Environmental Challenges and Opportunities for the Construction Sector in Ireland
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Environmental Challenges and Opportunities for the Construction Sector in Ireland

1. Introduction

The Construction Industry in Ireland has undergone a dramatic and fundamental contraction over the last few years. Up until 2007 the construction sector was a key driver of economic growth. Compared to an EU average of 7%, approximately 14% of Ireland’s workforce was employed in construction. In 2007 it supported in the region of 400,000 jobs and accounted for over 24% of Irish GNP, equating to approximately €38 billion. These figures illustrate the clearly unsustainable level of activity in the sector.

Since 2007 the industry has experienced its worst ever contraction in output. The value of output is estimated to have shrunk to €12 billion in 2010 and uncertainty exists as to when this will stabilise. Residential construction activity has collapsed with completions of less than 10,000 units expected this year, down from a peak of 90,000 units in 2006.

![Irish housing output to fall c.90% peak to trough, with adjustment ongoing until 2011](image)

**Figure 1. Irish Housing Output 1980 - 2011**

Private non-residential construction activity has suffered as a result of problems and uncertainty in the banking system and accessing credit. The ESRI has shown that private sector investment in the Irish economy has fallen from an average of 24.6 % of GNP over the period 2005 – 2008 to less than 14% of GNP in 2009 and the construction sector has been hit hardest.
The construction industry encompasses a wide range of firms, including large multinational building contracting and service companies, manufacturers of building related products and materials, consulting engineers, architects and providers of building management services. It is clear that the industry’s focus on house building cannot be relied upon in the short to medium term and a wider, more sustainable trajectory needs to be established going forward. The output of the construction sector in the form of roads, commercial and public buildings, infrastructural projects and domestic dwellings has a major impact on our ability to maintain a sustainable economy overall and also on our environment. Policy makers and legislators have recognised that we cannot meet our environmental targets, be they CO₂, energy or waste reduction without reducing the environmental impact of buildings and infrastructure construction. In short we have to change the way we design and build.

There has been significant progress in the area of sustainable construction in recent years, mainly as a result of legislative and policy drivers. It is recognised as a growth area by many and will provide significant opportunities for the sector. Some recent and imminent initiatives which will have implications in the move towards more sustainable building methods and the use of more sustainable construction materials are discussed below.

2. Drivers of Sustainable Construction

2.1 Energy Performance of Buildings Directive (EPBD) and the Building Regulations

Buildings have an enormous role to play in the European Union’s attempts to achieve energy savings and climate change targets. Buildings are estimated to account for 40% of all energy use and 36% of CO₂ emissions within the E.U. The energy consumption of buildings varies enormously; some new buildings can need less than 3 to 5 litres of heating oil or equivalent per square metre of floor area per year, while the existing stock on average consumes 25 litres per square metre with some buildings up to 60 litres.

The EPBD contains a range of provisions aimed at improving the energy efficiency of residential and non residential buildings, both new build and existing. It applies to all new buildings and existing buildings with a floor area of 1000m² or greater when they undergo a major renovation. To satisfy the requirements of the EPBD, new improved energy performance standards have been set for all buildings in the Republic of Ireland in the revised Building Regulations (Part L). These Regulations became fully effective from July 2009. The aims of the revised regulations are for a 40% reduction with respect to 2005 levels in energy demand and CO₂ emissions. New regulations to be published in 2011 will further improve the minimum energy performance standards and aim for a 60% reduction on 2005 levels.
The regulations adopt an integrated approach to calculating efficiency standards. Specifically the energy performance standards are raised by requiring significant improvements in wall, roof and floor insulation levels and back stop U values; a reduction in the air permeability backstop value; clarification on the requirement on air pressure testing for single unit development; more accurate thermal bridging heat loss calculation and specification; higher efficiency oil and gas boilers; minimum performance levels for the efficiency of biomass boilers; better lighting design and independent time control of space heating zones.

