

The Health Agenda within Sustainable Development

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Climate Change and Health – some key issues

Royal College of Physicians of Ireland, 6 Kildare Street, Dublin 2

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10.00am – 1.00pm

Key Issues 1

Recognise huge uncertainties about the *geography* of climate change, the local effects, and their *timing*.

Geography – unlikely, but we could conceivably become cooler.

Local effects and timing - models predict dryer summers and warmer winters.....Likely in the long run, but.....

Key Issues 2

There may be positives (reduced hypothermia) and pharma investment in finding solutions to tropical type diseases (higher incomes to pay for medicine) to complement work by Gates Foundation.

As well as the negatives (increased exposure to warm country diseases)

Responses

Awareness of great uncertainties – stay flexible to respond quickly to reality as it unfolds, rather than a presumed future that never materialises.

Response should be integrated including:

- *Medical* – fast track development of local knowledge.
- *Behavioural* – education on choices and implications
- *Business* – support enterprise responses – base of pharma, ICT and emerging innovation led business provides solid base.
- *Policy*- keep price signals (incentives) and innovation systems in place to encourage both behaviour and enterprise to respond appropriately.

Market Failure

The market on its own fails to recognise that the capacity of the planet's atmosphere to absorb more greenhouse gasses is a scarce and increasingly valuable resource.

Unless this market failure is corrected, so that users pay a price for such use, and have a 24 hour a day 365 days a year incentive to do so, there is no prospect that we will achieve a transition to a low carbon and sustainable world.

Role of prices –shift behaviour automatically.

Xenophon: I should like the enemy to think that it is easy for him in every direction to retreat.

European Leadership

Europe has led by:

- creating a price for carbon in the European Union Emissions Trading Scheme (EU ETS) – covers 40% + of emissions – guarantees 20% reduction in emissions from power, cement, steel, pulp and paper, ceramics and glass by 2020.

Shameless huckstering: For the definitive examination of EU ETS, see *Pricing Carbon* by Ellerman, Convery and De Perthuis, Cambridge University Press, 2010

- Capping emissions from the non traded sectors (heat from households and business, agriculture, transport, waste)

Irish leadership

Carbon Tax on Non traded sectors (but
excluding methane from agriculture)

Fuel Type	Unit	Current Price €	Carbon tax @ €15 (incl.VAT)	% change in price	Revenue Yield in a Full Year (Incl. VAT) €M
Petrol	Litre	1.19	4.2 cents	3.5%	75
Auto-diesel	Litre	1.10	4.9 cents	4.4%	92
Kerosene	1,000 Litres	516	€43.14	8.4%	47
Marked Gas Oil	1,000 Litres	539	€46.87	8.7%	43
LPG	1,000 Litres	720	€27.97	3.9%	4
Fuel Oil	1,000 Litres	600	€52.15	8.7%	1
Natural Gas	13,750 kwh*	800	€47.86	6.0%	47
Peat Briquettes	Bale	3.85	39 cents	10.1%	6
Coal	40kg	16.20	€1.79	11.1%	15
Total Yield					330

Key points on Irish carbon tax

Rate is €15 per tonne of CO₂

Biggest price impact will be on:

Fuel Oil (+8.7%)

Peat Briquettes (+10.1%)

Coal (+11.1%)

Total Revenue annually €330 million

€50 million set aside to address fuel poverty.

Supporting Innovation

But price alone will not be enough

Getting enterprise, research, policy and society working together – the ‘innovation ecosystem’ is crucial.

Last 10 years – flowering of research, and innovation emerging

Developments in UCD

Earth Sciences Institute (ESI) – brings all disciplines together with mission of tackling key carbon reduction, renewable and adaptation challenges, in collaboration with other research centres in Ireland and abroad and enterprise. Innovation lab a key feature

Transforming Ireland series

Every Friday 12:30 to 14:00 in Royal College of Physicians from March 19 to December 17, 2010.

Innovation in action – how to mobilise innovation to:

- Generate export led jobs and income
- Meet 20% reduction in GHG emissions and 16% share of renewables in final energy consumption by 2020 and intensify progress to 2050.
- Better predict and adapt to climate change
- 30+ presentations and debate from leaders of the enterprise and academic communities

All welcome!

Climate Justice

Think Globally

Key challenge is helping the poor adapt and convert challenge into opportunity.

THANK YOU