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SANDYFORD'S FUTURE

'THE SMART ECONOMY'

SBEA





Building Ireland's Smart Economy

A Framework for Sustainable Economic Renewal



Building Ireland's Smart Economy

A Framework for Sustainable Economic Renewal

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FOREWORD

Ireland faces challenging economic circumstances but there are also great opportunities on the horizon. While it is imperative we successfully plan our way through the current economic storm, we must also restructure our economy so that we can be in pole position when the global recovery begins.

Building Ireland's Smart Economy sets out an ambitious set of actions to reorganise the economy over the next five years and to secure the prosperity of current and future generations. It sets out a framework to address the current economic challenges and to build a 'Smart Economy' with a thriving enterprise sector, high-quality employment, secure energy supplies, an attractive environment, and first-class infrastructure.

This Framework does not seek to outline all the reforms or measures which will be required across the economy. Instead, it sets out a clear direction which the Government intends to pursue and some of the specific actions we will take in the short-term to help us get there.

Neither does the Framework address all of the policy challenges which arise from the interdependence of economic and social policy issues as set out in *Towards 2016*, reflecting the important work of the NESC in this area. The primary objective of this document is to outline a pathway forward which acknowledges the severe short-term economic challenge, while focusing on how we can return to sustainable growth in the medium-term.

The Action Areas and Points within this Framework are a combination of existing policies on which the Government will build and new actions that will drive the restructuring of the economy. This combination is important because a principal objective of this Framework is to reprioritise the business of Government and to re-focus resources in a manner that will hasten economic renewal. On occasion, that will mean other policy issues having to wait until the economic situation has improved. We will make those choices where necessary.

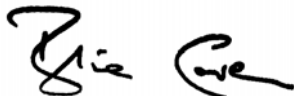
The lesson from the past is that providing a clear sense of direction by setting out a long-term vision and a set of goals, and by prioritising the resources needed to achieve them, secures immediate gains from increased confidence and a determination to deliver. There won't be overnight results – but there can be, and will be, successes over the period ahead. Success will come from taking the right decisions, implementing them quickly and effectively, and acting consistently to support the enterprise sector in generating growth and jobs.

The successful implementation of this Framework will not just be delivered by the policy measures and investments put in place by the Government. It requires a national effort, in particular to meet short-term, but crucial, challenges. The Government intends to work with the Social Partners on the development and implementation of this Framework, which is consistent with the principles and vision underpinning *Towards 2016*, using the well-established mechanisms of the social partnership process.

I met with the Social Partners on Tuesday 16th December and outlined the Government's thinking about the elements of this Framework for Economic Renewal. While it is the duty of the Government to provide leadership, I believe that the best prospect of achieving what we all want for our country, as reflected in the goals of *Towards 2016*, lies with a collective effort grounded in the values of partnership.

I invited the Social Partners to participate in detailed and intensive discussions on measures to develop further and then implement this Framework for Economic Renewal. I invited them to work with us in a constructive spirit to contribute their views before the Government concludes the detailed actions to implement the Framework. I am glad that their response was extremely positive.

The path to economic renewal begins here.

A handwritten signature in black ink, appearing to read 'Brian Cowen', with a stylized flourish at the end.

Brian Cowen T.D.,
Taoiseach

BUILDING IRELAND’S SMART ECONOMY
A FRAMEWORK FOR SUSTAINABLE ECONOMIC RENEWAL
2009-2014

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EXECUTIVE SUMMARY

Introduction

This Framework for Sustainable Economic Renewal sets out the Government's vision for the next phase of Ireland's economic development, which is predicated on successfully addressing the severe economic situation we face, restoring stability to the public finances, and beginning the process of restoring competitiveness. Building on the significant strengths of the economy, which provide strong foundations for future export-led economic growth, this document sets out an ambitious set of actions to develop Ireland's Smart Economy.

Our strategy is to:

- address the current economic challenges facing the Irish economy by stabilising the public finances, improving competitiveness, assisting those who lose their jobs, and supporting Irish business and multinational companies;
- invest heavily in research and development, incentivise multinational companies to locate more R&D capacity in Ireland, and ensure the commercialisation and retaining of ideas that flow from that investment;
- implement a 'new green deal' to move us away from fossil fuel-based energy production through investment in renewable energy and to promote the green enterprise sector and the creation of 'green-collar' jobs;
- develop first-class infrastructure that will improve quality of life and increase the competitiveness of Irish business.

The Smart Economy

The Smart Economy combines the successful elements of the enterprise economy and the innovation or 'ideas' economy while promoting a high-quality environment, improving energy security and promoting social cohesion. A key feature of this approach is building the innovation or 'ideas' component of the economy through the utilisation of human capital - the knowledge, skills and creativity of people - and its ability and effectiveness in translating ideas into valuable processes, products and services. A second important aspect is the greening of the economy and the development of green enterprise.

We can learn lessons from the current international financial crisis and pursue these twin initiatives to ensure the creation of high quality, well-paid employment which lasts through any future upturns and downturns in the global economy.

The Smart Economy has, at its core, an exemplary research, innovation and commercialisation ecosystem. The objective is to make Ireland an innovation and commercialisation hub in Europe – a country that combines the features of an attractive home for innovative R&D-intensive multinationals while also being a highly-attractive incubation environment for the best entrepreneurs in Europe and beyond. This will be the successful formula for the next phase of the development of the Irish economy and for delivering quality and well-paid jobs.

The Smart Economy is a ‘Green Economy’ in that it recognises the inter-related challenges of climate change and energy security. It involves the transition to a low-carbon economy and recognises the opportunities for investment and jobs in clean industry. The core of this Green New Deal is a move away from fossil-fuel based energy production through investment in renewable energy and increased energy efficiency to reduce demand, wastage and costs.

This sustainable approach to economic development complements the core strength of our economy in the use of natural resources in the agriculture, forestry, fisheries, tourism and energy sectors. It recognises that our manufacturing industries are already relatively clean and green in the low level of resource inputs they use and environmental outputs they create. It will allow us develop a digital services export economy which will only require a high speed broadband network, a renewable electricity supply and our own ingenuity to succeed.

The resolution of Lisbon Treaty issues is important to the success of this plan as any uncertainty about Ireland’s future position in the European Union is a serious threat to our future economic performance, in particular, the attraction of foreign investment. At the same time, there is now an important all-island dimension to all aspects of Government policy and, to the extent that it is appropriate, and by agreement with the Northern Ireland Executive, all of the policies, programmes and initiatives in this Action Plan will take full account of the mutual benefits available through North-South co-operation.

Meeting the Challenge Facing the Irish Economy

The ambitious vision and implementation plan in this document can only be achieved if we effectively manage the serious economic challenges we face at present.

A fall in GNP and rising unemployment over the period 2008 – 2010 is forecast and a return to positive and stable economic growth, in the later years of this five-year framework, can only be achieved if we restore stability and order to the public finances. Tax revenues are now nominally at 2005 levels which, combined with the very significant increase in current spending in the intervening years, means that we have a substantial funding gap. It is likely that borrowing to pay for day-to-day services will be in the region of €3.5 billion this year and will be higher next year. This is not sustainable and the interest costs mean that more and more of our day-to-day resources are simply going to pay interest as opposed to paying for services.

A crossroads has been reached in the nation's economic development. If we are to implement this plan, and be well-placed to prosper from the anticipated upturn in the global economy in 2010, we must address competitiveness issues and the serious shortfall in the Exchequer finances. Urgent priority must be given to returning the public finances to a stable and sustainable position. A national effort is required and, with this in mind, the Government will be engaging with the Social Partners and other stakeholders to ensure we take the right decisions in the interests of securing the economic future of the Irish people.

