



THROUGH THE ROOF

HOW PUBLIC SECTOR ENERGY IS GOING TO WASTE



Dublin
Friends of
the Earth



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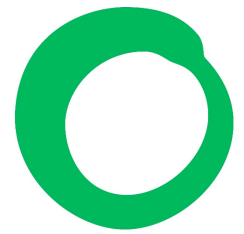
HOW PUBLIC SECTOR ENERGY IS GOING TO WASTE

Dublin Friends of the Earth report

Autumn 2009

Summary

- Imagine a cut in public spending that costs no jobs and hurts no services – and that could save taxpayers up to €100 million within two to three years? Such a cut would surely top Colm McCarthy’s hitlist and the government would ensure its immediate implementation?
- Well, no, it seems not, in the case of money spent on energy in thousands of buildings in the public sector, eg, heating and lighting schools, hospitals, libraries, government and local authority offices. The government’s policy is indeed to cut the public energy bill by 33% by 2020; but according to research by campaign group Dublin Friends of the Earth, progress to date is patchy and slow; and meanwhile, scarce public resources are literally going through the roof!
- Dublin Friends of the Earth has researched Ireland’s compliance with an EU Directive requiring that all medium and large public buildings display an energy certificate, called a DEC. We’ve found that Ireland only began the process of DEC implementation by last January’s final deadline; by late June 2009, only 8% of eligible buildings had a DEC; and by October 2009, that figure had crept up to a mere 20%.
- With a DEC assessment, a school or hospital can find out that their energy costs are wasteful. Staff awareness campaigns on behavioural changes can lead to cuts of 10 - 20%; and retrofitting the building can save more energy. Such investment has a double pay-off, saving costs for future years and saving emissions to help avert climate chaos. This report calls for 100% compliance with the DEC requirement and a mandatory programme of targeted energy cuts across the public sector. Of 793 buildings rated so far, almost half were D1 or lower.
- Meanwhile, Ireland’s greenhouse gas emissions are the sixth most polluting, per capita, of all the rich countries of the world. An Taoiseach, Brian Cowen, stated at a recent UN conference that climate change is the most important and pressing issue on the world’s agenda; but it seems that when it comes to leading by example, Ireland has plenty of good intentions but a marked lack of urgent action.



Some headline findings

- The Office of Public Works manages 250 public buildings, with an annual energy bill of €25/30 million. An energy awareness programme run since early 2008 brought average savings of 7.6% in the first nine months; savings of 15% are expected by December 2009. As well as cutting emissions, that means a cost saving of at least €4 million.
- Similar savings across 5,000 buildings equals an extra €80 million within two years for the public purse. Making the most urgent improvements to the building stock could bring future savings to €150 - €200 million; and more still if smaller buildings were tackled too.
- The DEC energy rating for FÁS headquarters on Baggot Street in Dublin is **G**, the lowest possible – which means that yet more money is being wasted by the scandal-ridden state body.
- The rating for Dublin City Council's Civic Offices is **F**, the second lowest of the scale – so thirty years after the Wood Quay controversy, the bunkers are still giving cause for complaint.
- Ratings for central government departments range widely, and include: C2 for the Dept of Environment's Custom House, a 200 year old building; D2 for the Dept of Enterprise, Trade and Employment, built in the 1940s; E1 for the Dept of Energy and Communications, built about 20 years ago; and F for the Dept of Social Welfare's Goldsmith House, which was renovated a mere six years ago.
- Of ten major hospitals in Dublin visited by DFOE members in Sept/Oct, not one had a DEC on show: Beaumont, the Mater, St. James', St. Vincent's, Tallaght, Temple St., Crumlin, the Rotunda, the Coombe and Holles St. If our hospitals stopped wasting energy, we could pay for cervical screening and other priority programmes.
- The OPW's energy awareness project found that where there was 'excellent engagement' by staff, cuts of almost 20% could be made; this fell to 5% where engagement was 'good' or 'fair'; and crucially, where there was no awareness programme, energy use *increased* by 11%.
- The McCarthy Report made no analysis of possible energy savings in the public sector. A paltry reference in Chapter 3, p35-6, recommends rationalising 'the multiplicity of energy efficiency schemes funded by Sustainable Energy Ireland (SEI)', as '...energy prices are a stronger determinant of consumer behaviour'. But the OPW's project show that targetted schemes are essential to cut both costs and pollution.



