

Dublin Friends of the Earth

Presentation to the Joint Oireachtas Committee on Education and Social Protection

for hearing on Wednesday 4th June 2014

Introduction

Dublin Friends of the Earth welcomes the opportunity to present this paper to the Joint Oireachtas Committee on Education and Social Protection. The paper argues that millions of euros are being wasted each year, because there is no national strategy to reduce energy waste in our 4,000 schools. Energy costs in schools are estimated at up to €80 million a year; government policy is to achieve 33% savings in energy use across the public sector by 2020, and existing initiatives show that up to 20% can be saved by no-cost or low-cost means. That's the good news story; but the bad news is that in spite of great work through voluntary schemes such as the Green Schools Programme, there is no national data or targeted plan to ensure the maximum savings as soon as possible. Dublin FOE is asking the Joint Oireachtas Committee to address these failures as a matter of urgency.

The context

We are struggling with two crises in Ireland as elsewhere, an economic crisis and a climate crisis. The effects of financial cutbacks, including a 3.5% cut to capitation payments for schools' running costs, are all too clear in every school. The urgency of cutting greenhouse emissions is also all too clear, for example in the most recent UN Report by the Intergovernmental Panel on Climate Change Report (IPCC). In Ireland, our emissions are still among the highest per capita in Europe, and the Green Paper on Energy Policy published in May 2014 states: 'Climate change is possibly the most fundamental existential issues of our time. Over the next decades Ireland's economy will need to shift from one predominantly dependent on imported fossil fuels to a more indigenous, low carbon economy based on renewable energy, energy efficiency and smart networks'.¹

Reducing energy waste in the public sector can provide good news on both financial and climate fronts. The National Energy Efficiency Action Plan, updated in 2013, sets a target of 20% energy savings across all sectors of the economy by 2020, with a 33% target for the public sector as an exemplar to others. This means sustained changes in 10,000 buildings and other facilities, including those run by central government, the health service, local authorities and in our 4,000 schools.

Dublin FOE is a local voluntary campaign group, part of Friends of the Earth Ireland (www.foe.ie). In 2012, we published a report entitled Cuts That Don't Hurt.² In our research, we found admirable energy efficiency policies on the part of state agencies but patchy and slow implementation on the ground; and a random survey of 40 schools in the Dublin area showed that only three of them had an energy management plan. A recent article in the Journal summarises our campaign.³

¹ <http://www.dcenr.gov.ie/Energy/Energy+Planning+and+Electricity+Corporate+Division/>

² http://www.foe.ie/download/pdf/dublin_foe_cuts_that_dont_hurt.pdf

³ (<http://www.thejournal.ie/readme/climate-change-carbon-emissions-public-builings-1415887-Apr2014/>).

Overview on public sector energy costs: what's (not) happening

SEAI, the Sustainable Energy Authority of Ireland, has responsibility for implementing energy efficiency policy across the public sector. Many initiatives are underway, but crucially, the basic data that would show whether and how much progress is being made has still not been published.

- For almost two years now, SEAI has promised to publish data on energy use in the year 2011 by the 100 largest public sector bodies, responsible for 90% of energy use in the sector. Dublin FOE was told in Feb 2014 that the report was with the designers, but it has not yet been published. But data on schools will not be included in any case, although schools comprise over 4,000 of the public sector's 10,000 buildings.
- Public sector bodies have been legally obliged since January 2011 to report their annual energy use and measures to achieve reductions to SEAI. The first reporting date for schools has been set for January 2015, and according to SEAI, a pilot project is now underway in just 8-10 schools to establish a monitoring and reporting system to enable them to do so.
- The lack of national data from 2011, 2012 or 2013 means that we do not know how much public energy savings are being achieved and how quickly or slowly. But projects run by OPW, the Office of Public Works, shows that without targeted energy management plans, energy use *increases* by 11%, as use of computers and other equipment grows.
- SEAI and OPW have also found that with targeted plans, 5–15% savings are possible through simple behaviour change such as controlling or switching off lights, computers and heating at night and weekends; another 10% savings are possible with low-cost improvements such as timers, light sensors and boilers; after that, only retrofitting, eg with wall and roof insulation and better glazing, can make the 33% target achievable.