Government Actions to Build the Smart Economy

The Framework consists of a set of interlocking elements each of which is reflected in a series of Action Points, which demonstrate the specific measures which are being taken as a matter of urgency. The five Action Areas of the Framework are:

1. Meeting the Short-term Challenge – Securing the Enterprise Economy and Restoring Competitiveness;
2. Building the Ideas Economy – Creating 'The Innovation Island';
3. Enhancing the Environment and Securing Energy Supplies;
4. Investing in Critical Infrastructure;
5. Providing Efficient and Effective Public Services and Smart Regulation.

Action Area 1: Meeting the Challenge – Securing the Enterprise Economy and Restoring Competitiveness

Meeting the challenge of securing the economy in what are among the most difficult global economic circumstances since the foundation of the Irish state is an absolute priority for Government. We are implementing a strategy to manage the current short-term difficulties, maximise the rate of pick-up in economic activity, restore competitiveness, stabilise the banking sector, and assist those who lose their jobs during the downturn, while respecting the unavoidable constraints on policy arising from the fiscal and international environment. This strategy to secure Ireland's Enterprise Economy will provide a strong base from which to pursue the next phase of economic development.

Key actions:

- A fiscal support is being applied to pump billions of euro into the economy through unparalleled investments in infrastructure which will make the economy more competitive. This constitutes proportionately the largest capital programme in the EU;
- Capital investment allocations will be reviewed to identify scope for re-prioritisation towards more labour-intensive activities;
- Significant funding will be made available for a range of housing programmes and insulation schemes (see Action Area 3);
- The public finances must be restored to a sustainable position and the Government will engage with the Social Partners to chart a way forward;
- The Special Group on Public Service Numbers and Expenditure Programmes will have a significant role to play by identifying options for expenditure adjustment;
- Steps to broaden the tax base will be taken, having due regard to the recommendations of the Commission on Taxation;
- The Government's focus will continue to be on securing a stable and active banking sector which serves the needs of the Irish economy; we will support, alongside existing shareholders and private investors, a recapitalisation programme for credit institutions in Ireland of up to €10 billion;
- Our low corporate tax regime has been a central pillar of Ireland's industrial policy and we will maintain competitive, low corporation tax rates (including the 12.5% rate) and introduce a range of pro-enterprise tax measures to stimulate activity and employment growth;

- Activity and employment in the construction sector will benefit from substantial and sustained capital investment under the NDP; in particular the Exchequer will provide €1.66 billion for housing in 2009, we are reforming Stamp Duty applicable to commercial property, and Enterprise Ireland will provide a construction sector export service to assist companies and professionals to market their products and services abroad;
- Within the Social Partnership framework, we will seek to ensure wage moderation and flexibility consistent with our competitive position, while also securing industrial peace and stability;
- We will publish a whole-of-Government response to recommendations contained in reports of the Competition Authority within nine months of their publication;
- We will pursue reforms to reduce legal costs and tackle factors which continue to drive costs and delays arising from the legal system;
- We will work to a target of reducing administrative burdens on business by 25% by 2012, beginning with concrete measures in Taxation, Environment, Health and Safety, Statistics, Employment and Company Law and introduce a consolidated inspections programme to reduce the number of inspection visits to business;
- The Government will improve co-ordination between Departments and Agencies in order to improve access to job search, training and education, community and employment programmes and will provide a range of opportunities for up-skilling and re-skilling;
- Specific actions include increased Job Search Supports capacity; an initiative to target young people who become unemployed; additional places, predominantly in training, for the unemployed; and we will bring forward further measures in this area in early 2009;
- Retraining of construction and other workers will be re-focused and enhanced in order to support retrofitting of our housing stock and provide the skills for the green economy;
- Initiatives to protect mortgage holders include the Government's insistence that banks participating in the Guarantee Scheme confirm their compliance with the Irish Banking Federation (IBF) Code of Practice on Mortgage Arrears, support through the Money Advice and Budgeting Service, and careful monitoring of practices in relation to mortgage arrears and a pro-active approach to any further regulatory or other steps required;
- A range of measures is included to build on the strengths in the Agriculture, Fisheries and Food Sectors and exploit the potential of an export-led, natural resources based

Agri-food sector. They include income support and capital investment on farms, environment and animal welfare enhancing schemes, further investment in the food processing sector, supporting innovation, marketing and research and development throughout the sectors and continued support for sustainable forestry. Measures to overcome the recent difficulties in the pigmeat sector are also being implemented;

- A range of measures will be introduced to re-invigorate the international financial services industry including: reform of the legislative framework for financial services in Ireland, support for a targeted upskilling programme for the industry to enhance the skill base necessary to attract and retain investment; increased support for Research, Development and Innovation activity; extending the number of double taxation treaties; and vigorous promotion targeting new opportunities in areas such as specialist leasing, pensions, technology development and sovereign wealth funds.

Action Area 2: Building the Ideas Economy – Creating The ‘Innovation Island’

The key objective of this Action Area is to make Ireland an innovation and commercialisation hub of Europe – a country that combines the features of an attractive home for innovative multinationals while also being a highly-attractive incubation environment for the best entrepreneurs from Ireland and overseas. It builds on Ireland’s significant multinational presence and Ireland’s stock of highly-skilled workers and higher education institutions by incentivising greater investment, in high-value research and development areas in science and technology. In addition, the objective is to create an exemplary research, innovation and commercialisation ecosystem which capitalises on the Government’s unprecedented €8.2 billion investment in science and technology. This will be achieved by mobilising Ireland’s cohesive ‘Team Ireland’ agencies to translate knowledge creation into economic return. It will involve creating a similarly R&D-intensive indigenous enterprise sector through the provision of strong supports for start-up companies and entrepreneurs whose companies will provide the employment of the future.

Key actions:

- Up to €500 million will be generated to create a venture fund, known as ‘Innovation Fund – Ireland’, to support early stage R&D-intensive SMEs. The capital will be divided into five venture funds of between €75-150 million;
- The new fund will be operated in coordination with existing financial supports from Enterprise Ireland for early stage R&D intensive SMEs, in order to ensure efficient allocation of resources and avoid overlapping supports;
- More favourable tax treatment of the carried interest of venture capital is being introduced at a rate of 15% for partnerships and 12.5% for companies to encourage the availability of so-called ‘smart capital’ for investing in start-up innovative companies who will be the employers of the future;
- The multinational community will be incentivised to intensify innovative, high-value activity and technological convergence which will provide quality jobs;
- Entrepreneurship, business start-ups and employment creation will be driven by a number of highly-favourable taxation measures including exemption from corporation tax arising in the first three years of operation for business start-ups, a tax abatement scheme for restricted shares, and a refund in the case of forfeited shares, to assist companies, including start-up companies, in retaining key employees;

- A Remittance Basis of Taxation scheme will apply, in appropriate circumstances, to income earned from the exercise of an employment in this State where the payment is made outside of the State;
- We are introducing significantly enhanced R&D tax arrangements; an industry-led Competence Centre Programme is being rolled-out in Applied Nanotechnology, Advanced Manufacturing Productivity, Energy, BioEnergy, Composites and Advance CMOS Circuits; and an action plan will be developed for expanding research and development in converging technologies combining our science-based strengths with enterprise capacity;
- Revised arrangements for the taxation of intellectual property will be developed during the course of 2009;
- In the light of the above, we will review the potential for the active management of Intellectual Property, whether generated or domiciled in Ireland;
- Fast-track visa arrangements will be provided for key researchers and highly skilled staff and their spouses. They will also be eligible for fast-track progression to long-term residence;
- Manufacturing will continue to play a fundamental part in our economic future, with an increasing focus on securing competitive advantage through innovation, R&D and design, and we are establishing a Manufacturing Forum to support the sector;
- There will be continued substantial investment in R&D through implementation of the Strategy for Science, Technology and Innovation, as demonstrated by significant allocations in Budget 2009, launch of a 5th cycle of the Programme for Research in Third-Level institutions and the preparation, by June 2009 of an Action Plan for Health Research;
- We will focus on the promotion of commercialisation of opportunities arising from research undertaken including through the Commercialisation Fund, the Incubator Space Scheme, and the Technology Transfer Strengthening Initiative;
- A particular focus will be on opportunities arising from research in the renewable energy and environmental technologies areas, including the development and commercialisation of ocean energy and Science Foundation Ireland's recently added third pillar of energy;
- Science Foundation Ireland will continue to build Ireland's world class research capacity in strategic areas allied to the needs of industry;
- To accelerate Ireland's global science reputation, by 2013, SFI will attract to Ireland a premium cohort of world class researchers who have been nominated for, or secured

prizes, awards and honours that will drive up the international visibility of Ireland to the global research community and the global high-tech business community;

