

By KAREN-ANNE COLE, of Enterprise Ireland

Singer-song writer Johnny Cash was so smitten with the Emerald Isle that he wrote an album in celebration of its attractions, including the song 'Forty Shades of Green'.

This feature spotlights the 'green' environmental aspirations of The Celtic Tiger, and includes (on page 27) a report on why environmental professionals will need to review changes in water and waste management, and (on page 28) a review of Ireland's burgeoning composting industry.

The Irish have long prided themselves on their reputable green image. For most, however, this remains an assumption of beautiful 'green' scenery.

The fact is that Ireland's economy has grown exponentially over the past couple of decades. This economic boom, nicknamed 'The Celtic Tiger', has now become the benchmark for those countries that are aspiring to meet their environmental obligations.

The legal and regulatory framework for the environmental sector in Ireland continues to develop all the time. The most prolific example is the early adoption of the WEEE Directive in August 2005, which cleared the way for producer-funded recycling of waste, electrical and electronic equipment.

Impressive results

Irish companies have pioneered the WEEE Directive with impressive results, with companies such as Cedar Resource Management Ltd and TechRec Ireland Ltd pushing forward the development of the recycling industry.

The Directive has been highly successful throughout Ireland, with the national target easily reached and almost doubled. Factors that contributed to this success include the positive attitude of the public and a well-implemented take-back service.

The Directive represents a large step towards implementing strong environmental initiatives. As opposed to wasting valuable resources, Ireland is now becoming more efficient in recycling existing ones and has set the standard in embracing a 'greener' way of living.

Apart from this, another notable initiative includes becoming the first country to introduce a tax on plastic shopping bags in 2002. This 'plastax' cut the use of plastic bags by more than 90% and subsequently raised millions of euros in revenue.

The Environmental Minister at the time, Martin Cullen, said of the initiative: "It is clear that the levy has not only changed consumer behaviour in relation to disposable plastic bags, it has also raised national consciousness about the role each one of us can and must play if we are to tackle collectively the problems of litter and waste management.

"The UK has been closely monitoring the situation, and is still considering the implementation of the plastax. Certainly, in Ireland, it has been deemed a major success."

### Pay-By-Use

In 2006, Ireland, once again demonstrated its concern for the environment with the early adoption of a Pay-By-Use (PBU) waste system. It was set up to investigate the implementation of PBU domestic waste charges in Ireland in order to discern their impact on domestic waste management activities such as waste prevention, waste recycling and waste diversion.

PBU gives the householder the power to influence the extent of their waste charges while also benefiting the environment.

Advanced Manufacturing Control Systems (AMCS) Ltd is a leading provider of innovative and identification solutions to the waste management industry, and has rapidly become a market leader in pay-by weight technology in Ireland.

AMCS has installed its fully-integrated Waste Trax and Routeman System in hundreds of refuse collection vehicles linked to over a million bins in Ireland and the UK. This has redefined waste management, and AMCS is unique in that it is the only company that combines weighing and ID technology with integrated GPS and real-time data download.

Another company making headlines is City Bin Co which is using this technology with a mould-breaking delivery model to roll-out a domestic and commercial waste collection service.

Already implemented in Ireland, including Dublin itself, this could fundamentally change the business model in this sector.

World's largest

Ireland can also proudly boast to have the largest range of baler and compactor manufacturers in the world.

Companies making in-roads in this sector include Mac-Fab Systems Ltd, Moovmor Engineering Ltd, Loughman Waste Equipment Ltd, PEL Manufacturing, LSM Engineering Waste Equipment and Ace Compaction Systems.

Each company is unique in that it produces its own range of equipment and services that benefit businesses all over the world. However, as Ireland's economy has grown, so too has its energy requirements. The 'greener' emphasis now means that the country's energy resource is becoming more diversified, with renewables, including wind and CHP (Combined Heat and Power) now making up an increased percentage of total energy output. This in turn has given rise to the waste-to-energy debate. Bioverda and Greenstar are just two of Ireland's major energy firms promoting their ideas internationally with great success.

World markets

Dublin-based Greyhound Recycling and Recovery is Ireland's most experienced recovery operator, with markets in Britain, Germany, India and China for the export of dry waste and recyclables.

Over the past five years the company has invested €25m establishing Ireland's largest materials recovery facility at its headquarters in Dublin. An additional €10m has been invested in a second facility in Limerick and at a further facility in Meath, which produces biodiesel from used cooking oil.

The company has established nationwide partnerships providing total waste management – including waste-to-energy resources such as refuse-derived fuel – across both private and public sectors.

Another Irish company making inroads into the UK is 3NRG Waste Management. This year it hopes to complete the UK's first commercial autoclave municipal solid waste (MSW) treatment with a backend power plant in Bridgend, Wales.

Set up by FLI Environmental, 3NRG is driving its green division internationally.