

# **European Employment Observatory**

## **EEO Review: The Employment Dimension of Economy Greening**

### **Ireland**

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## **1. Introduction**

The most appropriate way to approach the subject matter for this Review is to describe the most important Government sponsored developments related to promoting environmental or ‘green’ policies over the past number of years. In this regard three reports are reviewed. There is little reference to related labour force requirements in these documents, except in giving broad estimates of future employment outcomes and some brief references to the need to adapt training and education systems to meet the objectives proposed.

It must be understood, therefore, that the development of a green agenda has not reached a point in Ireland where it is possible to provide information on the implications for labour market issues. Many of the issues raised have not even entered the public consciousness, let alone generated debate.

The Review is structured around three sections. The first section provides some relevant background and context; the second section deals with future developments and labour market issues; and section three draws some broad conclusions.

## **2. Background**

### ***2.1 Renewed Programme for Government***

The first aspect that should be mentioned in this context is the Renewed Programme for Government which was recently agreed between the Government coalition parties and issued on 10 October 2009. The document states that a key pillar of future economic policy will be to implement a Green New Deal in order to move away from fossil-fuel based energy production through investment in renewable energy and increased energy efficiency to reduce demand, wastage and costs.

The Green Party, which is the junior partner in the current Coalition Government, would have been influential in drafting this component of the Agreement. The principal elements of the Green Deal are:

- To put in place new public procurement procedures and guidelines to ensure that green criteria are at the centre of all state procurement;
- The revision of the State Capital Investment Programme (bearing in mind new budget realities) to meet mandatory climate change emissions reduction targets;
- To prioritise research and technologies that offer strong development opportunities in the area of water management, leaks, measurement, metres etc;
- To organise the deployment of some 6 000 electric vehicles over the next three years;
- To develop a plan for a high voltage off-shore electricity grid as part of the wider European electricity ‘Supergrid’ to facilitate energy exports; and
- To select a “Smart Town” test site of at least 1 000 homes for energy companies to test new grid and other energy efficient applications.

Even though it was not referred to in the above mentioned programme, the Government did take a significant first step in following a green agenda in introducing a carbon tax in the December 2009 Annual Budget (at a rate of EUR 15 per ton of carbon).

However, even before this development, some earlier initiatives (described below) had been introduced by the Government to promote active consideration and debate of what needs to be done to develop green policy issues and address the consequences of climate change.

## 1.2 Other Initiatives

A significant event was the setting up in late 2007 of a Steering Group with officials from the Department of Enterprise, Trade and Employment (DETE) and relevant development agencies to study the potential for developing business opportunities in the environmental goods and services (EGS) sector on the island of Ireland (i.e. the Republic of Ireland and Northern Ireland).<sup>1</sup> The Steering Group (hereinafter referred to as the *EGS Group*) agreed that the agencies Forfás and InterTradeIreland should carry out a study and prepare a report designed to meet this objective.

More precisely, the main objective of this research was to:

- estimate the size of the EGS sector on the island of Ireland;
- identify the most promising areas in the EGS sector where new opportunities are likely to occur; and to
- identify key supports and framework conditions required to assist EGS companies.

The report, “*Environmental Goods and Services Sector on the Island of Ireland: Enterprise Opportunities and Policy Implications*”, insofar as it relates to the Republic of Ireland, is described in the next section of this Review. It was published in October 2008.

It is also relevant to refer to the work of *Comhar SDC, the National Sustainable Development Council*, which was set up by the Department of the Environment, Heritage and Local Government (DEHLG) as far back as 1999.<sup>2</sup> On the basis that sustainable development is dependent on active participation with key stakeholders and sectoral interests, Comhar SDC has been the main organisation in Ireland providing a mechanism for such interests to participate in sustainable development. More specifically, its terms of reference<sup>3</sup> are:

‘to advance the national agenda for sustainable development, to evaluate progress in this regard, to assist in devising suitable mechanisms and advising on their implementation, and to contribute to the formation of a national consensus in these regards’.

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<sup>1</sup> The agencies were Forfás, InterTradeIreland, Enterprise Ireland, IDA Ireland, Invest NI and Sustainable Energy Ireland.

<sup>2</sup> Comhar is the Irish word for partnership.

<sup>3</sup> See [www.comhar.ie](http://www.comhar.ie).

In October 2009, the Comhar report, “*Towards a Green Deal for Ireland*”, proposed a stimulus package to be applied over a period of up to three years targeted at green investments. However, the package has a very high cost (see Section 2).