- Ireland has just won the European City of Science 2012 for Dublin and will use this opportunity to bolster Ireland's reputation internationally;
- A review is being conducted to ensure maximum coherence and collaboration between the enterprise development agencies and to identify any gaps in support;
- We will explore and pursue opportunities in international services including in Tourism, Construction, the Maritime Sector, Arbitration and Digital Trade Facilitation;
- We will seek to position Ireland as a location of choice in the International Education market;
- A number of initiatives to support life-long learning will be implemented;
- Restructuring the higher education system will be a priority with a new Higher Education Strategy to enhance system wide performance;
- Higher Education institutions will be supported in pursuing new organisational mergers and alliances that can advance performance through more effective concentration of expertise and investment;
- Under the Strategic Innovation Fund, priority will be given to flexible learning initiatives that can be targeted at up-skilling people in the workforce;
- We will use research funding through SFI, Enterprise Ireland and IDA to instil a commercialisation culture in third-level institutions alongside the now embedded teaching and research culture;
- We will foster entrepreneurship, mathematical, science and language skills and prioritise the roll-out of Project Maths;
- We will promote study in priority areas through the Discover Science and Engineering programme, which will now assume a role in relation to maths;
- We will explore, in partnership with industry, development of a targeted programme of bursaries to increase participation in key engineering programmes at third level;
- Young Scientist winners will be linked with a third-level institution and/or a firm to enable them to bring their idea to development and the top 3 finalists will have laboratory/research space, as appropriate, in universities for the summer;
- We will raise the profile of the County Enterprise Board student enterprise awards and encourage second level students to participate in an enterprise related programme;
- We will enhance ICT use in schools, working in partnership with industry to invest in ICT equipment and connectivity;

- The Schools Broadband Programme will be continued, the range of services available to schools will be expanded and the range of digital content available to schools will also be expanded;
- We will pursue the objective of equipping second-level schools with 100Mb per second broadband connectivity;
- Summer schools in science and engineering will be expanded with an emphasis on innovation and commercialisation;
- The HEA will progress the provision of entrepreneurship and management training skills on scientific and engineering doctoral programmes in universities;
- We will continue to strengthen bilateral education relations between Irish and Chinese authorities at third level, including further development of economic and cultural links and the learning of the Chinese language;
- An Action Plan will be developed for improving trade, investment and tourism links with new and fast-developing markets by end-2009;
- We will review the network of diplomatic and consular missions in order to ensure a proper alignment of resources with strategic objectives;
- A consultative mechanism will be established with public and private sector representatives to advise on the economic work of Embassies;
- Enterprise Ireland will build on its existing network of offices in Asian and other high-growth markets;
- The IDA will shift resources from non-business generation to business generation, expand the number of staff based in the United States and seek to diversify the source of foreign direct investment (having recently set up offices in Mumbai, India, and Beijing, China);
- The programme of Ministerial-led trade Missions will be expanded to build on both existing markets and also new opportunities, including Asia, the Gulf States, Brazil, Russia and the developing EU markets;
- Detailed proposals will be brought forward to stimulate and enhance economic links with the overseas Irish, including the vital issue of Ireland/US Economic Relations;
- IDA, Enterprise Ireland and SFI will develop a marketing campaign for ‘The Innovation Island’.
- We will publish a new Knowledge Society Strategy by mid-2009 with an action plan for the use of new high speed broadband networks to further our enterprise, educational and environmental objectives.

Action Area 3: Enhancing the Environment and Securing Energy Supplies

The EU has committed to reducing overall carbon emissions by 20% by 2020. Agreement on a climate change package in Copenhagen next year will further increase our responsibilities and we must plan for this transformation now. The International Energy Agency has also warned that the ‘era of cheap oil is over’. Ireland, which is over 90% reliant on imported fossil fuel, must alter this dangerous dependence. We need to protect our economy from future oil and gas supply shocks. Radically enhanced energy efficiency across all sectors of the economy, together with actions to diversify supply through investment in renewable energy will deliver reduced costs, reduced emissions and greater energy security.

The success of our economy is intimately related to how well we manage our environment. For example, tourism depends on high quality landscapes and built environments and certain high value-added parts of the food industry depend on Ireland’s ‘green image’ for competitive advantage. More fundamentally, for the purposes of this Framework, if we wish to keep talented Irish people working in Ireland, as well as attracting the most talented people from around the world to our shores, we cannot afford to offer a poor quality living environment. In addition, the environment and energy areas are beginning to provide very significant opportunities for industrial and enterprise development through Green Enterprise.

Key actions:

- The Government will increase the production of renewable electricity in a cost-effective manner to meet the new increased target of 40% of electricity from renewable resources by 2020;
- Over the next two years an estimated €400 million will be spent by the private sector building an additional 400mw of wind power to meet our 2010 target for 15% of our power to come from renewable electricity supplies;
- EirGrid will spend €4 billion between now and 2025 building a new electricity transmission system to tap into renewable energy resources;
- The ESB has set out its own zero emissions corporate plan for 2030 and a related €2 billion long term investment budget;
- Bord Gáis have set out a €5 billion investment strategy to develop the gas network and clean energy technologies;
- The East West interconnector will be completed in 2012 while planning further interconnection to the UK and the Continent;

- A framework will be in place in early 2009 to support the development of auto-generation projects by large industry as well as micro-generation in the small business, agriculture and domestic level;
- 21,000 smart meters will be placed in Irish homes as a test project prior to the roll out of the new smart grid to every home in the country;
- We will fast-track development and commercialisation of ocean energy technologies under the Ocean Energy Development Programme 2008-2012;
- We will ensure that the Commission for Energy Regulation carries out a fundamental review of energy prices and tariff methodologies which will take account of the needs of all energy consumers including the need to support economic competitiveness;
- We will progress restructuring of the electricity sector through finalisation of the CER / ESB Asset Divestment Strategy by end year and the transfer of the national transmission assets to EirGrid;
- The consent process for energy developments on the foreshore will be modernised in 2009;
- €30 million will be spent in 2009 helping the installation of better insulation in over 25,000 houses;
- We are increasing the range of energy efficient equipment purchased by companies that can qualify for accelerated capital allowances, including energy efficient data-server systems and, vital in these times of high energy costs, electricity provision equipment and control systems;
- We are pursuing national cycling and walking strategies and a cycling package for Dublin;
- We will publish a National Sustainable Transport and Travel Action Plan early in 2009;
- We will work towards our target of 10% of Ireland's road transport fleet being electrically powered by 2020;
- In the first quarter 2009 the Government will publish its National Energy Efficiency Action Plan including the targeted 33% improvement in energy efficiency in its own services by 2020;
- Environmental considerations will be further integrated into the public procurement process in 2009, with the goal of bringing us in line with the best performers in Europe;
- Current capital appraisal and cost-benefit analysis guidelines will be amended in early 2009 to incorporate best practice in reflecting the cost of CO2 emissions in cost benefit analyses;

- An announcement on the issue of a Carbon Levy, assisted by recommendations of the Commission of Taxation, will be made in Budget 2010. Particular attention will be paid to ensuring that any Levy does not impact adversely on the most vulnerable or on the economy;
- Further appropriate modifications to the motor tax system will be considered to encourage continuous improvements in the efficiency of the car fleet and to encourage a move from advanced plug-in hybrid vehicles to full electric vehicles;
- The Irish Government will support measures at EU level to have a lower rate of VAT apply to eco-friendly products;
- A high-level Action Group on Green Enterprise will report to Government within four months, setting out an Action Plan for developing green enterprise in Ireland;
- We will continue to support the development of eco- and green tourism.