A key stipulation of the EPBD is the introduction of an energy performance certificate to promote greater awareness and debate on energy savings in buildings. This provided for the Building Energy Rating (BER) certification system which is administered by SEAI and was introduced for new dwellings in 2007 and existing dwellings in 2009.

The Public Sector was encouraged under the Directive to take the lead in regard to energy certification and as a result public buildings occupied by public service bodies with a floor area above 1000m² are legally required to have Display Energy Certificates (DECs) and these should be displayed in a prominent place clearly visible to the public.

**Recast EPBD**

The new recast Directive was adopted by the E.U. in May 2010 and must be implemented by member states by July 2012. There was a general consensus that many member states had poor levels of ambition in regard to the provisions of the original Directive and a new, more substantial and strengthened recast Directive was required.

**What are the most important changes in the new Directive?**

- The Directive introduces the concept of ‘nearly zero’ energy buildings (or buildings with a very high energy performance). As of 31 December 2020, new buildings must consume ‘nearly zero’ energy and be powered “to a very large extent” from renewable sources

- By the end of 2018 the public authorities that own or occupy a new building should set an example by building, buying or renting a ‘nearly zero’ building.

- Member States must draw up national plans for increasing the number of nearly zero buildings, and, by mid-2011 make a list of financial and other incentives for the transition (technical assistance, subsidies, loan schemes and low interest loans).

- Existing buildings will have to improve their energy performance after major renovations (if technically, functionally and economically feasible). Member States must encourage owners to install smart meters and replace existing heating, hot-water plumbing and air-conditioning with high-efficiency alternatives such as heat pumps or renewable based systems.
• The scope of the Directive is widened. Energy performance certificates will be required for any buildings constructed, sold or rented out to a new tenant, and for buildings where over 500m² (reducing to 250m² after five years) will be occupied by a public authority and frequently visited by the public. The removal of the 1000m² threshold for the application of energy efficiency requirements to existing buildings means that almost all buildings will be covered under the new requirements.

• Energy performance certificates will have to provide recommendations for improvement and may also include additional information such as annual energy consumption and percentage of renewable energy in total energy consumption.

• When buildings or building units having an energy performance certificate are offered for sale or rent the energy performance indicator must be included in all advertisements and promotional material.

• By 2011 the European Commission should develop a voluntary common European methodology for calculating cost optimal levels of minimum energy performance for buildings and building elements (e.g. the roof of a building).

Overall the recast Directive is welcome and gives clear long term policy signals to both policymakers and stakeholders in the building chain. Manufacturers of products/services that can contribute to energy efficiency need advance notice to ensure they have sufficient lead time for product development. Long term signals also give sufficient time for appropriate training and capacity building. Significant opportunities will exist for companies involved in a range of services that can contribute to the move to more sustainable and low carbon buildings. Developing and implementing a cohesive national plan for increased numbers of low or zero energy and carbon buildings in new and existing building stock will be a key challenge for Ireland.

2.2 National Energy Efficiency Action Plan

Ireland’s first National Energy Efficiency Action Plan (NEEAP) was published in 2009. The government has committed to achieve a 20% reduction in energy demand by 2020 across the business, residential, transport and energy sectors. Recognising that the government must lead by example, targets have been set at 33% for the public sector. Both the European and Irish policy focus is placing a strong emphasis on energy efficiency to meet the reduction in energy demand. Ireland is required under the Energy Services Directive to submit a second NEEAP by mid 2011. A
consultation on elements of the plan was carried out by the Department of Communications, Energy and Natural Resources in the 1st quarter 2011.

A significant deliverable of the NEEAP will be the introduction in 2011 of a National Retrofit Programme. This programme will seek to streamline a range of existing energy efficiency and renewable energy programmes such as the Home Energy Savings Scheme and the Greener Homes Scheme, into a single programme while significantly scaling up activity.