What Dublin Friends of the Earth investigated

Most people are familiar with **BERs** – the compulsory energy rating certificate which allows buyers/tenants of houses, apartments and commercial offices to judge the likely energy costs of their decision. **DECs**, however, have hardly impinged on public consciousness, although they were introduced by same EU Directive (Article 7, Energy Performance in Buildings Directive 2002/91), which originated with the Kyoto Protocol on climate change. The Directive's aim is 'to achieve the great unrealised potential for energy savings and to reduce the large differences between Member States in this sector'.

DFOE visited and/or contacted a sample of public sector organisations in Dublin to find out whether they were aware of the DEC requirement, whether they had DECs on display and if so, what their ratings were. In some cases, we also found out what other energy reduction initiatives were in place. This report updates findings first compiled by us at the end of last June.

What are DECs?

Display Energy Certificates apply to all public buildings over a certain size: as the Directive puts it, 'buildings with a total useful floor area over 1,000 m² occupied by public authorities and by institutions providing public services to a large number of persons'. The minimum size is similar to that of an Olympic swimming pool. According to Sustainable Energy Ireland, there are 4–5,000 eligible buildings in Ireland.

Each of these buildings has to be assessed according to an agreed methodology for DECs, and compared to a benchmark of buildings of the same time. A rating from A to G is then given: like the Leaving Certificate, A1 is best and G is worst. A rating for CO₂ emissions is also given, plus a list of recommendations for improvements in energy use; but unfortunately, acting on the recommendations is not mandatory. Instead, it's hoped that DECs will encourage voluntary improvements, including behavioural changes among staff and physical changes to the buildings. Each building's DEC has to be displayed 'in a prominent place clearly visible to the public'.

A BER assesses the fabric of a building – its walls, windows, attic insulation, heating system etc – to find out how efficiently or otherwise it can use energy. A DEC is different: instead, it's based on the current energy bills (gas and electricity) of the building, in proportion to its usable floor space, so that the resulting calculation shows the actual operation of the building. So an F rating could be due to poor insulation, to a costly air conditioning system, to wasteful behaviour, or to all three.

Demonstration DECs can be viewed at: [Display Energy Certificates.pdf \(size 467.8 KB\)](#)



The bad news

Ireland left it till the last possible moment to implement the Energy Performance in Buildings Directive agreed by the EU in December 2002 and in force from 4 January 2003. Member states were given three years to prepare for it, eg, by working out methodologies suited to their climate. Each country was to bring in regulations by 4 January 2006, and another three years were given for full implementation. So by January 2009, a DEC should have been on show in each of Ireland's 4 - 5,000 eligible buildings.

- Instead, the regulations were not signed into law by Ireland's Minister for Environment until 23 December 2008, and came into operation on 1 January 2009. **In other words, the EU's final deadline was interpreted by Ireland as the starting line!**

Having lost three years, Ireland's public sector is struggling to catch up. Sustainable Energy Ireland (SEI) is responsible for informing those involved and for providing training and assessment tools. Last February, SEI told Dublin Friends of the Earth that most DECs should be in place by late June; but by that date, only a small fraction, 8%, were; by mid-September, the figure was 20%; and SEI cannot say when the remaining 80% will be completed.

- Of the total 4 - 5,000 eligible buildings, 793 had a DEC by autumn 2009, a compliance rate of 20%.
- In the health sector, SEI reports that the number of DECs is 46, up from 20 in late June. Of ten major hospitals we visited in Dublin, none had a DEC on show in their main reception area. We also contacted three HSE offices, but in spite of several requests, only one of them provided information on DEC assessments and compliance.
- The education sector has thousands of buildings, which we estimate to include at least 2,000 eligible schools. SEI reports that 517 education buildings now have a DEC; and an Energy Efficiency Scheme for schools was announced last May, which helped to publicise DECs among applicants. But no circular has been sent to schools to tell them of the requirement. We made several attempts to get more details on progress from the department, but received no information.
- DFOE contacted many organisations such as the OPW, Dublin City Council, an Post, the Dublin Airport Authority and others. Some had not heard of the requirement when we spoke to them, and few could report that all or most of their buildings had a DEC on show. But the longer it takes to do basic energy assessments across the public sector, the more public money will go through the roof.



