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STRIVE

SUMMARY OF FINDINGS: STRIVE Report No. 103

Towards a Green Net National Product for Ireland

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The report further documents the development of Environmental Accounts for Ireland, which report emissions and resource use across 20 sectors of the economy from 1990-2010. The report also presents the latest environmental emissions projection scenarios developed using the Irish Sustainable Development Model (ISus) covering the period to 2030. The purpose of projections is to gauge how successful current policies and trends are likely to be in achieving policy targets and thereby contributing to a discussion of how environmental policy might be amended

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Key Words:
projections, accounts, economic, economy, GHGs, waste, greenhouse gases, policy, policymaker

Background

Governments devote considerable resources to measuring economic performance, for example as measured by gross domestic product (GDP) but less resource is devoted to measuring the enhancement or degradation of the environment associated with economic growth. Economic activity affects the environment both positively and negatively and conversely natural resources and a clean environment contribute to economic growth and well-being. To place decisions that affect the environment on a strong empirical foundation it is important that a set of Environmental Accounts are incorporated into the national accounts. This project further developed Environmental Accounts for Ireland and now includes 20 gaseous emissions to air, 19 resource uses (energy), emissions of 9 metals; 7 persistent organic pollutants (POPs); 3 categories of particulate emissions; and 5 types of waste with 5 dispositions, each for 20 sectors of the economy. Environmental Accounts data are critical for analysis of the effectiveness of environmental policy. The Irish Sustainable Development Model (ISus) uses the historical data in the accounts to estimate behavioural relationships between economic activity and each of the emission types (e.g. CO2, hazardous waste) to project future trends in environmental emissions with the objective of informing public debate on environmental policy options.

Key points

- **Climate Change**: Kyoto Protocol & EU 20-20-20: We expect that Ireland will comply with its Kyoto Protocol target covering the period 2008-2012 but compliance with longer term targets will be much more difficult. Ireland is projected to exceed its binding annual emission limits under the EU Commission's Climate and Energy Package from 2016. By 2020 we expect that emissions from the non-ETS (Emissions Trading Scheme) sector will be 5 per cent below 2005 levels in 2020, whereas the

EU's 20-20-20 target is a 20 per cent reduction in non-ETS emissions compared to 2005. Without significant policy intervention we project actual emissions will be substantially higher than the policy target.

- **Sustainable Agriculture**: Agriculture accounts for over 42% of non-ETS (Emissions Trading Scheme) sector emissions and it is difficult to envisage within existing climate mechanisms how Ireland's non-ETS emissions targets will be achieved without a significant contribution from the agricultural sector. While Ireland's dairy and beef production systems are among the most efficient worldwide in terms of carbon footprint, the implementation of Food Harvest 2020 has the potential to contribute an additional 1 million tonnes of greenhouse gas emissions per annum by 2020. There is significant carbon mitigation potential in Irish agriculture but the key environmental question that remains unanswered is the extent to which mitigation measures will be fully implemented at farm level.
- **Sustainable Transport**: Emissions from transport have more than doubled since the 1990s, growing by more than 4 per cent per annum on average. That level of growth is unsustainable both for a country attempting to reduce emissions and also in terms of the impact on global climate. A carbon tax that directly penalises use of the fuels from which emissions arise, is an efficient instrument to ration transport demand, but to make any meaningful progress of reducing emissions practical low-emission transport alternatives are necessary. Electric vehicles fall into that category, as does the development of renewable transport fuels for blending with, and as alternatives to, petrol and diesel.
- **Waste Management**: Since the recession waste generation has been declining but that is projected to change. The ISus model projections suggest that household waste generation will continue to decline to 2015 but will grow thereafter reaching 2010 levels of waste generation by 2020, whereas Commercial sector waste generation is already growing. Post 2015, waste generation is projected grow by 2–2.5 per cent per annum for the household and municipal waste streams. The level of recycling/recovery will increase with at least an additional 100,000 tonnes of municipal waste recovered/recycled per annum by 2020

For Further Information

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