Action Area 4:**Investing in Critical Infrastructure**

Continued commitment to high levels of investment in infrastructure will provide an important basis for economic recovery and growth while also supporting employment and stimulating economic activity. Given the current economic and financial circumstances, there is a need to prioritise projects and expenditure with the most immediate positive impact on the economy and employment. Investment must also be delivered in a coherent and efficient manner and be consistent with the vision of a 'Smart Economy'. The key role of dynamic city-regions in driving economic growth and in enhancing regional and national competitiveness, by acting as economic engines for their regions and providing a critical mass of public and private institutions, will be reflected in this process.

Key actions:

- We will continue investment under *Transport 21* concentrating on completion by 2010 of the five major inter-urban motorways, continuing development of the Atlantic Road Corridor, increased public transport capacity and maintaining the momentum on project planning and statutory approvals;
- Some €2 billion will be invested over the coming years in Dublin Airport;
- €300-600 million in capital investment will be made in our commercial seaports over the period to 2013;
- Investment will be made in 2009 of €1.3 billion capital funding in social housing, €102.5 million in Affordable Housing Initiatives and other Private Housing Supports, and €560 million in Water Services;
- A capital allocation is being made in 2009 to the school building programme of €581 million with a third-level capital investment of €265 million;
- The Arts, Sports and Tourism capital allocation of €148 million in 2009 will develop sporting and cultural infrastructure and enhance the infrastructure aimed at tourists and foreign visitors. The Convention Centre Dublin and Lansdowne Road Stadium are scheduled for opening in 2010;
- ESB, EirGrid and Bord Gáis are investing over €1 billion in 2008 and in 2009 in extending and upgrading the national electricity and gas distribution and transmission networks while ESB is investing €2 billion up to 2020 in the electricity network, the National Smart Meter programme and renewable energy R&D and commercialisation projects;

- EirGrid will also invest €4 billion from now up to 2025 in the national transmission grid under the Grid 25 Strategy and is delivering the electricity interconnector between Ireland and Wales to schedule by 2012 while undertaking the feasibility work on next phase interconnection with UK/mainland Europe;
- We will support the continued investment of some €700 million each year by the private sector in the upgrading of our broadband network via a telecoms regulatory framework which has the promotion of competition as a core objective;
- There will be a requirement for open access fibre to be installed, where practicable, in new premises;
- We will roll out the National Broadband Scheme, which will ensure that every part of the country has full access to broadband coverage;
- We will support investment of €70 million in international connectivity through Project Kelvin;
- We will establish a new ‘one stop shop’ to allow better access for telecom operators to fibre optic ducting contained within public infrastructure and mandate the provision of such ‘open access’ ducting in new state projects;
- We will promote Ireland as a world leader in the flexible use of the wireless spectrum including the creation of new ‘ubiquitous’ broadband connectivity zones;
- We will introduce a new terrestrial digital television service in 2009 and secure a digital dividend in 2012 with the switch off of the analogue transmission service;
- We will continue to develop the Digital Hub and the National Digital Research Centre;
- An analysis of the implementation of the National Spatial Strategy (NSS) by end March 2009 will be used to assess the extent to which sectoral programmes are aligned with the NSS and to recommend any necessary re-prioritisation;
- The Dublin Transport Authority will be established in early 2009;
- A Public Transport Regulation Bill will be enacted in 2009 to reform the licensing of access to the bus market;
- The Strategic Corridor Frameworks for the Atlantic Gateway cities (Waterford, Cork, Limerick, Galway) will be completed early in 2009;
- Work on implementation of the cross-border North West Gateway Initiative (Letterkenny/Derry) will also be well underway in early 2009;
- Under the Rural Development Programme funding of €425.4 million will be provided for the diversification of the rural economy, creating up to 12,000 jobs in rural areas;
- The CLÁR and Gaeltacht schemes will also continue to provide key rural infrastructure and supports for small enterprises.

Action Area 5: Efficient and Effective Public Services and Smart Regulation

Reform and renewal of the public service is essential if Ireland is to achieve the ambitious economic and social challenges set out in this document. Efficiency and effectiveness in the delivery of public services is critically important in progressing economic recovery and reform and will be directed strategically through the fast-track programme of reform set out in the recent *Government Statement on Transforming Public Services*.

At the same time, while Ireland's regulatory environment is well regarded internationally, reform must be accelerated in order to maximise competitiveness and accessibility of the system for business and citizens, in particular by minimising red tape. Where regulation is necessary to achieve policy goals it should be clearly communicated, and regularly evaluated. Enforcement should be based on risk so as to minimise the burden on citizens and businesses.

Key actions:

- The Special Group on Public Service Numbers and Expenditure Programmes will recommend by end-June 2009 reductions in public service numbers, further rationalisation of State Agencies and reallocation of staff and expenditure resources;
- We will use centralised and specialised procurement to acquire goods and services more effectively, efficiently and at lower cost to the taxpayer, including through the introduction of e-auctions;
- Public Bodies will share services for functions such as payroll, human resources, financial management, procurement and ICT systems management;
- We will improve performance measurement through the development of specific outcomes and indicators for all sectors, organisations and individuals;
- Performance and underperformance of staff within the Public Service will be measured and addressed through strengthening, standardising, and monitoring the performance management system;
- Performance assessments will be developed in areas of the Public Service where none currently exist;
- We will identify and remove barriers to a unified public service labour market to include new arrangements on redeployment and exit options where people cannot be redeployed;
- Priority e-government projects will be developed to facilitate information sharing across public service bodies and to improve value for money and service standards;

- An Administrative Burden Reduction Programme will be introduced to reduce volume and frequency of data required from the public;
- The system of Regulatory Impact Analysis will be strengthened and enhanced;
- Accessibility to legislation will be improved by early 2009 through updating the Electronic Statute Book to include all 2008 Acts and Statutory Instruments from 2005 to 2008.

1. Introduction

Ireland is facing a difficult set of unfavourable international economic and financial factors and domestically we are faced with a contracting construction sector, a rise in unemployment and a period in recession. Nevertheless, it is important not just to weather the ‘perfect storm’ of negative international financial and economic factors and then regroup. The Government is determined to undertake an ambitious set of structural reforms of the economy to ensure that Ireland emerges from the global downturn in the strongest possible position to benefit from increased global economic activity. We must plan for Ireland’s next phase of economic growth now.

Building Ireland’s Smart Economy brings together measures that constitute an immediate policy response to aid economic stabilisation with measures to restructure the economy over the period 2009-2014. This Framework builds on the significant strengths of the economy which provide strong foundations for future economic growth – the road to economic renewal starts here.

The document briefly sets out the challenge facing the Irish economy in recent times, the strengths of the economy as well as the threats to its robustness. It pays particular attention to the short-term challenges that Ireland faces as its economy goes into recession and unemployment rises. It goes on to present a framework through which we assess the potentialities of the Irish economy and the principles and action areas through which Government intervention will be implemented via a series of action points. It is tempting to simply focus on the short-term difficulties and ignore the medium-term possibilities. However, dealing with the short term without a vision of what we want to achieve would severely limit the effectiveness of our actions. Therefore, particular attention is paid to structural reform of the economy as this is the key instrument by which we can emerge from the extreme global downturn and be in the best possible position to resume a sustainable, positive growth rate through building Ireland’s Smart Economy.

This document is intentionally not a stand-alone document. It is intended to complement the Programme for Government 2007-2012 and should be read in conjunction with it and related policy documents. It is also consistent with *Towards 2016* and the recently completed review.