And some good news

We found goodwill among most agencies and individuals we contacted. They realise that it makes no sense to cut essential spending, as so many are doing this year, while wasteful energy spending continues. Ireland's regulations on DECs stipulate that the rating on display has to be updated each year, to encourage improvements. The EU had required updates only every ten years, so Ireland's approach is to be commended.

A number of large organisations are implementing or planning energy efficiency campaigns, including the following:

- The OPW (Office of Public Works) manages 250 buildings including government departments, garda stations and heritage buildings. In a major two year project to cut greenhouse emissions, an average cut of 7.6% was achieved in the first nine months, with the best offices making savings of almost 20%. Overall, they expect a 15% reduction by the end of this year. They are now tendering for a new two year programme, with retrofitting of wasteful buildings as the main focus.
- Dublin City Council has a Climate Change Strategy and a detailed Energy Action Plan, and is involved in an EU-wide campaign by local authorities, www.minus3.org, to cut energy use by 3% each year, over 3 years from 2008 – 2011.
- Dublin's four universities have been cooperating since 2004 on an energy management project called e3 (www.e3.ie), to share information and make savings. Most of the 70 buildings involved will have a DEC on display by the end of November 2009.
- An Post has initiated a number of energy-saving measures and are also taking part in a review of energy use reductions by postal services across the EU, to be presented to the Copenhagen climate change conference in December.
- An Energy Efficiency Scheme for schools was announced in May 2009, with funding of €20 million for basic roof and cavity wall insulation work. We understand that the take-up has been very good, though we have been unable to get figures from the Dept of Education. The application deadline was recently extended to November.

These positive initiatives are very welcome and provide examples of what can be done. What is needed, however, is that such patchy progress is replaced with across-the-board planned reductions, based on national targets and actions in all sectors. The first step is to make 10 – 20% reductions in energy use by changing our behaviour; then Ireland's many poorly planned buildings will have to be retrofitted in order to reach 30 – 40% reductions.



Why Ireland needs energy-efficient buildings

It seems obvious that public money should be saved in ways that don't hurt services – which is exactly what can be done with energy reductions. This is why Dublin Friends of the Earth was so surprised that Colm McCarthy's An Bord Snip Nua did not pay attention to cutting wasteful energy costs.

The OPW's experience is that expenditure can be recouped within one year on the sort of targeted, high-profile campaigns necessary to achieve behavioural change by staff; but just as importantly, if energy reductions are not targeted, then spending increases by at least 10% each year, eg, as extra computers, printers and other equipment arrive in our offices.

But it's not just a matter of public money. The threat of climate change is accepted by all reputable scientists, and the latest evidence shows that dramatic change is happening more quickly than expected. So urgent cuts in greenhouse emissions are needed across the world to avert a climate catastrophe which could make our recent economic troubles a picnic by comparison. The Irish government's policy is to reduce the country's energy use by 20% by 2020, and the public sector's by 33% by the same date. Given the urgency, why are we crawling gently towards those targets?

According to SEI, Sustainable Energy Ireland, energy use in the public and commercial sectors combined grew by 70% in the period 1990 – 2004, and greenhouse emissions grew by 62.5%. Overall emissions in Ireland grew by 25% in that period, almost twice the Kyoto Protocol limits. Clearly, we have a lot of work ahead to undo the dirty years of the boom.

Ireland's greenhouse emissions for 2005, the latest available, are at 16.7 tonnes per person per year; Sweden's are 7.4; the EU average is close to 11; the U.S. figure is 23.5, China's is 5.5 and for Ethiopia is just 1. Ireland has been rated the sixth most polluting country in the developed world, per capita.

Another example is that Dublin's buildings have much higher emissions per capita than those of London, Tokyo or Stockholm. According to the City Council's Energy Action Plan, Dublin's figure is 5.3 tonnes of CO₂ per person each year, London's at 4.3, Tokyo's at 2.9 and Stockholm's at 2.6.

According to SEI, buildings account for 40% of energy use. By saving 25% of that energy, Ireland could make a 10% cut its total emissions and costs. Transport, power generation, agriculture and other measures could bring us to a 30% cut. This is the target for 2020 put forward by the EU in the preparations for December's U.N. Climate Conference in Copenhagen.