School energy costs: what's (not) happening

Schools' running costs, including energy, are paid for by individual schools from the capitation funding they receive from DES, Dept of Education and Science, per child enrolled each year. Capitation costs for our 3,300 primary schools are €180m a year; those of over 700 second-level schools are harder to confirm, but we estimate total capitation at up to €250m pa. There is no reliable data on what proportion of this goes on heating, electronic whiteboards and other energy costs; but individual schools have told us they estimate it at under a quarter to a third, which is equal to €50-€80m a year; and SEAI has confirmed to us that this is the range they estimate too, which puts schools' energy spending at 8-16% of the total public sector energy spend.

A report from SEAI⁴ gives the average annual spend of a school with under 200 pupils at €11,500; 400-500 pupils at €31,500; and over 800 pupils at €75,700. So saving even 20% of this can help pay for books, libraries, school trips and other needs, and relieve fundraising pressures.

It is also important to remember that new technology leads to a rising demand for energy: as well as computers for pupils' use, having a projector, electronic whiteboard and laptop in every classroom,

⁴http://www.energyineducation.ie/Energy_In_Education/Information_for_Schools/Resources_and_links/Energy-management-and-education-supports-for-schools-Progress-Summary-2012—2013.pdf

using whiteboard bulbs that we are told have to be replaced every year or two, means that unless there is a strict energy management plan in place, costs and climate pollution rise inexorably.

Energy in Education was piloted in 2009 and launched in 2012 by SEAI and DES to provide training and advice to schools to reduce their energy use. Its website www.energyineducation.ie provides very accessible templates and models to help them do so. But Dublin FOE questions how the programme is functioning, and whether it can deliver implementation of its energy saving aims.

- In October 2012 a press release from the SEAI⁵ stated that 250 schools had taken part in Energy in Education. By January 2014 another press release from DES⁶ claimed that 260 schools had taken part. This is a rise of only 10 schools in over a year.
- SEAI's report, *Energy in Education 2012/13 Progress Report* (referenced at footnote 4 above) gave similarly low figures on usage in 2012-2013. So it seems that the programme has engaged with 6% of schools at most.
- DES has never sent a circular to schools to tell them of the existence of the programme, even though such a circular would announce a way to help schools to save vital money. Individual schools who have used the website, or gained training or advice from SEAI have told us that they found it very helpful. So why is the programme being kept such a secret?
- Political leadership is also clearly lacking on the urgency and benefits of energy saving in schools. Dublin FOE can find very few instances on the record of Minister Ruairí Quinn TD speaking publicly on the issue in the past two years.

On new school buildings, sustainable design has been promoted and achieved by the DES in recent years. This is very good news; but on school extensions, Dublin FOE has been told recently of a instance where such a standard was not implemented, so we would ask whether that is an issue that should be examined. Crucially, however, most of our schools are not new, and therefore to achieve major and continued savings in the short and medium term, behaviour change, low technology improvements and deep energy retrofits to existing schools are essential.

The role of the Green Schools scheme

Green Schools (www.greenschoolsireland.org), coordinated by An Taisce in partnership with local authorities, is part of an international programme which promotes longterm, whole-school action for the environment. It is based on step-by-step changes on six themes: litter and waste, energy, water, travel, biodiversity and global citizenship; eg, to receive its first Green Flag, a school works on reducing, recycling and raising awareness of waste over a two year period, before moving to the next theme, energy. Activity is coordinated by an adult – usually a staff member working voluntarily – in conjunction with a committee on which a majority are pupils. Green Schools research has shown that behaviour change requires peer leadership rather than just awareness and knowledge,

A majority of schools are now participating in the programme and around 3,000 have now been awarded at least one Green Flag, so it is clearly having a great impact on environmental awareness and action among young people. On the travel theme, GS has partnered with NTA, the National Transport Authority, to implement the state's transport policy of encouraging walking and cycling to

⁵ http://www.seai.ie/News_Events/Press_Releases/2012/Energy_in_Education_Launch.html

⁶ <http://www.education.ie/en/Press-Events/Press-Releases/2014-Press-Releases/PR14-01-23.html>

school. On energy, however, Dublin FOE understands from its contact with Green Schools that this kind of large-scale institutional partnership has not taken place, in spite of opportunities to do so, and cooperation with SEAI on some initiatives over the years.

