

## DID YOU KNOW?

- It has been estimated that at least 11% of Europe's population and 17% of its territory has been affected by water scarcity, putting the cost of droughts in Europe over the past 30 years at €100 billion
- In the EU today each person consumes 16 tonnes of materials annually, of which 6 tonnes is wasted, with half going to landfill
- Over the 20th century in the EU, fossil fuel use increased by a factor of 12, while the extraction of material resources increased by a factor of 34
- If global society continues to consume resources at the same rate as it does now, by 2050, we will need three times more material resources, and 70% more food, feed and fibre

Environmental resources and ecosystem services are direct inputs into the economy. Clean water, air, soil and vibrant biodiversity all contribute to a successful economy. While economic growth often receives political prioritisation, it goes hand in hand with social cohesion and environmental protection to deliver a high quality of life for citizens.

The establishment of a sustainable pattern of development for Ireland is one of the key challenges of government and ultimately for society. There is also a clear consensus at European and national levels that existing patterns of economic development must become more sustainable. The vision of the European economy is that by 2050 it will be competitive, inclusive and provide a high standard of living with much lower environmental impacts, that all resources are sustainably managed, while biodiversity and the ecosystem services it underpins will be protected and restored.

The development of key economic sectors in Ireland, such as the agri-food and tourism industries, is strongly bound to the quality of our environment with marketing efforts focussing on our clean, green image. However, it is important that this brand is reinforced by a high level of environmental quality in Ireland - to demonstrate 'substance' behind the image.

## ENVIRONMENTAL PRESSURES

The current recession has meant that levels of emissions and waste generation rates have paused and in some cases reduced. However, care must be taken not to interpret recession-induced reductions as a sign that environmental pressures are being managed. What is required is that, as Ireland's economy and key sectors develop and recover, they do so in a sustainable way - decoupling economic growth from environmental pressures.

## THE GREEN ECONOMY AND SUSTAINABLE GROWTH

The green economy is a phrase which is used to categorise a wide range of economic activities which contribute to lower greenhouse gas emissions and better resource usage while also functioning as commercial businesses.

There are a number of key sectors which are usually identified with the green economy overall. These include: renewable energies; energy efficient products and services for buildings; lower carbon transport; water/wastewater treatment; waste management; and green tourism.

On a global scale, the green economy is projected to grow strongly into the future providing opportunities for Irish-based companies to export relevant goods and services and also for Ireland to attract growing volumes of foreign investment. Ireland has a number of strengths which it can leverage to create employment and growth opportunities both for indigenous companies and for foreign investment in Ireland. These include excellent renewable energy and water resources; strengths in key sectors such as engineering, information and communication technologies (ICT) and a strong Research & Development (R&D) base.

The European Commission's strategy document, 'Roadmap to a Resource Efficient Europe', outlines how Europe's economy can be transformed into a sustainable one by 2050. It proposes ways to increase resource productivity and decouple economic growth from resource use and its environmental impact and illustrates how policies interrelate and build on each other.

Resource efficiency underpins the development of a green economy. By focussing on raw materials such as fuels, metals and biomass and also the air, water and soil ecosystems that support them, resource efficiency reduces inputs and minimises waste in economic activities while also addressing environmental objectives.



## ECONOMIC RECOVERY

A central plank of Ireland's economic recovery will centre on the development of a green economy that recognises the opportunities for investment and employment creation in sectors such as renewable energy, energy efficiency and waste and water management, and how this sustainable approach to economic development can complement the core strengths of the economy in the use of natural resources. An economic model for Ireland based on sustainable growth will provide the following advantages:

- > Freeing up resources for household spending and productive investment by reducing energy and material costs
- > Reducing reliance on imports and exposure to the fragile geopolitics of energy supply
- > Providing a boost to jobs in the expanding 'environmental industries' sector
- > Making progress towards the demanding carbon emission reduction targets needed to stabilise the global climate
- > Protecting valuable ecological assets and improving the quality of Ireland's living environment for generations to come

**The EU Renewable Energy Directive** has set ambitious targets for all Member States, such that Ireland will reach a 16% share of gross final energy from renewable sources by 2020.

Clean energy from renewable sources will be a critical pillar of the green economy. The Sustainable Energy Authority of Ireland (SEAI) unveiled three energy roadmaps to 2050 focusing on the potential benefits of Ireland moving to a future energy system where electricity, managed via a smart-grid, and increasingly generated by wind, meets more of the country's energy needs, in particular for heat and transport.

## RESOURCE EFFICIENCY

In parallel with developing sustainable energy sources, a successful green economy will require a more environmentally sustainable approach to production and consumption of water, energy and waste generation, with a major focus on resource efficiency. It is necessary to ensure that resource efficiency is embedded across all sectors of the economy in Ireland. This would allow the economy to create more with less, deliver greater value with less input and utilise resources in a way that minimises pressure on the environment.

## EPA NATIONAL WASTE PREVENTION PROGRAMME (NWPP)

The **NWPP** is part of a national family of programmes, including those run by SEAI, Enterprise Ireland and IDA Ireland, which are designed to promote a more sustainable society and economy. A substantive element of the EPA-led NWPP is influencing positive behavioural change by supporting businesses, communities and households to be more resource efficient.

Projects funded include Green Homes, Green Hospitality Award and Green Business. The most recent report of the NWPP shows that in many cases the resource efficiency projects are resulting in significant commercial gains and savings for participants as well as positive outcomes for the environment. **The Green Hospitality Programme** is aimed at the Irish hotel sector and has saved its members approximately €21 million in the five years it has been operating, while at the same time reduced water and energy use and waste generation.

Similarly, **The Smart Farming Programme** is focused on adopting resource efficiency measures on farms. The aim of the programme is to facilitate and enable the bringing together of national resource efficiency experience, expertise and skills already available through farm advisory groups and organisations. The EPA is being supported by other organisations including the Irish Farmers' Association in implementing the Smarter Farming programme.



## FUTURE CHALLENGES

Establishing a sustainable pattern of development is a key challenge for Ireland, and improving resource efficiency is a top priority to achieve this goal. Transforming the economy onto a resource-efficient path can bring increased competitiveness and new sources of growth through cost savings from improved efficiency, commercialisation of innovations and better management of resources. This requires policies that recognise the interdependence between the economy, wellbeing and natural capital and the removal of barriers to improved resource efficiency.