What Dublin Friends of the Earth wants

1. All public agencies falling under the remit of the EU Energy Performance Directive should be informed immediately of their obligations, and **100% of eligible buildings should have a DEC by the end of March 2010**, up from 20% in autumn 2009. Extra resources should be provided to SEI if necessary.
2. **All public buildings to have mandatory targets for energy cuts, with set timetables for action. This requirement should be included in the Climate Change Bill** to be published by Minister John Gormley, T.D. in early December. Voluntary actions on a haphazard basis across the country are not enough. Targets could be 5 – 10% cuts in the first year, 10 – 15% in the second year and 15 – 20% in the third year. Most of these short-term cuts could come from the 'low-hanging fruit' of behavioural changes, including simple measures such as turning off lights, heating and computers at night-time and weekends. But behavioural changes do not come about by wishful thinking – the evidence is that planned programmes are essential.
3. **An immediate energy audit in all buildings rated E1 or lower, which comprise 25% of those to date, and a possible total of 1,000 buildings.** Within three years, those rated C2 down to D2 should also be audited – a possible total of another 1,700 buildings. A programme of retrofitting should follow in both cases, to deal with poor insulation, leaking windows, high emission heating and air-conditioning systems and other problems. Given spending constraints, the cheaper and most urgent measures could be prioritised; but it will be a false economy for the government to postpone indefinitely the major improvements needed in our buildings. The sooner we spend, the sooner we save.
4. All new buildings paid or part-paid for by the taxpayer to be designed to low-energy or carbon neutral standards – **because at the design stage, emissions can be eliminated or cut by 80%**. According to the EU, most of our buildings consume 25 litres of heating oil, on average, per square metre per year, and in some buildings, up to 60 litres. Good design cuts this to 3 – 5 litres.
5. **All buildings – small as well as medium and large - should have DEC assessments and mandatory reduction targets.** It's expected that the EU will require buildings below the 1,000 sq m threshold to be rated from 2010, and this could bring the number of rateable buildings in Ireland up to 8 - 10,000.



Further questions that need to be asked

Dublin Friends of the Earth would like to urge journalists and public representatives to follow up on the information in this report by asking the government, individual public agencies and SEI a lot of hard questions.

Such questions include:

- When will Ireland comply with the DEC provisions of the EU Directive on Energy Performance in Buildings, given that the implementation deadline was last January 2009?
- Does SEI have sufficient resources to ensure the speediest possible implementation of DECs, along with all the other energy efficiency schemes they're working on? And if the McCarthy report recommendation on SEI is pursued, how does the government propose that Ireland can comply with its obligations?
- Why has wasteful public spending on energy not been highlighted and targetted by the government for urgent reductions, given the pressure on the public finances as well as the need for action on climate change?
- In the Climate Change Bill to be published before the U.N. conference in Copenhagen in December 2009, will there be mandatory annual targets for energy reductions across the public sector? Will the Climate Change Bill include provision for capital spending on retrofitting energy-wasting buildings, as this spending will create jobs and can be expected to pay for itself within a short period of years?
- We would like to urge T.D.s and councillors across the country to find out what the public organisations in their area – schools, hospitals, local authorities, health service offices, libraries, garda stations and others – are doing to comply with the EU requirement for DECs, and what energy savings they are planning for. If a minimum of €80 million of energy costs can be saved in Ireland within the next 1 – 2 years, as we believe, that's €2 million of public spending for every constituency, without a single job lost or service curtailed.



More details on our survey

Dublin Friends of the Earth, a voluntary campaign group, did not aim for a comprehensive survey, but rather for a broad picture based on random samples, mostly in the Dublin area. On this basis, we tried to find out:

- 1] are public sector organisations aware of the DEC requirement?
- 2] do they have a DEC on prominent view in eligible buildings?
- 3] if so, what DEC rating/s do they have?
- 4] are they implementing an action plan to reduce energy use, based on DEC recommendations or on another scheme?

The organisations we contacted or visited were as follows:

- SEI, Sustainable Energy Ireland.
- Department of Environment - Building Standards section.
- OPW, covering central government departments, garda stations and heritage buildings; and we visited individual departments in Dublin.
- Department of Education and Science, and a number of individual schools, both primary and post-primary.
- Powertherm, energy consultants to the e3 project coordinating energy reduction programmes in all four universities in Dublin.
- Dublin City Council; their sustainability advisors, Codema; and also Dublin City Libraries and a number of individual libraries.
- Fingal and Dún Laoghaire/Rathdown County Councils.
- HSE, the Health Service Executive, and several major Dublin hospitals.
- FÁS headquarters; Iarnród Éireann; Dublin Airport Authority; An Post; and RTÉ radio and television centres in Donnybrook.