**Why Retrofit? – A major opportunity**

The old adage saving energy is cheaper than buying it certainly rings true in the current economic situation. It is estimated that upgrading 1 million buildings saves €17 billion more than it costs. Approximately 25% of Irish CO2 emissions come from residential energy use. Transforming the energy performance of Ireland’s building stock is a huge challenge but one that can provide much needed opportunity and stimulus to the construction sector. The Institute for International and European Affairs (IIEA) estimates that between 23,000 and 35,000 direct jobs can be created annually with an investment of between €1 and €1.5 billion. The Abatement Cost Curve in Figure 3 (below) shows that energy efficiency measures are the most cost beneficial of abatement technologies.

![Figure 3. 2030 Abatement Cost Curve (Courtesy SEAI)](image)

The current energy efficiency programmes managed by SEAI have proved very successful. The Home Energy Savings Scheme has seen 90,000 homeowner applications since 2009 and over 40,000 homes have been upgraded under the Warmer Homes
Scheme since 2009. There is however huge untapped potential for energy efficiency in Ireland as indicated in Figure 4.

<table>
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<tr>
<th>Year (inclusive)</th>
<th>Pre-1972</th>
<th>'72-'78</th>
<th>'79-'81</th>
<th>'82-'91</th>
<th>'92-'01</th>
<th>'02-'08</th>
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<td>E2-G</td>
<td>E1-E2</td>
<td>D1-D2</td>
<td>C3-D1</td>
<td>C2</td>
<td>C1</td>
</tr>
<tr>
<td>Housing Units</td>
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<td>173,327</td>
<td>83,246</td>
<td>215,865</td>
<td>356,134</td>
<td>313,000</td>
</tr>
</tbody>
</table>

*Sources: SEI (2005) and DOEHG (2009)*

**Figure 4. Estimated BER of Current Housing Stock**

The proposed scale up Retrofit Programme will be a multiannual, incremental programme which is likely to take in the region of 10 – 15 years and likely to involve energy upgrades to over 1 million households, businesses and public buildings. A number of challenges need to be addressed in the programme, including the significant scale up proposed, the upfront cost of deep retrofits, the reluctance of homeowners to look at the whole life cycle cost of the retrofit and the actual savings that can be made in the medium term. Other challenges include addressing issues surrounding the private rental market and better communication of the benefits and payback to consumers. Quality issues including better building standards, certification and codes of practice, trained experts and an effective inspection regime are also vital for the programme to succeed.

**Costs and Financing of Retrofits**

Looking at existing housing stock (mostly pre 2002) it is technically possible to bring the entire stock up to a BER of C1. Although this is lower than the B1 currently required for new builds in Ireland, it would be a significant improvement on current efficiency standards in the residential sector, which are considered poor by European standards. The IIEA estimates that a national programme with a C1 objective would cost in the region of €15 billion at current levels of technology. Costs, however, would be expected to fall as the market for expensive technologies matures, as it has done in other European countries. A combination of several measures would be required depending on the size, age and energy efficiency standard of the house. Typical measures include external, internal, cavity wall and attic insulation, new efficient boilers, heat pumps, smart heating controls, lighting, low emissive glazing as well as new innovative smart technologies that will come onto the market. Building energy management systems (BEMS) technology has advanced significantly with improved interfacing, control and ease of use. They are becoming more cost attractive for smaller
buildings and their use will become more widespread. Final rollout details on Smart Metering are expected in Q3 2011 following trials and a Commission for Energy Regulation (CER) consultation. Smart Metering systems can empower consumers with detailed and often real-time information on energy usage and enhance energy efficiency (pictured).

The cost of an ambitious programme will rely on a combination of innovative financing solutions, regulation and new business models, as exchequer funding is likely to be limited. Some options include an energy demand reduction target for energy suppliers. This is likely to result in the outsourcing of retrofit activities to Energy Services Companies (ESCos) and specialised building contractors. Financing provided could be repaid by the customer via a pay as you save type model. Other funding possibilities include some form of levy on energy bills and public funding in the form of revenue from a carbon tax. Some regulatory measures particularly in relation to the private rental sector may also be necessary. Private financing in the form of ‘green loans’ from banks may also increase but evidence so far suggests uptake is currently low. The exact details of the National Retrofit Scheme are expected to be announced in the summer of 2011.

