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IRELAND'S FUTURE: A LOW CARBON ECONOMY? THE IMPACT OF GREEN STIMULUS INVESTMENT

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OVERVIEW

The World Economic Forum advised theG8 leaders in 2008 that a paradigm shift to a low carbon economy by 2050 will involve a "third, green industrial revolution" to drive the next chapter of innovation. **Ireland's Future: A Low Carbon Economy**?" **The impact of green stimulus investment** paper will outline the actions being taken by the Irish Government in creating this green revolution and will discuss the impact of the green stimulus measures taken by Ireland to develop its green economy. The paper will focus on Ireland's investment in specific low carbon technologies, enabling 'first-mover' advantage that will allow the country to take a stronger competitive position in meeting demands of green technology. Focus will be placed on energy efficiency initiatives to stimulate economic development and employment creation and the overcoming security of supply concerns (currently 90% import dependent), thereby reducing 'locking-in' to more emissions-intensive stock in the long term. The global market for environmental goods and services in Ireland is expected to grow to $700 billion by 2010 and $800 billion in 2015.[1]

Subsequently, the Irish Government announced that there is the potential to create 80,000 green jobs in the coming years that will strengthen an Irish 'smart economy'. For the purposes of this paper I am defining this green stimulus as "the application of policies and measures to stimulate short-run economic activity while, at the same time, preserving, protecting and enhancing environmental and natural resource quality both near-term and longer term".[2]

METHODS

The paper will concentrate on

(a) Government policy approaches to stimulate the economy, including strategies to enhancing the environment and secure energy supplies and promoting competitiveness
(b) The identified opportunities arising from Ireland's recently published marginal cost curves for Greenhouse gas abatement, specifically focusing on efficiency (transport and buildings) and renewable energy deployment across a number of oil $ scenarios and
(c) Presenting the key areas that Ireland is focusing on to achieve its low carbon economy vision and crate economic stimulus

RESULTS

The key result findings will be displayed in (a) a presentation of the findings from Ireland's abatement cost curve and in (b) outlining the investment areas and technologies that Ireland is focusing on to achieve its low carbon economy vision. Comparison will be made of comparative (EU) Government Investment per capita (PPS) and its subsequent impact on energy productivity.

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[1] *Extracted from "Developing the Green Economy in Ireland", Report from the High Level Group on Green Enterprise, 2009.*

[2] *Extracted from "Green stimulus, economic recovery, and long term sustainable development," World Bank (2010)*

From a policy point of view, one of the key challenges is that much of the abatement is expected to become feasible between 2020 and 2030.
Another issue for policy is that a relatively high proportion of the expected savings in 2020 and 2030 arise within the EU Emissions Trading sector, primarily electricity generation and large industry. This is significant because, after 2012, the EU Emissions Trading Scheme (EU ETS) abatement targets and the resulting sectoral allocations of EU allowances will be part of an EU-wide regime. Ireland's national climate targets will be limited to non-EU ETS emissions which are dominated by the residential and commercial sectors as well as transport and agriculture.
Presentation will be made for a $60/bbl and $120/bbl oil-price scenario. In both scenarios, improvements to energy efficiency are found to offer the cheapest and most readily available abatement opportunities. This aligns with other analyses, including previous modelling work on Ireland's energy system.

CONCLUSIONS
The main conclusions will be derived from the results ascertained from the Cost Curve for Ireland where evidence is presented of the impact of fluxuating oil prices on specific technologies.
Several of the positive-cost abatement opportunities are of importance to Ireland's stated intent to take a leading global position as a centre of 'green' technology, goods and services. Some of Ireland's priorities in this area, such as ocean energy and electric vehicles, are confirmed by this analysis as being capable of delivering notable contributions to abatement by 2030 in particular. For both ocean-energy technology and energy systems for electricvehicles, Ireland has taken the strategic decision to position itself with a view to building capacity, attracting investment and winning a global-leader status.
Attention will be placed on the new technology opportunities that Ireland could deploy to drive its low carbon vision. Comparison of curve will be made across UK, USA, Russia and Poland.
The key investment areas to be elaborated are building retrofitting in the short term perspective, harnessing ICT in the medium term and the identification of new energy resources for the longer term delivery and impact.