Some of these contacts were exhaustive and we received very helpful information and advice from some agencies; but in the case of others, constraints of time allowed only initial contacts or brief visits. In a number of organisations, finding out who was responsible for energy management took a lot of phone calls. We tried our very best to confirm all the information in this report and would welcome any corrections necessary.

We understand that the process of making DEC assessments can be time-consuming: eg, many organisations do not have up-to-date floor plans of their buildings; some state bodies shares their building with a commercial or community group, so that separate measurements are needed; and some operate across many buildings on a campus.

As a way to measure energy use, DEC's can also be quite crude, and we understand that some criticisms have been made of the methodology adopted in Ireland. But most people we spoke to agreed that DEC's provide very useful baseline information.



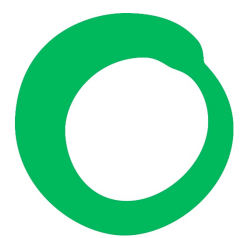
DECs – compliance or enforcement?

DFOE spoke in detail to the Department of Environment on the question of responsibility for enforcing the EU Directive. The first answer was that the government's approach is one of encouraging compliance rather than threatening punishment for non-enforcement. The government, we were told, is very conscious of being behind the more advanced European countries as regards energy efficiency in general and is anxious to rectify this.

Responsibility for this area is shared by three bodies: the Department of Environment, responsible for buildings standards in new buildings; the Department of Energy, responsible for energy use in existing buildings; and SEI, whose task is to provide information and advice to all affected agencies. Responsibility for implementation of EU Directive 2002/91 falls to the Secretary General of each government department/ CEO of each organisation/manager of each school and so on. But SEI and the two departments above have tried to set up mechanisms to make it easier to collect all the information needed – eg, since June 2009, the Dept of Education has an online system for all schools to apply for a DEC. This backroom work, they say, will speed up greatly the process of obtaining individual ratings.

If enforcement were necessary, we were told that legislation gives the Building Control Authorities (in the local authorities) power to take non-compliers to court. But it's hoped that would not have to happen, and indeed, the EU Directive does not envisage such enforcement. Full compliance is expected, according to official sources, even if some organisations are slower in their response than others, or have more complex buildings to assess.

We would like to urge public representatives and journalists to ask questions on this issue and on related questions of energy pollution and wasted public expenditure. DECs are one specific item in a long list of actions needed for Ireland to join the civilised countries that are trying to live, not just within our immediate financial means, but more crucially for our future, within the means of our planet.



DETAILS ON EACH ORGANISATION CONTACTED

SEI/ Sustainable Energy Ireland

SEI is responsible for providing information, training and assessment tools to the public bodies required to show DEC's. In mid-October, following a number of requests, SEI sent Dublin Friends of the Earth some helpful figures, dated mid-September 2009, which give an overview of compliance to date.

- 793 buildings had a DEC in place, out of a total of at least 4,000.
- This is a compliance rate of 20%, up from 8% in late June, when only 336 buildings had a DEC.
- 1. SEI told DFOE that it cannot speculate on when 90- 100% compliance will be reached, as 'to do so could potentially be misleading'. It is working with public bodies as a priority to enable them to meet their DEC obligations.
- SEI provided the following list of the numbers of buildings for each rating, which shows the wide range of energy standards in Ireland's public sector.

Assessments by Grade

Energy Rating	# Ratings
A1	0
A2	3
A3	5
B1	36
B2	68
B3	57
C1	58
C2	97
C3	75
D1	82
D2	91
E1	59
E2	45
F	34
G	83
	793

- In the list above, 394 buildings, almost half of the total, are rated D1 or lower; and over a quarter are rated E1, E2, F or G, and therefore are wasting a lot of money, as well as being serious polluters.