2.3 UK Opportunity

Opportunities also exist outside Ireland for well placed ESCos, manufacturers of relevant technologies and forward-looking construction firms in the retrofit market. The UK for example is committed to reducing household emissions by 29% by 2020 (based on 2008 reference) and has announced a number of efficiency programmes to achieve this. The current Carbon Emissions Reduction Scheme (CERT) is to be extended into a nationwide ‘Green Deal’ programme which will be underpinned by an Energy Company Obligation. The new Green Deal programme is a pay as you save type model and will be introduced in 2012. It will be open to the residential and commercial sectors. The Green Deal will require standards and accreditation for products and installers.

The task of improving the energy efficiency of the UK’s housing stock is extremely challenging. The Department of Energy and Climate Change suggests that the UK needs to be delivering a comprehensive package of measures at a rate of 1.8 million houses per year (35,000 per week) by 2020 in order to get the entire housing stock operating more efficiently by 2030 and to meet their national targets.
3. Green Public Procurement

3.1 Background

Procurement is far broader than simply purchasing, it is the process of acquiring goods, services and works, spanning the initial identification of what is needed, through to the end of life of a product or service. Green Public Procurement (GPP) is defined as the approach by which public authorities integrate environmental criteria into all stages of their procurement processes. Environmentally responsible or 'green' procurement is the selection of products and services that minimize environmental impacts. It requires a company or organization to carry out an assessment of the environmental consequences of a product at all the various stages of its lifecycle. This means considering the costs of securing raw materials, manufacturing, transporting, storing, handling, using and disposing of the product.

Green Procurement is becoming an embedded business strategy in the private and increasingly the public sector. Organisations are recognising green procurement as smart procurement. Public Authorities in Ireland are major consumers with total purchasing power estimated at over €16 billion. In Europe Public Authorities spend approximately €2 trillion annually, equivalent to some 17% of the EU’s gross domestic product. By using their purchasing power to choose goods and services with lower impacts on the environment, they can make an important contribution to sustainable consumption and production.

It is also worth noting that in the short term the vast bulk of construction output in Ireland is expected to be on the public side, with annual capital works expenditure estimated at €7 billion. GPP is being promoted both at an EU level (2020 Strategy – Flagship Initiative on Resource Efficiency) and at a National Level (National Action Plan) as a policy instrument to encourage sustainability, innovation and competitiveness.

3.2 EU Criteria

The EU has issued common GPP criteria for a number of products / services:

- Copying Paper
- Cleaning Products/Services
- Office IT
- Construction
- Transport
- Furniture
- Electricity
- Food and Catering Services
- Textiles
- Gardening Products and Services
8 new product groups were added in July 2010 – many construction related:

- Windows, Glazed Doors and Skylights
- Thermal insulation
- Hard floor-coverings
- Wall Panels
- Combine Heat and Power (CHP)
- Road construction and traffic signs
- Street lighting and traffic signals
- Mobile phones

For each product /service group two sets of criteria are presented:

- Core GPP criteria – these address the most significant environmental impacts, and are designed to be used with minimal additional verification effort or cost increases;
- Comprehensive GPP criteria - are intended for use by authorities who seek to purchase the best environmental products on the market.

The EU GPP criteria are voluntary and Member States are allowed flexibility in how they approach setting GPP criteria at a national level. The main objective for developing ready-made criteria is to make it easier for purchasers to make use of environmental requirements. Another objective is to inform suppliers and contractors about the kind of environmental requirements which might be brought up in future procurement processes.

The EU Construction criteria address energy consumption, the use of renewable energy sources (RES), construction materials and products, waste and water management as well as other aspects influencing the environmental impacts of construction such as architects’ experience, monitoring and user aspects. The proposed approach focuses on buildings as a system instead of just an accumulation of components.

3.3 GPP National Action Plan

A GPP National Action Plan is currently being progressed by the Department of the Environment in conjunction with other stakeholders and is due to be unveiled in the very near future. From an Irish perspective seven priority product areas are initially being developed for GPP. These areas will in turn encompass a number of product groups.