It is important to emphasise that the Framework does not include all sectors of the economy but rather focuses upon those that will make the greatest contribution to the management of the current economic circumstances and lay the foundations for economic renewal and expansion. Given the openness of the Irish economy and the rapidity with which international circumstances can change, the plans set out in this document should, of course, be adapted for changing conditions as required.

2. THE CHALLENGE FACING THE IRISH ECONOMY

The development of the Irish economy in recent decades is one of the world's most impressive economic success stories. In terms of economic growth, Ireland significantly outperformed our European neighbours and our workforce doubled to 2 million in two decades.

Over the period of sustained high growth levels, Ireland moved from having a standard of living that was only two-thirds of the European average to now being one of the best-off countries in Europe. We moved from being a country where many people's only career choice was to emigrate to being a nation offering great career prospects, not only to our own people, but also to a large number of 'new Irish'. In the past fifteen years the Irish economy has played catch up with our European counterparts and, indeed, has surpassed them.

This strong growth was the result of a number of interacting factors. Advantageous exchange rates, sustained US economic growth and low energy prices were important external factors. Similarly, Ireland's EU membership resulted in substantial funding transfers for infrastructure development, agriculture and training supports and access to the EU Single Market, while eurozone membership provided a stable currency.

The most significant of the domestic policies included the creation of a very favourable environment for Foreign Direct Investment (FDI), a well-educated and plentiful supply of relatively low cost labour, industrial peace and the consensus approach to the management of change aided by social partnership.

Current Economic Difficulties

A sharp downturn in economic activity occurred in 2008, associated with the international credit crunch, a recession in our major trading partners, rising energy costs, adverse exchange rate movements and the severe correction in housing construction. This has resulted in a rapid rise in unemployment and rapidly deteriorating public finances. While particular aspects of these effects may level off over the next years, there is a risk that significant structural effects will develop which could have long-run consequences, while other more temporary impacts may be prolonged beyond what is necessary.

The Irish public finances deteriorated significantly in 2008 reflecting the significantly changed environment. We are now borrowing to fund some of day-to-day and all of our

capital spending. A key milestone on the path to sustainable economic growth is restoring order to the public finances and prioritising resources where they provide the highest return.

This is essential to underscore Ireland's well-earned international reputation as a good place to do business. It is also an essential building block for the medium-term strategy that is contained in this plan.

The Opportunities

Future economic growth will depend on re-orientating the economy towards exporting goods and services. To achieve this we need to stimulate the growth of enterprise, take advantage of the significant potential from the development of the green economy, reduce the relative cost of doing business, continue investing in both labour and productive infrastructure, increase competition across the economy, attract high value added employment, guide the construction sector to a more sustainable growth path and address issues such as the cost and security of energy supply. This Framework sets out how we intend to tackle these issues.

The All-Island Context

Uniquely in history, and by contrast with previous periods of economic difficulties since independence, Ireland faces the current economic situation as an island at peace. The institutions established by the Good Friday Agreement and the transformation in relationships between the two traditions on the island, between North and South and between Britain and Ireland, provide an entirely new and positive basis for tackling the current economic challenges together. There is now an important all-island dimension to all aspects of Government policy. To the extent that it is appropriate, and by agreement with the Northern Ireland Executive, all of the policies, programmes and initiatives in this Action Plan will take full account of the mutual benefits available through North/South co-operation.

European Union

Any uncertainty about Ireland's future position in the European Union would be a serious threat to our economic performance, in particular the attraction of foreign investment, which demonstrates the importance of resolving the Lisbon Treaty issues in a manner which enables Ireland to remain at the heart of the Union.

3. STRENGTHS OF THE IRISH ECONOMY AND THREATS TO ITS PERFORMANCE

This Framework builds on the significant strengths of the economy which provide strong foundations for economic renewal. These include: relatively high productivity; forward-looking investments in infrastructure and research and development; strong export-orientated sectors; pro-enterprise government policy; an attractive business environment; robust Foreign Direct Investment (FDI) with a high concentration of leading high-tech multinationals; strong entrepreneurialism; and a young, educated and English-speaking population with high educational attainment.

However, in planning for the future, the Framework also addresses the significant threats to our ambitions for the future performance of the economy. These include: the rapid deterioration in the public finances, the construction sector slowdown, weakening of competitiveness as a result of wage and price pressures, continued infrastructural deficits, reliance on foreign direct investment, high reliance on imported fossil fuels, only average level of business expenditure on research and development and limited private equity investment in start-up business ventures. Each of the Action Areas of this Framework has the objective of building on specific strengths but also addressing the threats to our future economic performance.

Strengths of the Irish Economy
<ul style="list-style-type: none">• A competitive economy in many respects through low corporation tax, overall productivity levels, a well-educated and young workforce and a smart approach to business regulation.• Ireland has moved up two places to 12th place in the 2008 IMD World Competitiveness Score Board and is ranked fourth in the world for business efficiency. The latest World Doing Business report ranks Ireland as 7th out of 182 countries as a place to do business; the 5th easiest place to establish a business; and the 3rd cheapest location for business start-up regulation. Corporate and tax laws are closely aligned with the needs of global enterprises;• Forward-looking investment - Ireland has proportionately the largest capital investment programme in Europe• Membership of the EU, including access to an internal market of almost 500 million people;• Membership of eurozone, ensuring a stable currency and exchange rates and reduced international transaction costs;• Highly trade-oriented country – exported goods and services are approximately 80% of GDP;• Harmonious industrial relations delivered through Social Partnership;• The IMD 2008 ranks Ireland as third in the world in terms of attitudes and values and second in terms of openness to foreign ideas;• Robust FDI – Ireland’s stock of direct inward investment is five times greater than the OECD

average and the rate of return to US-owned companies in Ireland is third in the EU-15;

- Outward investment has increased significantly with Ireland now ranking sixth in the OECD;
- A tourism sector which is widely recognised as highly successful and has gained market share in recent years;
- Young, educated and English-speaking population – Ireland has the highest proportion of people under 15 in the EU and the lowest proportion of people over 65. Over 85% of 20-24 year olds have completed at least a secondary education which is the 2nd highest in the EU-15 and 40% of those aged 25-34 have a third-level qualification which is the highest in the EU-15, along with Belgium, and higher than the US. The IMD World Competitiveness Yearbook 2006 ranks Ireland's education system as 4th in the world for meeting the needs of a competitive economy;
- High concentration of leading high-tech multinationals with significant strengths in high-value clusters of economic activity in areas such as ICTs, biopharma, medical devices and international financial services;
- A robust presence in internationally significant R&D in key growth technologies;
- Above EU-15 average rate of scientific citations and publications and this is growing rapidly;
- Our abundant renewable energy resources;
- Ireland ranks 4th across the OECD and 2nd in Europe for the proportion of early stage entrepreneurs with 8.2% of adults in Ireland engaged in entrepreneurial activity in 2007, up from 7.4% in 2006;
- Ireland performs well above the EU average in terms of the number of firms engaging in innovative activities (in terms of changing their products and services);
- Ireland has relatively high living standards and is an attractive place to live and work. The UN ranks Ireland as 4th in the OECD in terms of human development and fifth in terms of satisfaction with life measures;
- The Government has a strong commitment to improved environmental performance and, despite some specific challenges, Ireland is ranked 9th out of 28 in the OECD in terms of performance.