- If this pattern is replicated in the remaining 80% of buildings to be assessed, at least 1,000 medium to large buildings will need to be retrofitted urgently, and many more should be audited and improved within the next 3 – 5 years.
- SEI also provided the following figures for the number of buildings with DEC ratings in different parts of the public sector. However, as they did not provide a comparison with the total numbers of eligible buildings in health, education, local authorities etc, it's difficult to interpret this information.

Assessments by Sector

State bodies	Health	Education	Central govt	Prison / Garda	Local authorities
68	46	517	39	7	116

- DFOE is concerned that the slow progress in DEC compliance may be due, to some degree, to a shortage of resources to inform all public bodies of their obligations and to help them to get assessments done. The number of eligible buildings estimated at 4,000 – 5,000; and when the DEC requirement is widened, as expected in 2010, to include small public buildings too, this number could double. According to SEI, the following numbers of people are qualified/available to do the assessments:

DEC Assessors

Total Number of DEC's issued	793
Total number of Registered DEC Assessors	121
Total number of Active Assessors	62

- Among the schemes run by SEI, there's a Public Sector Programme, with free advice and mentoring on energy efficiency measures. Over 200 public facilities have registered for this service in recent months.
- If the recommendation of Colm McCarthy's report on public spending is accepted by the government, to rationalise 'the multiplicity of energy efficiency schemes funded by Sustainable Energy Ireland', Dublin Friends of the Earth is very concerned that DEC implementation will slow to a standstill, and that the basic data needed to ensure countrywide cuts in public energy use will not be collected. According to McCarthy, energy efficiency schemes 'should be promoted routinely by the energy companies, under regulatory requirements if necessary'. It seems unlikely, however, that promotions by the ESB, Airtricity and others will bring about the behavioural changes and improvements to thousands of buildings so urgently needed.



OPW/Office of Public Works

- The OPW manages 250 buildings for the state, including central government departments, garda stations, court buildings and heritage centres. The OPW is working with two energy consultancies, and is preparing DEC assessments; but we did not get figures on how many buildings have been rated to date.
- From visits to some government departments, we've established the following information on individual ratings:
 - C2 - Custom House/Dept of Environment [over 200 year old building];
 - D2 - Dept of Enterprise, Trade and Employment [built in the 1940s]
 - D2 - Leinster House complex of 11 buildings on Kildare St/Merrion St [ranging from a 250 year old to recent buildings].
 - D2 - Dept of Health, Hawkins Street [about 40 years old]
 - E1 - Dept of Energy & Communications, Adelaide Rd [20 years old];
 - E2 - Dept of Social Welfare, Store St [over 50 years old];
 - F - Dept of Social Welfare, Goldsmith House [renovated 6 years ago]

We found no rating in the Dept of Transport or in the Dept of Agriculture, both in Kildare St; they may be included in the 'Leinster House complex', though SEI guidelines indicate that DECs should apply to individual buildings, even in case of a common energy management system.

The methodology for DECs means that ratings are based on a comparison of energy use in one building with a benchmark for buildings of the same type; so being an old or a new building is not a determining factor. But it is striking that many of our late 20th century buildings above give such poor value.

- The OPW's annual energy bill is €25/30 million. Saving 10% means up to €3m less spending for the taxpayer, saving 15% means up to €4.5m. In January 2008, following an earlier pilot, the OPW started a programme to reduce energy use and CO₂ emissions, with a target of a 15% cut within 20 months. To make it effective, a system of energy monitors, similar to smart meters, was installed in their buildings, providing 'live' data online every 15 minutes. An awareness campaign called [OptimisingPower@Work](#) was put in place, with energy officers and energy teams in every building.
- The programme took place in two phases, the first to Aug 2008, the second recently extended to Dec 2009. Phase I, covering just 100 buildings, achieved an average 7.6% cut in emissions. Success depended on staff engagement:
 - savings of 19% where there was 'excellent engagement';
 - savings of around 5% where engagement was 'good' or 'fair';
 - almost no savings where it was 'poor';
 - energy use **increased** by 11% in buildings not participating.

These figures show that campaigns have to be well-planned and targeted, and that doing nothing leads to a constant increase in energy use, as more computers, printers etc are installed. Simple measures such as turning off lights and computers bring the biggest immediate savings.

- The OPW is now tendering for a new 2 year programme which will focus on energy-saving renovations to a number of buildings. DFOE believes such a programmes should be mandatory across the public sector.