Priority Product Areas

- Construction
- Energy
- Food and Catering Services
3.4 How can GPP Criteria be used at different stages of the tender process?

In planning GPP, contracting authorities need to consider all stages of a procurement procedure and examine where it is most appropriate to insert environmental considerations. Each case is specific. Examples of what is possible for public procurers to do at each stage are given below.

- **Pre-procurement**: Early market dialogue may assist in identifying technologies or solutions with the potential to meet environmental objectives, prior to commencing the procurement. A public authority may need to purchase a new lighting system for its office buildings with substantially reduced energy consumption. Pre-procurement dialogues with technology suppliers and developers will help determine if the market is able to offer more innovative solutions to achieve this outcome than those currently available.

- **Subject matter**: Defining the subject matter of the contract and choosing a title provides an opportunity to inform the market of a buyer’s GPP objectives (e.g. the purchase of energy efficient computers, the supply of energy from renewable sources, construction of an energy efficient building using sustainable construction materials and products, sustainable cleaning services, etc.)

- **Selection criteria**: In some cases public procurers can request that the tenderer has an Environmental Management System (e.g. ISO 14001) or equivalent so as to demonstrate that they can carry out the construction works with minimal impact on the environment. All potential tenderers may be required to have an environmental policy. Where the contract has a specific environmental dimension (e.g. the use of airtight and air exchange systems with heat recovery or the use of high efficiency cogeneration, passivhaus etc) assessment of the contractor’s previous experience or other elements of technical capacity may also be taken into account.

- **Technical specifications**: A technical specification defines the procurer’s requirement in detail, and detailed GPP criteria are appropriate for being directly included at this stage.

Examples include:

- X% of net energy demand must be provided by localised renewable energy resources;

- All wood used must come from certified legal sources (FSC etc);

- All white goods used must achieve a minimum of ‘A’ rating under the EU Energy Label classification;
- The overall building rating must be BREEAM ‘Excellent’ or equivalent;
- All insulation installed must have a BRE Green Guide rating of A+ or equivalent;
- Building must be BER B1 or higher.

**Award criteria:**

Public authorities may use two types of criteria for awarding their contracts:

- Lowest price only;
- or most economically advantageous tender (MEAT).

It is expected that environmental considerations could make up between 10 – 20% of the overall award score - the specifications/weightings for each environmental consideration should be outlined in the tender.

**Contract performance clauses:**

Contract performance clauses should be clearly related to the execution of the contract and made known to tenderers during the procurement process. They apply after the contract has been awarded and can have legal implications for the contractor. Examples could include:

- The contractor must provide the building manager with monthly figures on energy consumption for the 1st 3 years;
- use of reusable containers to transport products to the site;
- requiring that goods be delivered outside peak traffic times to minimise the contribution of deliveries to traffic congestion.

With the adoption of the National GPP Action Plan, public authorities will increasingly be obliged to include environmental criteria in tenders for specified priority products and services. Bidders will be scored on their environmental specifications as part of their overall tender score. The introduction of GPP will gradually ensure that companies who supply goods and services with strong environmental credentials will be at an advantage when competing for contracts.

It is expected that a recommended target of 50% GPP (based on value and number of contracts) should be attained within a short time period, in respect of the priority product groups.
It is also expected that the OPW will develop GPP guidance and specifications for the construction sector which will develop key aspects related to the design, energy efficiency, materials usage and environmental impacts (land use etc) of construction projects.

4. Preparing for Green Procurement

Suppliers of construction products and services who can demonstrate the environmental attributes of their products and services will be at a considerable competitive advantage when selling to both the private and public sectors. Large organisations, both public and private are engaging suppliers across the value chain in efforts to procure more sustainably. This represents an opportunity for companies to generate new revenue and increase competitiveness by developing eco-innovative products and services.

It will no longer be sufficient to state the environmental credentials of your product or service, procurers will increasingly be looking for evidence that your claims are verifiable.

