sustainable travel to school including: the walking bus, cycle trains, park ‘n’ stride and walk to school days called ‘WOW’ (Walk on Wednesdays). The schools have hands on assistance from dedicated Travel Education Officers. The officers provide expertise in getting the travel theme started; in terms of school visits and incentives as well as supporting training of teachers and pupils when the need arises through the delivery of workshops and lessons.

Green-Schools Travel can play a considerable part in tackling traffic problems by encouraging pupils to play their part as responsible citizens caring for the earth. Just think a cleaner, greener neighbourhood is only a walk away!
An excellent little book by Hickey from NUI Galway has a particularly interesting perspective on a well covered subject. Whilst explaining the mechanics of climate change in general Hickey also charts the climatic history of Ireland with many stories I haven’t heard before and details the specific impact of climate change here in our own back yard. “Climate change will transform Ireland”. Final chapters outline what you can do and what will happen if we don’t act now!
I highly recommend this book even to those who know the subject well.

www.earthscan.co.uk

Earthscan was originally founded by the International Institute for Environment and Development in 1987, and is now a leading publisher on climate change, sustainable development and environmental technology. Their book lists are a treasure trove of titles, with new books to tempt us to get away from the computer!

A couple that I saw last year were:


This was a light read but explained climate change concepts, problems, and solutions in ways that anyone can easily understand. Following a six-step climate diet plan, families will be able to count their carbon calories and learn how to reduce them, leaving us with a slim healthy planet now and for the future.

Understanding Sustainable Development, by John Blewitt.

EarthScan, 2008 ISBN: 9781844075459

This text book was quite heavy going and academic but it covers many topics of great interest to An Taisce members. Blewitt integrates ideas from science, philosophy, sociology and cultural studies in his explication of key topics. My own copy is heavily underlined, reminding me of useful accounts of principles that we in An Taisce aspire to, including a chapter on leadership, hope and achievement.

Other chapters include: social capital and environmental justice, beyond the imperatives of economic growth, envisioning a sustainable society and tools and systems for sustainability.

Ecopolitics Online Journal

The Ecopolitics Online Journal explores themes of environmentalism, sustainability and social movement.


The website also hosts a number of E-Books which can be downloaded from the books link along with a recent FreeE.Book, Issues in Environmental Research: Politics, Anthropology and Sociology by Liam Leonard & Michael O’Kane. This, the third book in the Ecopolitics Series, presents a series of studies on activists in Ireland between the 1997 and 2007 general elections.

Subscriptions to Ecopolitics Online Journal cost €16.00 (individual) per edition and €50.00 (institutions) per year.

www.sustainable-tourism.ie

Sustainable Tourism Ireland (STI) is an organisation which promotes the concept of sustainability within the tourism sector. STI is building a community of like-minded people who share the same vision and passion in growing sustainable tourism in Ireland.

STI is very much aware of the impact that tourism represents on the environment in terms of energy and carbon emissions. In particular air transport is an issue, as it accounts to more than a third of total emissions from the tourism sector.

For foreign travellers (except UK) it is very difficult coming to Ireland without using air travel. STI suggests the responsible tourist to utilise carbon offsetting schemes for air travel, but also to follow the guidelines for responsible travel, which include energy efficiency and using public transport for travelling within a country.

For more information on the guidelines to responsible travel, visit our website:

www.sustainable-tourism.ie

To offset carbon miles, we recommend to you the project of STI’s member CELT, based in Co.Clare www.celt.net.org/offset-your-co2-page.html to apply for the program.

Ecoescape: Ireland

by Catherine Mack.

Published under the Green Guide Imprint by Markham Publishing. May 2008.

ISBN: 978-1-905731-29-9

Written by Irish Times columnist and travel writer, Catherine Mack, this new guide follows the recent publication of ecoescape: UK. Catherine gives a personal insight into her top 50 ecocapes around the country. Full of practical details, including a Slow Travel Toolkit, ecoescape: Ireland helps travellers find ways to responsible escapism closer to home, and provides international visitors greener options for their travels around Ireland, both North and South.
Leave a living LEGACY

The one thing that remains constant across all our lives is our environment. Since 1946 An Taisce has been on the fore in protecting Ireland's natural and built environment. From one generation to the next, protecting our environment is something that we must do now, for the future.

Would you consider leaving a gift in your will?
Planned giving or making a bequest or legacy is the most effective way to contribute to protecting the future for generations to come. There are a number of options that you can consider when leaving a gift to An Taisce.

Your gift could take any of the following forms:
- A RESIDUAL BEQUEST: after making provisions for your family and friends, the balance of your belongings (legally referred to as your estate) is donated to An Taisce.
- A PURCHASE OF YOUR ESTATE: where a specific percentage of your estate is left to An Taisce.
- A SPECIFIC BEQUEST: where a specific sum of money is donated.
- A SPECIFIC GIFT BEQUEST: referring to any non-cash items such as shares, properties, jewellery, artwork, or other valuables, which can be given to An Taisce.
- A LIFE INSURANCE/INSURANCE POLICY.
- A TRUST.

An Taisce is launching this legacy programme in the hope that you too can see the need for planned giving now. So that we can protect the future now.

This newsletter contains a copy of our full legacy brochure. If you have any questions or require further clarification please contact us in Tailors Hall @ 01 453 3255 or email info@antaisce.org

Thank you. Together we can leave our children a living planet.

An Taisce

Tailor's Hall, Back Lane, Dublin 8.  Tel: 01 454 1786. Fax: 01 453 3255.
Email: info@antaisce.org  Web: www.antaisce.org
VOTE EARTH!

YOUR LIGHT SWITCH IS YOUR VOTE

SWITCH OFF YOUR LIGHTS FOR EARTH HOUR
SATURDAY // MARCH 28, 8:30 - 9:30PM

Further information see http://friendsoftheirishenvironment.net