



Chairman's Commentary¹
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Adapting to Climate Change in Ireland - Some Reflections

By Frank J. Convery, Chairman, Comhar Sustainable Development Council

In addition to death and taxes, we can now add 'climate change' to life's inevitabilities. The recent 'early warnings' in the UK, Northern India and Bangladesh concerning extreme weather events give us the chance to reflect on issues and implications for Ireland.

Two things are likely with climate change: sea levels will rise, and we will experience more intense weather events. Both are eminently manageable. After all, such events have been occurring for hundreds of years in countries to the south of us. We can learn how these countries have adapted, but only if we avoid doing what should be avoided and actively pursue what should be pursued.

¹ This is the first of a rolling series of bi-weekly commentaries, designed to stimulate debate and action on key emerging issues in regard to sustainable development. Feedback is encouraged.

² Comhar Sustainable Development Council is charged with informing the public about issues in sustainable development and advising the government in regard to policy.

Ireland needs to be proactive in preparing for climate change for two reasons: firstly, if we drift incrementally into policies of *ad-hoc* reaction, this will prove to be expensive and ineffective. Secondly, we could spend so much time and effort on adaptation that it absorbs scarce resources that we should be devoting to reducing our greenhouse gas emissions so that climate change does not become catastrophic.

Specifically, we need to be smart in estimating benefits and costs of alternative interventions. We need to decide who carries the risk and who captures rewards. Policy instruments need to be developed to achieve outcomes that are cost effective and that encourage innovation. At the heart of our strategy to deal with climate change must be the wider public interest, and not the specific interests of well-organised and self-serving lobbying campaigns.

The following 10-step approach could contribute to Ireland's preparedness in dealing with climate change:

Step 1: Limit taxpayer liability for avoidable losses

The government should create a deadline – as early as 1 January 2009 – after which *no* public funds will be used to compensate those who build or develop in pre-identified flood-prone and erosion-prone zones. Our expenditure on this is modest at present, but it could grow exponentially if we don't take defensive action now.

If we don't do this, development will proceed in such zones, and when the inevitable flooding and erosion happens, there will be pressure for the taxpayer to pick up the tab and compensate for losses.

Step 2: Limit structural intervention to prevent coastal erosion

As sea levels rise and storms intensify, there will be increasing pressure by affected property-owners to lobby for the building of sea walls, groins and other means to protect and enhance their properties.

The costs of intervention can be astronomically high and, in any event, often robs other communities on either side of the intervention. Professor Orrin Pilkey of Duke University is an expert on coastal erosion and has documented 150 years of experience with sea walls in the US. He concludes that sea walls re-direct wave energy to the unprotected beach at each end of such walls, increasing erosion and requiring construction of more walls.

There should be a national policy, implemented by local authorities, that – if intervention is advocated – the burden of proof that it would not damage other communities would rest with the proposers.

Step 3: Advance efforts on the science of adaptation and on mobilising research

Climate change is an opportunity, but only to those who innovate and adapt quickly and smartly. In Northern Europe, the Dutch are leading on this, with innovations like housing that can float while staying attached to water supply, electricity and other services, and with work on genetic adaptation of crops.

We need to do likewise, stimulating new and exciting innovations to meet new challenges. Bearing in mind that countries and regions to our south have for millennia experienced what we are now beginning to face up to, we should join with them as partners in innovation.

If we develop new and better soft and hard technologies for addressing adaptation, we can make this an integral part of the knowledge economy we must become.

Step 4: Smart information and education

Abraham Lincoln observed *'With public sentiment, nothing can fail; without it, nothing can succeed'*.

As citizens we need the best information available to make our own decisions, and this is particularly the case for our public authorities. We need to understand and support some of the difficult decisions that will need to be taken.

Specifically, we need high-quality information as to where flooding and erosion are likely to happen, and what policies, activities and adaptive measures are likely to work in this quickly changing new world.

Step 5: Smart organisation

The buck needs to stop with one well-resourced entity, with both the capacity (including skills in science, law, finance, insurance, risk management, economics, Geographic Information Systems and communications) and the authority to make legally-binding decisions in the public interest. A national authority (for example, the Office of Public Works) linked with River Basin Authorities is one model.

Adaptation is a matter of water management and the river basin is the logical organisational mechanism. Authority – as well as co-ordination – is necessary; a decision about zoning has to be mandatory or, at the least, liability for any damages ensuing by ignoring the recommendations should be borne by the officials and / or elected representatives that overrode the decision.

Step 6: Smart subsidies

Bad subsidies damage competitiveness, are unfair, drag down an economy and hurt the environment. For every existing subsidy and new subsidy proposed, the following questions need to be posed:

- Is there a general public interest served?
- Do the benefits substantially exceed the costs?
- Is innovation being encouraged?

Step 7: Smart regulation

Regulation is the use, in effect, of police power. It needs to be used sparingly, but effectively and consistently.

Zoning is a key way of specifying what is allowed and what is not, but it needs to be very well informed by good information and research. Good zoning decisions should encourage and facilitate innovation and adaptation.

Step 8: Smart prices and incentives

When prices rise, we cut back; when they fall, we increase consumption; and when prices are zero, we waste and waste again. Water will become more expensive to store, treat and to manage, and become more seasonal in its natural availability. However, there need not be any shortage of this vital resource.

There is no need to ration or regulate the use of water if we price it properly and charge the biggest users most for it. At present, those who conserve carefully are subsidising those who are feckless in their consumption.

This applies also to inter-regional transfers. How can Dublin consider transfer of water from the Shannon when it doesn't first price its own water to ensure careful use?

Step 9: Smart property rights

Transactions can only happen if property rights are well defined and unambiguous. There can be ambiguity in Ireland as regards ground and surface water and the foreshore.

'No one ever washes a rental car' – Larry Summers' observation applies generally: we don't cherish what we don't own. The countries

that manage their water to best economic, social and environmental effect have very defined rules around water ownership. For instance, in Chile, water rights are separate from land rights and this allows farmers to adapt their farming practices quickly and efficiently and ensures water is treated parsimoniously.

Step 10: Smart investment

The National Development Plan 2007-13 comprises a multi-billion euro portfolio of exciting investments in transport, water supply and treatment, drainage, energy and public buildings.

This needs to be 'adaptation proofed' to make sure that it is designed, constructed and managed to deal with more extreme weather events than we have heretofore experienced.