4.1 Environmental Management Systems (EMS)

Installation of an accredited EMS (e.g. ISO 14001) can ensure that a company manages the environmental impact of its products and services within a formalised structure. It will be deemed sufficient proof by public authorities that a contractor with a certified EMS (or equivalent) can perform a construction related contract in an environmentally sound manner. An EMS may be specified in the selection stage of a tender provided it is related to the subject matter of the tender. For many SMEs the installation of a full certified EMS may seem daunting. A phased, incremental approach, starting with an environmental policy statement and commitment can be a starting point. Some recent construction contracts in the UK require all potential tenderers to have an environmental policy. Prequalification questionnaires are also asking potential suppliers about their environmental procedures.

4.2 Ecolabels/Environmental Product Declarations (EPDs)

An “eco-label” identifies a product or service that meets specified environmental performance criteria or standards based on life cycle considerations, “Eco-labelling” is a voluntary approach to environmental performance certification that is practiced around the world. In contrast to “green” symbols or claim statements made by manufacturers and service providers, an eco-label is awarded by a third-party organization to products or services that are determined to meet these criteria or standards.
Environmental performance labels and declarations vary greatly. The International Organization for Standardization (ISO) has identified three broad types of voluntary environmental labels.

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<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type I</td>
<td>Voluntary, multiple-criteria based, third party program that awards a licence that authorises the use of environmental labels on products indicating overall environmental preferability of a product within a particular product category based on life cycle. e.g. EU flower ecolabel, German Blue Angel, Nordic Swan.</td>
</tr>
<tr>
<td>Type II</td>
<td>Informative environmental self-declaration claims.</td>
</tr>
<tr>
<td>Type III</td>
<td>A program involving a declaration that provides quantified environmental life cycle product information provided by the supplier, based on independent verification e.g. an Environmental Product Declaration (EPD) to ISO 14025.</td>
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</table>

Type 1 Labels such as the EU ecolabel or equivalent are deemed proof that a product or service is GPP compliant. Many of the EU GPP criteria have been developed based on the EU ecolabel requirements.

An environmental product declaration (EPD) is a communication tool that provides quantified information on the potential environmental impacts of a product or process based on information from a life cycle assessment (LCA) over its entire lifetime or a part of it. An important advantage of using EPDs is the possibility to add LCA-based information in the supply chain. This feature makes EPDs particularly valuable for the building sector where the final building is based on a large number of materials, construction products, semi-manufactured products and processes. A number of methodologies for delivering an EPD exist (UK BRE, German IBU etc) all based on international standards. A sector standard ISO 21930:2007 contains specifications and requirements for the EPD of building products. This standard compliments ISO 14025 which covers EPD in general.

The environmental opportunity that EPDs present is two-fold: EPD studies allow producers to understand the sources of their products’ environmental impacts, and the EPD itself allows purchasers to choose products with lower environmental impacts. Both these drivers should lead to the reduction of environmental impacts. EPDs are well suited as evidence for environmental requests in regard to public procurement.

Industry associations such as Eurogypsum and EuroWindow have expressed their preference for the use of EPDs and one would expect their use to grow significantly.
4.3 Standards in Progress

CEN the European standards body are preparing the CEN 350 set of sustainability standards for construction works. These are intended to provide a harmonised approach to the measurement and aggregation of embodied and operational environmental impacts (particularly for materials from construction product data - EPDs) into data for whole buildings across the lifecycle. They may also provide harmonised methods for measurement of some operational impacts (e.g. water consumption, waste etc.) where these do not already exist.

5. Enterprise Ireland Supports

5.1 Green Offer

Enterprise Ireland has a range of supports to help improve the sustainability of your business. Enterprise Ireland’s new Green Offer is comprised of 3 strands Green Start, Green Plus and Green Transform.

Green Start

Many companies find it difficult to incorporate environmental improvements into the day to day running of their business. However, there are opportunities for business to integrate a simple approach which can lead to better environmental performance without a major commitment in time and resources. The Green Start programme is designed to increase the level of environmental awareness relating to regulatory compliance and developments in Green markets in companies who have no in-house expertise or exposure to environmental issues to date. An increase in environmental performance can help companies reach a level where they will achieve competitive advantage through greater resource efficiency (energy/water/waste costs) and greater market share through enhanced credentials.