Threats to the Irish Economy

- The construction sector slowdown which, in conjunction with the global downturn and financial crisis, is a significant drag on economic performance;
- A deterioration in Ireland's fiscal position and a need to broaden the tax base;
- A need to ensure that productivity underpins economic growth such that Ireland is not dependent on growth being employment-driven rather than productivity-driven;
- Weakening of competitiveness generally as a result of rising prices and a need to ensure that wage levels reflect competitive pressures;
- A considerable challenge to achieve Kyoto and post-Kyoto climate change commitments;
- There is a need to enhance the adoption of technology, including the penetration of broadband in businesses and households, so as to improve productivity;
- Despite rapid and substantial improvements in recent years, addressing remaining infrastructural

deficits in transport, environment, energy and communications in particular, is crucial;

- Ireland consumes more energy per capita than the EU average and is heavily reliant on fossil fuels (coal and gas) while the costs of energy are relatively high;
- Possible diminution in Ireland's standing and influence in Europe, and/or a perception that Ireland's commitment to being at the heart of the EU is under question, with potential impact on, inter alia, influence on EU economic policy and the attractiveness of FDI based on access to EU market;
- A lack of traditional diaspora-based links to newly industrialised countries. New links need to be developed and our capacity to engage with other countries needs to be strengthened;
- A necessity for improved efficiency and effectiveness and value for money across the public service;
- While Ireland is above average in the EU in terms of innovative processes and products in firms, it is behind the leaders in terms of the percentage turnover of innovative activity i.e. the transformation of innovation into commercialisation needs to be enhanced;
- Venture capital investment is still relatively under-developed in Ireland. When defined as formal investment outside public capital markets, which represents total start-up, expansion and buyout investments, Ireland ranks 12th in the EU-15 in this regard;
- Business expenditure on R&D and overall spend is behind the EU average. The proportion of research staff in business is around the OECD average;
- Ireland lags behind the EU-15 average in terms of life-long learning which threatens the adaptability of the workforce;
- At post-primary level, Irish 15 year olds' scientific literacy is a little above the OECD average while mathematical literacy is at the OECD average.

4. SMART ECONOMIC GROWTH ACTION PLAN

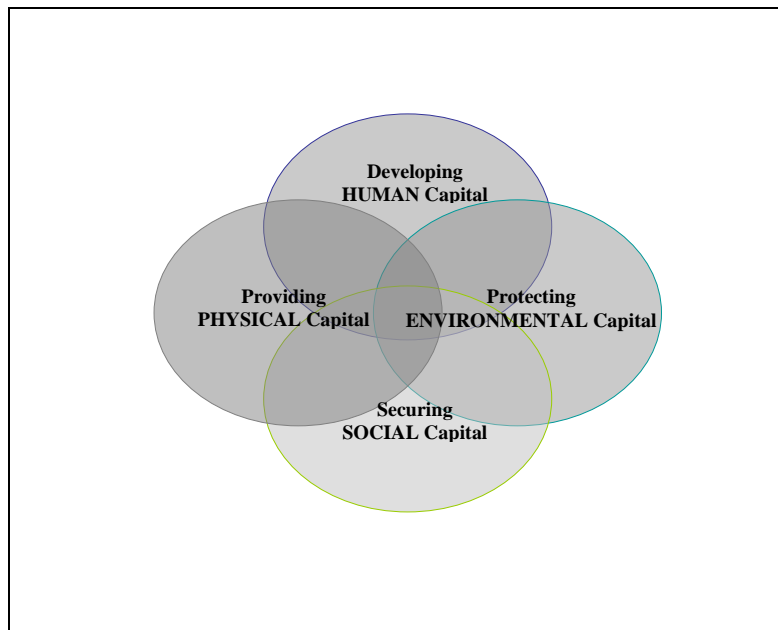
The threats to Ireland's economic performance must be addressed within the context of an overall economic plan for the future which builds on the considerable strengths of the economy. The first priority is to stabilise the economy in the face of short-term, but extreme, economic conditions. However, it is also essential to have a vision of where we are bringing the economy. The objective is to engage in structural reform of the economy in order to embark on what is known as a 'smart' economic growth trajectory so that we not only secure Ireland's economy in the short-term but restructure, reorganise, and re-orientate activities right across the economy and across Government so as to place ourselves in pole position to return to strong positive growth when the international downturn ends. We must begin to build Ireland's Smart Economy.

What is a Smart Economy?

A Smart Economy combines the successful elements of the enterprise economy and the innovation or 'ideas' economy while promoting a high-quality environment, improving energy security and promoting social cohesion. The most successful economies of the future will be those that can achieve this combination of attributes. Smart Economic Growth recognises the interdependence between four forms of capital accumulation that drive the economic and social progress of the nation. These are:

- human or knowledge capital - the skills, knowledge, ingenuity and creativity of people;
- physical capital - the stock of infrastructure that is used to produce goods and services e.g. machinery, buildings, transport and communications networks;
- natural or environmental capital – naturally-provided assets and the quality of the surrounding environment within which people live and work;
- social capital - the networks, connections, mutual trust and shared values and behaviours of the population.

These four forms of capital can be mutually reinforcing. For example, a strong physical capital stock provides the necessary infrastructure to support economic activity of all forms. A quality environment is a key driver in attracting foreign direct investment and promoting tourism as well as boosting the contentment of the population generally. A sense of community and shared values contributes to the cohesiveness of society and is highly significant in promoting the well-being of the population which, in turn, drives economic and social progress. Investments in human and physical capital raise the productivity of the workforce.



A key feature of the Smart Economy is building the innovation or ‘ideas’ component of the economy through investment in human capital and its ability and effectiveness in translating ideas into valuable processes, products and services. It has the objective of harnessing the ingenuity and creativity of people to drive research, innovation and commercialisation. It has, at its core, the creation of an exemplary research, innovation and commercialisation ecosystem so as to create ‘The Innovation Island’.

The Smart Economy plan also endeavours to make Ireland a global hub for knowledge, innovation and know-how.

The Smart Economy is developed by:

- enhancing productivity per person by investing in human capital;
- incentivising innovation and commercialisation;
- developing the green economy;
- securing FDI and improving public sector performance;
- within a high-quality physical, cultural and social environment.

The Attributes of the Smart Economy

The Attributes of the Smart Economy are: high-value and rewarding jobs; a thriving entrepreneurial culture; Ireland being a destination of choice for foreign capital and FDI; a magnet for top international talent and an attractive incubation environment for European entrepreneurs; a pool of highly educated workers; a modern and responsive public service; empowered citizens; intelligent infrastructure; light and adaptive regulation; a favourable tax environment for citizens and business; low costs of doing business and minimal 'red tape'; a decoupling of economic growth and environmental performance; a high quality living environment; widespread adoption of modern technology (including the development of a Green Technology sector); and an equitable society. A smart economy is a low-carbon economy, with sustainable development as its ultimate aim.

The Green-Economy

The Smart Economy is a 'Green Economy' in that it recognises the inter-related challenges of climate change and energy security. It involves the transition to a low-carbon economy and recognises the opportunities for investment and jobs in clean industry. Around the world there are now calls for what is being described as a 'Green New Deal' to stimulate the economy, get global markets back to work and to avoid the potentially catastrophic economic, social and environmental effects of climate change.

The central elements of a Green New Deal are a move away from fossil-fuel based energy production through investment in renewable energy and increased energy efficiency to reduce demand, wastage and costs.

Ireland is heavily and dangerously reliant on imported fossil fuels. Our fossil fuel bill for 2008 will be an estimated €6 billion. For every citizen in Ireland, this is expenditure of €1,500, more than twice the EU average of €700. Globally, the International Energy Agency has warned in its 2008 World Energy Outlook that the 'era of cheap oil is over'. We must address the situation where there is a flow from oil consuming to oil producing nations and plan for the eventuality where oil supplies contract rather than expand. Those countries that reduce their dependence on oil will have a distinct competitive advantage.

A green economy recognises that indigenous clean energy will not only reduce our dependence and expenditure on imported fuels but can act as a platform for economic recovery.

Energy efficient measures such as retrofitting of housing stock, smart metering and tax incentives for expenditure on energy efficient equipment will help business and the householder reduce their energy costs. This will enhance our overall competitiveness as well as reducing our carbon emissions helping us to reach our climate change targets.

Worldwide investment in sustainable energy has never been higher. Investment levels reached over €140 billion in 2007 and are projected to exponentially increase into the future. The current financial crisis has tested the market's resolve but has not dislodged investment from this sector.