Department of Education and individual schools

- There are just over 4,000 schools in Ireland: about 3,250 primary and 750 second-level. Some are very small and do not yet require a DEC.
- According to SEI, 517 buildings in education had a DEC in mid-September. That is likely to include some third-level buildings, so we estimate that, at most, 25% of eligible schools had DECs by then, up from about 10% in June.
- Up to October 2009, the Department of Education had not sent a circular to all schools telling them that DECs are a legal requirement. However, a website for DEC applications, www.energyeducation.ie, came on stream in June.
- Last June, DFOE contacted up to 15 individual schools in Dublin a- 10 second-level and 5 primary - and none had heard of the DEC requirement.
- Last May, a new Energy Efficiency Scheme for schools was announced, with €20m available to fund basic insulation measures; and the deadline for applications was recently extended to November. Provisional application for a DEC is required as part of the application process for funding. DFOE has tried to find out how many schools are benefitting from this, and whether the funding is sufficient to cover all the schools needing improved insulation, but we have not received any response to these queries.
- The McCarthy report on public expenditure has recommended that the Green Schools initiative should be discontinued, to save €2 million. As this is the same sum of money reported by An Taisce [Irish Times, 04.11.09] to be saved in our schools this year on fuel, electricity, waste and water, as a result of the Green Schools campaign, the recommendation seems shortsighted, at best.

Universities in Dublin

- Since 2004, all four Dublin universities – UCD, Trinity, DIT and DCU - are part of an energy management project called e3 [www.e3.ie], part-funded by SEI and covering seventy buildings. The goal of e3 is to reduce energy use in these universities by 10% by 2010, through cooperation on the best methods to use in their many specialised buildings.
- According to consultants Powertherm, who are involved in e3, DEC assessments are separate from the project; but the e3 steering committee has reported that the majority of buildings involved will have a DEC on display by the end of November 2009. DFOE has not been able to visit individual colleges to see what individual ratings they have.
- Since 2004, cumulative energy savings of €3 million have been made, and CO2 emissions reduced by 15,000 tonnes.
- According to information given to DFOE last spring, the total cost of electricity, gas and water to Trinity College in 2007 was €6 million, so a saving of 10% means an extra €600,000 for educational spending.
- A project run by e3 from 2004 – 2006 achieved 12% energy savings in 30 buildings; and a second project is now running, with the aim of maintaining that 12% and saving another 10% in 36 further buildings.



- A survey by e3 in one college [not named] found that using 3,300 computers resulted in 617 tonnes of CO₂ emissions each year, at a cost of €100,000. If all these computers were shut down at night, they said that energy use and emissions could be cut by 30%.

The e3 project is run by two energy consultancy companies, and involves a steering committee, project manager, college energy managers and 'energy champions' in each building. This is an example of how savings cannot be made by aspiration or exhortation, but by detailed planning.

HSE/Health Service Executive and individual hospitals

- According to SEI, 46 buildings in the health sector have DEC's. This is likely to be a small percentage of all the public hospitals, health centres, dental clinics, health services offices and related buildings throughout the country.
- DFOE members visited ten major hospitals in Dublin: Beaumont, the Mater, St. James', St. Vincent's, Tallaght, Children's University Hospital in Temple St, Our Lady's Hospital for Sick Children in Crumlin, the the Rotunda, the Coombe Women's Hospital and the National Maternity Hospital in Holles St. In mid- to late October, not one of them had a DEC in their main reception.
- In Holles St, an environmental policy is on view, with a commitment to minimising energy use, and showing a Sustainable Energy Award 2005 for a Thermal Energy Project.
- We made follow-up enquiries with a few other hospitals:
 - St. James' Hospital said that they had done a DEC assessment, but that 'technical problems' were delaying display of the certificate;
 - Temple St. Children's Hospital said that they were ready to proceed with the DEC assessment process as soon as SEI could allocate a person to work with them on it. Meanwhile, they told us of a major electrical upgrade completed in early 2009; major theatre refurbishment including electrical plant rooms; and replacement of its main steam generating plant for a higher efficiency unit. These and other works would help the hospital improve its energy efficiency.
 - St. Vincent's acute hospital seemed to believe that the DEC requirement did not apply to them; but we have confirmed with SEI that DEC's apply to all publicly-funded facilities, including voluntary hospitals and religious-run schools.
- DFOE also tried to get information from the HSE on DEC assessments in the sector:
 - HSE/Dublin North-East told us that assessment is ongoing, and that 30 sites have been audited: 16 in Dublin North, including two voluntary hospitals and 14 in Dublin North-East.
 - HSE/Mid-Leinster were unable to provide a response to several queries sent to them.
 - HSE headquarters' Press Office also failed to provide any details.



