

## Freezing and Sustainability

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'A man can stand anything except a succession of ordinary days' – Goethe

From Beijing to Borrisokane, freezing weather and unaccustomed snow are making sure that most of us are being spared the tedium of Goethe's 'ordinary days'.

Extreme weather events have many benefits. They provide those who have lived long enough with an opportunity to compare and contrast the present with days of yore. In Ireland, 1947, 1963, and 1982 are the favoured benchmarks, when we were all tough enough to get to school, hardy enough to survive without central heating, and fatalistic enough to accept God's will.

They remind us also of great moments in film. Reports from Plant City, Florida that the strawberry and citrus crops are threatened recall the bankrupting of the Dukes brothers in *Trading Places*, as they bought high-priced futures contracts in frozen concentrated orange juice on the erroneous assumption that there would be scarcity.

And the sense that we are all in this together brings to mind Aldo Leopold's observation: 'All ethics so far evolved rest on a single premise: that the individual is a member of a community of interdependent parts. His instincts prompt him to compete for his place in that community, but his ethics prompt him also to cooperate (perhaps that there may be a place to compete for)'.

Extreme cold reminds us again of the three most important requirements of policy and practice in relation to energy and climate change: efficiency, efficiency, efficiency.

We continue to be captivated emotionally and practically by the drama and sophistication of alternative energy supplies, ranging from nuclear fusion to the third-generation biofuels. But the reality is that those who are least adversely affected by current conditions are those whose homes and workplaces today are well insulated. And they are also the people whose energy use does least damage to our planet.

In these weather conditions, we are also reminded how enduring some of the mechanisms are that are used for dealing with the situation. One imagines that the Romans gritted with salt and sand to keep the London to Lincoln road passable in 200 AD, and this mechanism remains the staple of Irish road engineers today.

The dependence on the web as a source of information is a feature of our times, however. In Ireland, the National Roads Authority provides up-to-date conditions – road temperature, state (treated or not), precipitation, etc. – on the national roads (see: <http://www.nra.ie/RoadWeatherInfo/Map/data/htm/WeatherTable.htm>) and air, road and rail transport providers do likewise. Such access is, of course, not available to the 30 per cent or so of households not yet digitally connected, highlighting the importance of continuing the rapid progress already evident in this area.

How well prepared should we be for such extreme weather events? It is a paradox that those regions where adversity is 'normal' are generally least seriously affected by extreme conditions, and vice versa.

Work by Jonathan Healy while in UCD demonstrated that, in Europe, it is the Mediterranean countries (especially Portugal and Spain) that suffer the most 'excess mortality' from winter weather, either because of their (erroneous) operating assumption that the weather will always be mild, or the judgement that the costs of protection would exceed the benefits.

The Nordic countries, on the other hand, hardly suffer at all in this regard. For the same reason, an army of snow ploughs and associated staff keep traffic in Moscow moving through blizzards – and, of course, in Russia there is a certain fondness for severe winters because they defeated Charles XII of Sweden, Napoleon and his Grand Armee, and Hitler and his disastrous (for him) Operation Barbarossa.

Meanwhile, Dublin and Washington DC grind to a halt under much milder adversity. But how much should we invest in preventative action?

We need to consider the following dimensions – the four 'Is' – institutions, information, investment (and associated costs and benefits), and incentives.

As regards institutions and information, where should the balance lie between national and regional and local organisations? There is a need for a national voice that at least pulls all of the relevant information together, in 'real time', and that acts as a strategic holder of supplies of sand and salt.

We need to examine what investments – in infrastructure, equipment, supplies – are justified. This is difficult. We know that climate change is likely to result in more extreme weather events and that, therefore, the future is unlikely to be like the past. But we don't know what its character, frequency or duration will be. However, we can assume the worst, and see what this implies, and then examine various scenarios that allow a debate and decisions.

Finally, as regards incentives, a carbon tax will apply in Ireland to emissions from peat, coal and gas for heating from May 2010; we need to use this both as a stimulus and a source of funds for action in regard to energy efficiency and, in particular, to ensure that, by January 2011, the most vulnerable in our society are living in homes that are well insulated.