Ireland has some of the finest natural energy resources in the world. As a Government we are committed to realising this potential. Our national target for renewable energy is 40% by 2020. Through Government supports and semi-state investment plans, over €30 billion will be invested in our clean energy future over the next 15 years. This is unprecedented investment and, combined with our investment in energy efficiency, will bring thousands of green jobs to our economy.

Ireland has proved its ability to be flexible and intelligent; this financial and economic crisis allows for great opportunities to utilise these skills. The proposition means a significant change in direction similar to the one we took in the 1950s in opening up the economy to international markets. The Smart Economy concept is consistent with moving from an emphasis on quantitative growth to qualitative development

The Green Economy mitigates against a 'boom and bust' growth path and is based on the principle of sustainable development with a steady rate of growth in an economy less prone to external shocks.

It has been predicted that by 2025 70% of our exports will be in traded international services. Such exports will be carried on digital communications networks where technological development will allow quantum increases in both productivity and energy efficiency. There are many businesses and governments now making the connection between the advance of a new digital economy and new clean technology industries. Ireland will follow a similar direction as we build 'The Innovation Island'.

Positioning ourselves as a green economy fits with the aim of being at the centre of decision making in Europe. The 27 member states are now committing to a package of climate change and energy measures, which will drive us, as world leaders, to a robust low-carbon pathway. Positioning ourselves as a green economy will put Ireland in a favourable light in attracting foreign direct investment from all parts of the globe and it is consistent with our social objectives of achieving a more fair and equitable society.

This sustainable approach to economic development complements the core strength of our economy in the use of natural resources in the agriculture, forestry, fisheries, tourism and energy sectors. It recognises that our manufacturing industries are already relatively clean and green, in the low level of resource inputs they use and environmental outputs they create. It will allow us develop a digital services export economy which will only require a high speed broadband network, a renewable electricity supply and our own ingenuity to succeed.

Why Ireland should, and can, Implement a Smart Economic Growth Plan

A transformation of the Irish economy is necessary for sustained growth and increasing levels of future national welfare. In order to secure its economic future, Ireland must develop its own indigenous industry to complement the considerable external investment in enterprise. Innovation is the key ingredient to ensuring rising standards of living. General national welfare is highly dependent on the ability of a country to foster innovation and use that as a wealth building platform¹. For example, the US has been at the forefront in many areas of innovation in terms of technology and services with Silicon Valley as the epicentre of entrepreneurialism.

A reliance on traditional manufacturing and low-skilled services will not be sufficient to allow developed countries like Ireland to remain at the forefront of economic and technological curves. The world is becoming flatter; basic tasks are now being outsourced as low-tech business services, and contract manufacturing are migrating to low cost areas such as China, India, South America and the newer EU Member States of Central and Eastern Europe as developed countries become more expensive. Developed countries can no longer rest their future on continuing to perform tasks that can easily be moved to low cost environments. Instead, they must provide services higher up the value chain, in areas that are less cost sensitive, but require ingenuity and creativity.

¹ R. Atkinson and H. Wial, (2008), *Boosting Productivity, Innovation, and Growth through a National Innovation Foundation*, Washington MA: Brookings Institution.

The changed structure of its economy means that these principles now apply to Ireland. As the economy matures, it is essential to emphasise value added and the importance of productivity per capita.

To support well-paid and quality jobs, Ireland must move up the value chain and assert itself not only as an open enterprise economy with a positive environment for FDI, but also as an open entrepreneurial economy with significant comparative advantages. The ingenuity and creativity of Irish people is known the world over. For many years, Ireland exported talent through generations of Irish emigrants and Ireland has clearly punched above its weight in terms of its contribution to all facets of the global economy and society including a significant number of global business leaders. In more recent times, through the attraction of its young and well-educated workforce and favourable tax incentives, Ireland has imported the best of overseas commercial leadership, management expertise and supply and demand networks assisted by investments by multinationals. More than half of Ireland's new entrepreneurs, at some time in their careers, worked for a multinational company.

The presence of multinationals and the evidence of technological convergence - the tendency for different technological systems to evolve towards performing similar tasks – creates a demand for innovation and partnering with start-up companies, which gives Ireland a competitive advantage in innovation.

Ireland has established credibility as a place to do business. Ireland is already laying the foundations of the ideas economy by investing significantly in education, skills training and R&D under the National Development Plan, which includes delivery of the Strategy for Science, Technology and Innovation involving major investments in basic research through the PRTL, SFI and other funding programmes. Under the National Development Plan, the Government committed €2 billion to research, technological development and innovation. Business expenditure on R&D is targeted to grow to about €8 billion per annum by 2013.

Ireland's stock of foreign labour is seventh highest in the OECD suggesting Ireland is an attractive destination for foreign workers and the recent expansion of the EU enhances the potential supply of entrepreneurs who can be attracted to Ireland to develop and commercialise their ideas.

The objective of Ireland's Smart Economic Growth Plan is to make Ireland the innovation and commercialisation capital of Europe – a country that combines the features of an attractive home for innovative multinationals while also being a highly-attractive incubation environment for the best entrepreneurs in Europe and beyond. This will be the successful formula for the next phase of the development of the Irish economy.

By pursuing this strategy, Ireland can secure its position as a highly-successful open and competitive economy which combines a strong base of modern industry, a competitive export-led financial and business services industry, a highly skilled and flexible workforce, a positive fiscal environment and a pro-business culture which secures it as a destination of choice for FDI and as a magnet for innovators and entrepreneurs.

The table that follows summarises the Smart Economy concept and the Action Areas for Government intervention. Each Action Area sets out the context for that area, the strengths of the economy that are to be secured, the threats and challenges to be addressed and the principles followed in so doing. The first Action Area deals with securing the economy and the priority that must be given to stabilising our fiscal position. Each Action Area contains a series of Action Points.

It is important to emphasise that the lists of Actions are not exhaustive and are complemented by existing actions, policies and projects and activities under the Programme for Government 2007-2012 and related policy documents. It is also important to emphasise that the actions consist of new initiatives combined with existing initiatives. This is essential in order to re-orientate policy around this Framework.

Building Ireland's Smart Economy: A Framework for Sustainable Economic Renewal

Vision	To build a Smart Economy that exhibits economic security, high quality employment, strong environmental and social performance and secure energy supplies and is in the strongest possible position to benefit from the recovery of the global economy.
Objective	<p>To drive economic growth through the enhancement of productivity per person by: securing fiscal stability; enhancing R&D intensive foreign direct investment; investing in human capital and research and development; incentivising innovation and commercialisation; investing in critical public infrastructure; and improving public sector performance, within a high-quality physical and social environment.</p> <p>The Smart Economy concept involves:</p> <ul style="list-style-type: none"> ➤ Moving Ireland up the value chain by developing an exemplary research, innovation and commercialisation ecosystem thereby creating 'The Innovation Island'; ➤ Building on Ireland's significant strengths in terms of the multinational presence and Ireland's stock of highly-skilled workers by incentivising greater investments in high-value research and development areas which will provide quality jobs; ➤ Investing in the green economy; ➤ Building on the Government's unprecedented investment in research and development with a plan to create a similarly R&D-intensive indigenous enterprise sector through the provision of considerable supports for start-up companies and the attraction of entrepreneurs from overseas to Ireland.
Attributes of the Smart Economy	<ul style="list-style-type: none"> ➤ High-value and rewarding jobs; ➤ A thriving entrepreneurial culture; ➤ A destination of choice for foreign capital and R&D-intensive FDI; ➤ A magnet for top international talent; ➤ An attractive incubation environment for entrepreneurs; ➤ A pool of highly educated workers; ➤ High-quality infrastructure with widespread adoption of modern technology; ➤ A modern and responsive public service with empowered citizens; ➤ Effective and efficient regulation; ➤ Low costs of doing business and minimal 'red tape'; ➤ A favourable tax environment for citizens and business; ➤ An economy based on clean and efficient energy; ➤ A high quality living environment; ➤ Strong civic engagement.