A further significant development was the setting up of the *High Level Action Group on Green Enterprise* (HLAGE) in May 2009 under the aegis of DETE. Its brief is to identify actions required to enable Ireland to realise the potential of developing an innovation-based green enterprise sector. Its membership is comprised of representatives from the private sector and key senior officials from the relevant Government Departments and agencies.

In November 2009, HLAGE also produced a blueprint for advancing the green agenda entitled “*Developing the Green Economy in Ireland*”, which, along with the EGS Group and Comhar documents,<sup>4</sup> will be briefly reviewed in the following section.

The Renewed Government Programme, and three reports mentioned above, have triggered a degree of debate on the issue of green developments, which will be briefly reviewed in the third section of this Report.

## **2. PROPOSALS FOR FUTURE DEVELOPMENT AND LABOUR MARKET ISSUES**

As indicated in the Introductory Note, this Section describes the proposals set out in two recent Government sponsored reports, which are intended to promote the development of green policies over the coming years.

### ***2.1 Environmental Goods and Services Sector on the Island of Ireland: Enterprise Opportunities and Policy Implications (Forfas and InterTradeIreland)***

In carrying out this work, to define the scope of the environmental goods and services sector, the Forfas InterTradeIreland group adopted the concept as defined by OECD/Eurostat:

‘activities which produce goods and services to measure, prevent, limit, minimise or correct environmental damage to water, air and soil, as well as problems related to waste, noise and eco systems. This includes cleaner technologies, products and services that reduce environmental risk and minimise pollution and resource use’.

The summary review that follows relates only to those aspects of the report which relate to the Republic of Ireland.

The report, which was published in 2008, drew heavily on a comprehensive study of the EGS industry in Ireland carried out by Ernst & Young Consultants for the European Commission in 2004. The report updated the figures in the study to reflect growth in the sector since 2004 and incorporates data on the renewable energy sector and water management. It estimated the total value of the market to be in the region of EUR 2.8 billion in 2008, subdivided as follows:

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<sup>4</sup> The reports can be accessed through the links in the Bibliography.

- Water/Wastewater Treatment: EUR 1 billion (based on DEHLG data);
- Waste Management: EUR 550 million;
- Renewable Energies: EUR 700;
- Environmental Services & Other Clean-Tech: EUR 560 million;
- Total: EUR 2.810 billion.

The report also states that a 'best estimate' suggests that there are more than 6 500 people were directly employed in EGS companies in 2008. This seems to be the only definitive estimate available for the number of individuals working in the sector.

In light of the key drivers identified in this study, such as compliance with EU environmental legislation and significant public and private investment in environmental services and infrastructure, it is expected that the size of the EGS sector and employment opportunities will continue to grow. However, while the Report refers to global growth projections for the sector, it does not contain any forecasts for Ireland, either in relation to output or to employment.

Although the Report comments that it is difficult to target specific categories within the EGS sector, a range of different sub-sectors are seen as having the strongest development potential and conclusions are drawn as to whether these present opportunities are to grow domestically or internationally. These are:

- Renewable Energies;
- Efficient energy use and management (including eco-construction);
- Waste Management, Recovery and Recycling;
- Water and Wastewater Treatment; and
- Environmental Consultancy and Services.

The report has little to say regarding labour market issues apart from a brief section containing the rather broad statement that skills shortages have the potential to impede the growth of the EGS sector (a statement that has been seized upon in the other reports reviewed). Environmental engineering is identified as one area where a potential shortage may arise that could impede the growth of a number of sectors. The report recommends the incorporation of environmental considerations into continuing professional development programmes, which would enhance awareness of the importance of sustainable development, as well as boosting the stock of appropriate skills.

## ***2.2 Towards a Green New Deal for Ireland (Comhar SDC)***

In short this report proposes that the Irish Government should commit up to 2% of GDP to green stimulus measures over the next two to three years (i.e. nearly EUR 4 billion each year). This is consistent with the levels recommended by the U.N. and other sources. The Report recommends that the emphasis should be on:

- Improving the energy efficiency of existing housing stock (e.g. retrofitting);
- Renewable Energy (ocean and wind energy, solar PV etc.);
- Transforming the National Grid;

- Delivering Sustainable Mobility (second generation biofuels, electric vehicles etc.);
- Public Sector Investments; and
- Green Infrastructure (supports in agriculture, forestry, tourism etc.).