We offer a range of services depending on need:

- Assistance with preparation of an Environmental Policy Statement;
- A site visit and site audit;
- Advice on regulatory compliance issues (licences etc) and how to resolve them;
- Advice on environmental issues developing in the market place including Green Public Procurement, supply chain issues and reputation benefits;
- Assistance with preparation of eco-maps to deal with site issues;
- Assistance with access to SEAI Energy map and Green Business water and waste audit tools to improve resource efficiency.

Outcomes:

- Environmental Policy Statement;
- Compliance with regulatory requirements;
- Site eco-maps;
- Awareness of market benefits of improved environmental reputation;
- No client funding required.
Green Plus
Green Plus is designed to build on Green Start and to assist companies develop products and services to a level where they comply with specific Green Procurement requirements. This can involve the implementation of environmental standards, improvements in products or processes, installing a carbon management strategy or applying for Eco-labels. We offer advice, assessment and financial support through our GreenTech Support for feasibility studies and consultancy under the following headings:

- Installation of an accredited Environmental Management System (EMS);
- Carbon management strategy and carbon footprint of site and/or product;
- Develop an environmentally superior product;
- Attain an Eco-label or another accredited label such as an Environmental Product Declaration (EPD).

Outcomes:
- Improved competitiveness through greater resource efficiency;
- Enhanced reputation through reduced Carbon footprint and accreditation to an EMS;
- Greater access to Green Public Procurement and private supply chain tenders for the company and/or particular products.

Green Transform
This programme is designed to further improve the competitiveness and market access of those companies who have maximised their energy efficiency or reduced their carbon footprint through efficiency measures. Support is based on Capital support for proposed company expansion plans. This requires the submission of a Business Plan which would detail the proposed expansion in terms of export growth, jobs sustainability, productivity increases and cost benefit analysis.

Capital funding would fall under the following headings:
- Energy saving measures – such as energy management systems;
- High Efficiency Co-generation – such as combined heat & power (CHP);
- Increased use of renewable energy technologies – such as biomass boilers or wind turbines;
- Environmental feasibility studies directly related to the measures above.

Projects will be assessed by Enterprise Ireland and The Sustainable Energy Authority of Ireland (SEAI). The Green Transform programme and methodology will be managed and controlled by Enterprise Ireland.
5.2 Procurement

Enterprise Ireland is committed to working with client companies and buyers to facilitate and maximise the contract opportunities available in the public sector in Ireland and internationally. The Enterprise Ireland Public Procurement team focuses on raising awareness of the innovative solutions provided by indigenous SMEs and on assisting SMEs in learning about, and tendering for, contracts in the public sector in Ireland, channel partners, primary contractors and global government organisations, including the European Union and the United Nations.

Enterprise Ireland offers assistance to companies in relation to accessing procurement opportunities. We offer a range of funding and capability-building activities that will help prepare and enhance companies’ ability to successfully bid and win public contracts. Supports such as the GO2Tender programme and International Selling Programmes have proved very successful.

5.3 Eco-innovation Funding

Enterprise Ireland is also the point of contact for the Competitiveness and Innovation Programme (CIP) Eco-Innovation Funding Call from the European Commission. The call has an annual budget of approximately €80 million and one of the programme’s four priority areas is sustainable building products. The programme is specifically aimed at SMEs and supports innovative ideas which can be turned into ‘marketable’, green products and services. Enterprise Ireland client company Cygnum who are involved in the manufacture of timber framed housing have received significant funding under the programme. They are a partner in the InsulaTFH project which aims to develop a process for manufacturing cellulose from recycled newsprint and filling timber panels to achieve a required insulation value. This will greatly increase the use of recycled waste materials as high value insulation in the wall panels of timber-frame housing.

For details on the above initiatives contact:

<table>
<thead>
<tr>
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<th>Role</th>
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<td>General/Ecoinnovation Procurement</td>
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