Dublin FOE believes that the government must decide urgently how to implement the state's policy on 33% reduction by 2020 in energy and emissions by schools: it seems to us that Green Schools has the infrastructure and experience to make it a very effective platform to do so, but if they are not given that remit, another mechanism is essential. We believe that each school board should be required to have an active energy management plan, with measurable and comparable national data from year to year: this is not part of how Green Schools works at present but it seems it could be incorporated in their work if appropriate resources and supports are made available.

As they are set up at present, there are limitations to what Green Schools can achieve on energy:

- While a school works on the energy theme, it collects data on costs and usage of electricity and oil or gas, to show the 'before' and 'after' picture. But when it moves to new themes, such data may no longer be collected. Schools are encouraged strongly to continue energy conservation habits but it is not possible to measure the extent to which that happens across the board; and GS does not set or monitor specific percentage targets on energy.
- GS coordinators work voluntarily at school level – 'five minutes at lunchbreak and another ten after school' as one said to Dublin FOE. Whether they are well-supported by their principal and board or not, cutbacks and increased workload is making this more difficult. In addition, it is difficult to maintain momentum on energy while working hard on the water or biodiversity themes, and regular intervention is needed. To quote from the OPW, which has run some excellent energy management work in central government buildings: 'It is essential that savings already achieved be maintained; experience shows that without intervention the buildings will quickly revert to their pre-campaign consumption levels'.⁷
- Behaviour change and low-cost technical improvements can achieve 15–25% savings; but the poor fabric of so many schools is the biggest problem of all. Without data and targets, we believe that a workable strategy to address this will not be possible.

Examples of savings made by individual schools

The following are examples of how positive a story energy savings in schools can be - and they highlight how surprising it is that the Minister for Education is so silent on the issue.

- For the most recent school year 2013-2014 data obtained from GS indicated a saving of around €4m for participating schools on oil, electricity and gas costs, and a further saving of around €4m on water, waste and travel fuel costs.
- In percentage terms electricity was reduced by 18%; oil reduced by around 8-10% and gas by around 13%.

In individual schools the following are a few examples of savings from SEAI and Green Schools:

⁷ http://www.dcenr.gov.ie/NR/rdonlyres/B18E125F-66B1-4715-9B72-70F0284AEE42/0/2013_0206_NEEAP_PublishedversionforWeb.pdf

- A special school in Wicklow with 20 pupils saved 20% of its energy use by switching off equipment after school, removing electric heaters and opening blinds during daylight hours, resulting in an annual saving of €4,000.
- A post primary school in Mayo with 652 pupils saved 18% of its energy use by eliminating night use of electricity, using timers to switch off PCs and using efficient lighting and fan operation, resulting in an annual saving of €10,000.
- Scoil Phroinsias Naofa, Clara, Co. Offaly reported a 70% reduction in energy costs following low-level changes such as reduced settings and time switches on the heating system, turning off boilers at night and motivating pupils and teachers to close doors and turn off lights.

What Dublin FOE wants the Joint Oireachtas Committee on Education to do

We would like the Committee to support the following proposals and to ask the Minister for Education and Science to pursue them:

1. That all school boards of management be required to have an energy management plan as part of their financial responsibility; and that implementation is done with whole-school involvement; but that financial sanctions are also available if some schools are found after an initial period of 2-3 years not to be making energy savings.
2. That all schools have access to external support and guidance to implement this policy, and that all 4,000 schools are enabled in 2015 to monitor and report on their energy use and actions for efficiency. The initial costs of such energy management programmes can be repaid quickly: for example, the OPW found that a spend of €600,000 over 3 years saved €5m in energy costs from an energy spend of €30m across 250 buildings.
3. It seems to Dublin FOE from the information available to us that the Green Schools Programme is best placed, given their infrastructure and experience, to provide such external support, if they are given the remit and additional resources to do so. But it is a government decision how to ensure implementation of the state's policy for a 33% reduction in energy use by 2020, whichever mechanism or body is used to do so.
4. We would also like to ask the Committee to request the Minister to give leadership by promoting this issue publicly, as an urgent opportunity to achieve cuts that don't hurt.