It recommends that concrete policy instruments are required to support the transformation into a more sustainable and resource efficient society, such as green procurement and tax and subsidy reform. A gradual shift in the tax base away from labour and on to pollution would also help to contribute to a resource efficient and green economy. More specifically, the programmes would be financed through the earmarking of revenues from a carbon tax, from the sale of carbon emission allowances (currently free), as well as through the sale of Government backed “green” bonds. It is hardly surprising that these proposals have drawn criticism, given the critical state of the national finances.

With regard to *Skills and Training*, the Report recommends that a framework be put in place to advance the skills and training required for the sustainable jobs of the future. Although some of the proposed requirements can be met by existing capacity, many others will require reskilling and upskilling. Therefore, the skills sector (i.e. colleges, private training agencies, FAS, employers) will need to be able to design the courses and provide the required training within a short period of time. The Report states that if the education/training effort falls short of requirements, the setting up a National Skills Academy for Environmental Industries, like in the UK, should be considered. This comment seems to suggest that a degree of refocusing of educational/training programmes may well be necessary.

As for the question of the *Employment Potential of Green Projects*, the Comhar Report relies on studies undertaken in other countries<sup>5</sup> in assessing the jobs impact potential of a Green New Deal type initiative programme. The Report derives a ‘job creation potential’ related to an investment cost of EUR 4 billion for each of these studies and on this basis estimates that the recommended stimulus package could theoretically create at least 100 000 direct and indirect new jobs. This could be underpinned by procurement policies that promote quality jobs and sustainable enterprises by encouraging companies to uphold social, labour and environmental policies.

The Report concedes that there remain uncertainties over the scale of the precise potential for job creation. It states that there is a need for a sectorally disaggregated macro model of the potential employment that could be generated in order to assess the precise impacts in Ireland, which is not available at present.

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<sup>5</sup> The countries/regions are the US, South Korea, as well as the UN. The data used are summarised in the UK Sustainable Development Commission 2009 Report “*A Sustainable New Deal*”, as referenced in the Bibliography.

### ***2.3 Developing the Green Economy in Ireland (First Report of the HLAG)***

This report considers that the development of the green economy can make a significant contribution to restoring growth in the Irish economy by creating employment and export opportunities in green enterprises. The report also suggests that the global market for environmental goods and services will continue to grow rapidly and that, with appropriate policies, Ireland is well placed to capture a significant share of this market in niche areas.

In setting the scope of the EGS sector, the report was also guided by the OECD/Eurostat definition as referred to earlier.

The Group believes that the green economy and associated employment opportunities in Ireland will continue to grow rapidly. In addition, it draws on a range of reports which suggest that there is potential to create over 80 000 jobs in the coming years (see below). However, in order to realise these opportunities, the Government and public services generally will need to be effective in building a business environment that will give Ireland competitive advantages. As part of this process, the report recommends that steps must be taken to ensure that green firms can access finance.

The Group believes that the following sectors (which are similar to those referred to in the Forfas InterTradeIreland Report) have the most substantial export and employment potential:

- *Renewable Energy*: Ireland is one of the most favourable locations for wind and wave energy in the world. An enterprise and research base is emerging, but the report considers that delays in planning and licensing approvals are a constraint on growth;
- *Continued development of the Electricity Grid* will be required if Ireland is to realise the renewable opportunities — both internationally and domestically;
- *Efficient Energy Use and Management (including Eco-Construction)*. Standards in this area should be progressively strengthened. Furthermore, actions such as using some of the revenues from auctioning of emissions allowances (from 2013 on), the introduction of a carbon tax and reducing stamp duty on low-carbon homes should be considered;
- *Waste Management, Recovery and Recycling*; and
- *Water and Wastewater Treatment*.

With regard to *Employment Potential*, unlike the Comhar SDC Report, the HLAG document does not attempt to estimate the overall potential employment impact of a given green investment package. However, on the basis of forecasts/estimates in some recent reports, it does believe that significant potential exists to grow employment in Ireland in certain areas.