Dublin City Council

- DCC covers about 120 buildings, including the Civic Offices, fire stations, libraries and leisure centres. Only 28 of these require a DEC, we've been told.
- By the end of September 2009, just 6 of Dublin City Council's buildings had a DEC, and included the following ratings:
 - G – Aughrim St. sports hall.
 - F – Civic Offices on Wood Quay;
 - E1 – Seán McDermott St. swimming pool;
 - D1 – Dublin City Library and Archives, Pearse St;
 - B1 – Sheriff Street Recreation Centre.
- Codema, an energy consultancy working with Dublin City Council, has told us that DECs are a 'central performance indicator' in energy use, but they have encountered many delays in getting assessments done.
- Dublin City Council adopted a Climate Change Strategy in 2008 and, following on from it, the Dublin Sustainable Energy Action Plan, which lists detailed measures for carbon reduction. The council is also involved in an EU-wide campaign, Minus3% [www.minus3.org] which aims to cut energy use by local authorities themselves by 3% each year, over 3 years from October 2008 – Oct 2011. In March 2009, the Lord Mayor of Dublin signed the EU Covenant of Mayors, under which 500 European cities are working together to go beyond the EU 2020 targets for 20% reduction in CO2 emissions. This year too, the council facilitated participation by a number of staff members in an international post-graduate programme on sustainability.
- According to the council's Energy Action Plan, residential and commercial buildings account for 55% of total CO2 emissions in the city, and represent the biggest opportunity for CO2 abatement.
- Per capita emissions for Dublin's buildings are high, according to the Action Plan, compared with other cities in a similar climate. For example, emissions from Dublin's buildings are 5.36 tonnes of CO2 a year for each person; London's are 4.3, Tokyo's 2.9 and Stockholm's 2.6.
- Changes in behaviour were estimated to provide the single greatest short-term reductions in these – up to 20% reductions possible.



Fingal County Council

- We were told last summer that four of their buildings have been rated, but got no further information; and recent queries were not responded to.

Dún Laoghaire/Rathdown County Council

- Repeated calls and emails elicited no response on DEC ratings.

FÁS, the state training agency

- The FÁS building on Baggot Street has the lowest possible rating, G. This suggests that saving on energy costs should be another urgent priority for the trouble-ridden agency.

RTÉ Radio and Television

- Neither the radio centre nor the television centre in RTÉ's campus in Donnybrook had a DEC on display in late October. DFOE did not get an opportunity to make follow-up enquiries with RTÉ.

Other public agencies

Last May/June, DFOE contacted a number of other public agencies, and got the responses below. We have not had an opportunity to make follow-up enquiries.

Iarnród Éireann

- Dublin mainline/ commuter train stations checked by us then did not have a DEC: Heuston, Connolly, Pearse or Tara St stations. Several individual managers contacted by phone had not heard of DECs at that time; after several phone calls, one manager commented that “we’re looking at the legislation at present, and trying to find out which buildings are exempt.”

Dublin Airport Authority

- Ten buildings at Dublin Airport qualify for DECs, according to the DAA. In June, two people at DAA had qualified to do the assessments, and they hoped to have the first certificates “within a matter of weeks”.



An Post

- An Post has 26 eligible buildings, and all had been assessed and rated in June, but their DEC's were not yet on display. Their ratings varied from B2 to G.
- An Post is working with postal services in all EU countries to conduct a sectoral review of energy use and reduction programmes. This will be presented at the U.N. climate conference in Copenhagen next December, the only public service to plan to do so, as far as they knew.
- An Post had a number of energy saving initiatives in train, including a "Switch It Off" campaign at the mails offices in 2007, which they say cut significant costs on wasteful night-time and weekend energy use. There are plans to replace high bay lights at 18 mails sites with new self-managing energy efficient systems; and in conjunction with SEI, energy assessments were to be done of the GPO and the Dublin Mails Centre this year.

Dublin Friends of the Earth

13 November 2009