For example:

- A report on the Irish renewable energy sector<sup>6</sup> (e.g. small scale hydro, wind energy, biomass, ocean and solar energy, etc.) estimates that the sector has the potential to create over 50 000 direct jobs by 2020;
- A report on the construction sector estimates that meeting the energy-efficiency requirements of the residential sector could generate approximately 7 000 sustainable jobs;<sup>7</sup>
- A new report by the Institute for International and European Affairs (IIEA), Dublin, indicates that a national energy-efficiency retrofit programme in Ireland covering the entire dwelling stock would create 23 000 – 32 000 direct new green jobs in the construction sector<sup>8</sup>; and
- A report on the composting and anaerobic waste sector estimates that the sector has the potential to create 1 500 direct jobs.<sup>9</sup>

While the Report admits that care must be taken in aggregating these figures, they suggest that there is potential to directly create over 80 000 sustainable jobs in the coming years. The Report does not endorse these employment numbers, rather it highlights that they provide an indication of the potential of the green development process to support economic growth and employment.

### 3. Conclusions

The previous sections have illustrated that while a considerable amount of recent attention has been devoted to advancing the development of the green/environmental sector of the Irish economy, virtually all of this effort has involved assessing the feasibility and sustainability of various activities or subsectors in purely economic terms. These assessments have little to say about labour market consequences, apart from providing forecast estimates of the increased employment arising from the various proposals and some brief references to the need to adjust the skill profiles for different disciplines to take account of green/environmental requirements.

The three reports summarised in Section 2 of the Review involve a significant degree of duplication of effort and cross referencing, as well as a noticeable dependence on external studies in providing quantitative estimates. The duplication aspect raises questions concerning the justification for having two Government bodies promoting green issues with much the same brief.

Some of the employment forecasts may be prone to overstatement, as they originate from groups that have an interest in promoting the activities involved. There are no references as to whether these figures are gross or net (in the sense that jobs created

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<sup>6</sup> Biopower plc (2009). *Renewable Energy Generation in Ireland; Job Creation and Emission Savings*.  
Dublin

<sup>7</sup> DKM Economic Consultants (2009). *Economic Importance of Engineers in Ireland*, DKM: Dublin.

<sup>8</sup> Institute for International and European Affairs (2009). *Greenprint for a National Energy Efficiency Retrofit Programme: Jobs, Growth and Reduced Energy Costs*. IIEA, Dublin.

<sup>9</sup> InterTradeIreland(2009). *Market Report on the Composting and Anaerobic Digestion Sectors*.  
Dublin, Belfast.



in green industries may replace other jobs elsewhere), even though this may have been taken account of in some cases, given the use of figures based on data taken from studies carried out in other countries.

With regard to green skill requirements, as there is a considerable array of environmental related courses on offer in Irish third level institutions it is somewhat surprising that none of the reports quoted in this Review made any reference to need for an audit type assessment of these programmes to determine the extent to which they may need to be adapted to meet the requirements arising from the various proposed policy initiatives.<sup>10</sup>

The reports quoted, and the New Green Deal components of the recent Renewed Programme for Government, have given rise to some debate. Much of this has centred around the question of viability as currently many green initiatives (particularly in the energy area) are supported by State subsidies and/or tax concessions. On the whole few commentators dispute the need to gradually change production processes to environmentally friendly methods, although many are urging a slower and more cautious approach, at least until more cost effective processes are developed. There is a genuine fear that a precipitous rush into establishing green industries (which is what the Comhar Report proposes) will create a costly and heavily subsidised sector and impair competitiveness<sup>11</sup>.

Finally, it should be noted that, criticisms notwithstanding, the great majority of commentators are broadly in favour of advancing the green agenda, even if there are reservations about some of the approaches being proposed. The recent introduction of a carbon tax in the December 2009 Budget has, apart from industry interests, met with little hostility, indicating that the population at large is coming to realise that steps must be taken to protect the environment and counter the impact of climate change.

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<sup>10</sup> One programme of interest is the environmental training network, “EnviroSkillnet”, which is based on the University College Cork campus and which is part of the DETE sponsored national Skillnets Training Networks initiative. EnviroSkillnet plans to facilitate enterprise-led training for environmental consultants in Ireland, initially focusing on the areas of technical skills, legislation and information technology. There is also a FAS training programme which deals with the environmental needs of the construction industry.

<sup>11</sup> Writing in an Irish Times article on 9 October 2009, Colm McCarthy (the Chairman of the Special Group on Public Sector Expenditure Programmes) said ‘there is no long-term advantage in creating tax-subsidised jobs at the inevitable cost of job destruction elsewhere. On the contrary, further impositions on energy costs, through excess investment in favoured technologies, will render the economy less able to compete and recover’.

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