Action Areas

<p>1. Securing the Enterprise Economy and Promoting Competitiveness Achieving fiscal stability; stabilising the banking sector; aiding the restructuring of the construction sector; reinvigorating financial services; improving competitiveness.</p>	<p>2. Building The 'Ideas' Economy – Establishing 'The Innovation Island' Fostering ingenuity entrepreneurship and skills; incentivising R&D; developing the exported services sector; stimulating innovation & commercialisation; developing indigenous high value-added industry.</p>	<p>3. Enhancing the Environment and Securing Energy Supplies Mobilising the market to protect the environment; developing the Green Enterprise sector; the public sector as a driver of environmental innovation; improving energy security and reducing energy costs.</p>	<p>4. Investing in Critical Public Infrastructure Investing in infrastructure; stimulating economic activity and employment; enhancing productivity and competitiveness; improving transportation, environmental services, communications and energy infrastructure.</p>	<p>5. Efficient and Effective Public Services and Smart Regulation Achieving greater efficiency in public services; reducing costs and enhancing services; improving citizen focus; effective and efficient regulation.</p>
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5. ACTION AREA 1. MEETING THE CHALLENGE - SECURING THE ENTERPRISE ECONOMY AND ENHANCING COMPETITIVENESS

Context

The sharp downturn in economic activity is reflected in rising unemployment and a rapid deterioration in the public finances. Business sentiment and consumer confidence are particularly important channels of influence in determining both the duration and the severity of our economic difficulties. It is imperative that Ireland secures its well-developed enterprise economy so as to provide a basis for the next phase of development. We also must help people and businesses deal with these difficult times, manage the serious short-term fiscal and financial turbulence while, at the same time, pursuing a transition to a new and sustainable model of growth based on enhanced capacity and higher productivity.

As a small economy, our capacity to generate sustainable increases in living standards is determined by our ability to supply goods and services to the global economy. To achieve this it will be necessary to reduce the relative cost of doing business. Significant drivers of costs are outside our control – in particular the value of the euro. However, we will focus on those areas where we can make progress, including moderating wage and price cost relative to productivity growth.

Therefore, Ireland must implement a strategy to manage the current short-term difficulties, maximise the rate of pick-up in economic activity, increase competitiveness, achieve improvements in key strategic sectors of the economy, secure the banking sector, and assist those who lose their jobs during the downturn while respecting the unavoidable constraints on policy arising from the fiscal environment and international environment. This strategy to secure Ireland's enterprise economy will provide a strong base from which to pursue the next phase of economic development. This is the overall objective of Action Area 1.

Objectives

- To address the shortfall in the exchequer finances;
- To stabilise the banking sector;
- To improve competitiveness;
- To remain attractive for inward investment;
- To incentivise the establishment of businesses during the economic downturn;
- To aid the restructuring of the construction sector;
- To assist people who lose their jobs during the downturn;

- To reinvigorate international financial services sector.

Principles underlying intervention

- Stability in the public finances is a pre-requisite for economic recovery;
- Competitive tax rates are a key mechanism for attracting and retaining inward investment;
- Retaining and enhancing competitiveness is an essential basis for further economic growth;
- Interventions in the construction sector should support the restructuring of that sector rather than create an unsustainable short-term distortion of the market;
- Interventions should support other economic, environmental and social goals where possible so that government financing produces ‘win-win’ scenarios;
- A stable banking system is a necessary condition for a stable economy.

Strengths to be secured

- A competitive economy through low tax, high productivity levels, a well-educated and young workforce and a smart approach to business regulation;
- High trade-orientation;
- Robust FDI with a high concentration of leading high-tech multinationals with significant strengths in high-value clusters of economic activity in areas such as ICTs, biopharma, medical devices and international financial services;
- A shift to a strong emphasis on the production and export of business and financial services;
- Young, highly educated and English-speaking population;
- The latest World Doing Business report ranks Ireland as 7th out of 182 countries as a place to do business; the 5th easiest place to establish a business; and the 3rd cheapest location for business start-up regulation;
- A commitment through the NDP to assist the enterprise sector, both in terms of helping indigenous firms to grow and prosper and in terms of attracting foreign direct investment. Some €432 million of NDP investment in 2007 helped create 210 high potential start-up companies, helped indigenous firms enhance their export readiness through productivity improvements and supported creation of over 9,000 new jobs in overseas companies located in Ireland.

Threats to be addressed

The primary threat to the Irish economy is the current global economic and financial turmoil. However, this is beyond our control. Other threats to the performance of the economy are:

- A deterioration of the public finances;
- A need to broaden the tax base;
- A dramatic slowdown in the housing construction sector;
- A need to ensure that rising productivity per person is the engine of growth;
- Weakening of competitiveness;
- Increased competition for Foreign Direct Investment;
- Potential for instability in the banking system.

Action Areas

1.1 Addressing the shortfall in Exchequer finances

Following General Government surpluses in ten of the last eleven years, the Irish public finances deteriorated significantly in 2008. Budget 2009 forecasted that for 2008 and the foreseeable future, substantial General Government deficits are likely. The speed and scale of the deterioration in Ireland's fiscal position means Ireland is now an outlier in terms of fiscal performance in the EU.

In Budget 2009, the Department of Finance projected that the economy would contract by 1% in 2009. Forecasts produced by the ESRI and by the Central Bank set out a similar economic assessment. Furthermore, the Department's forecast was more pessimistic than most private sector forecasts as evidenced by the end-September market consensus view for zero growth in 2009.

Reflecting the unprecedented recent economic developments since then, by end-November the consensus of market forecasters was for economic activity to decline in 2009 by around 3%.

At Budget time, significant risks to the economic and fiscal forecasts were identified for 2008 and for 2009. The further deterioration in tax receipts in 2008, as seen by the end-November Exchequer Returns, the continuing weakening of consumer and investor confidence, adverse currency movements, continued difficulty in the international financial markets and depressed economic conditions, are all evidence of those risks materialising.

All indications are that economic activity in 2009 will contract by significantly more than the forecast in the recent Budget, perhaps somewhere in the region of 3 to 4%, with consequential implications for later years. The fall the 2008 revenue take alone would push the 2009 General Government Deficit up by about €1.5 billion to 7¼% of GDP. In addition, each 1% fall in economic activity in 2009 beyond the contraction of growth of 1% already forecast would increase the General Government Deficit by about ½%.

Tax revenues are now nominally at levels last seen in 2005 which combined with the very significant improvement in current spending in the intervening years means that we have a substantial funding gap. It is likely that borrowing to pay for day-to-day services will be in the region of €9 billion next year. This is not sustainable or sensible.

Over the period of the next few years, it is estimated that the interest costs on the national debt will more than double, accounting for 11% of tax revenue by 2011 as compared to 5% in 2007. This means that more and more of our day-to-day resources are simply being raised to pay interest costs as opposed to paying for services. So the taxpayer could end up paying more and getting less. This is not acceptable. Furthermore, the state of our public finances is a key factor in the cost of borrowing on international markets.

For all of these reasons, Government is placing the objective of the restoration of stability and order to the public finances at the centre of this recovery strategy. Otherwise our ability to prosper from the anticipated upturn in the global economy in either late 2009 or 2010 will be diminished.

In this regard, Budget 2009, while identifying the very real risks to the short term Exchequer performance, set out a framework for restoring balance to the public finances. It is now likely that some of the risks identified at Budget time are materialising, which means that the need to adhere to a stricter and more prolonged financial framework is now all the more important.

Action Points:

The strategy for addressing the fiscal difficulties will be based on a number of inter-related areas:

- The public finances must be restored to a sustainable position and a key milestone in this process is the restoration of the Current Budget to a balanced position as soon as possible. This means eliminating borrowing for day to day expenditure as soon as is reasonable.

Given that a very high level of borrowing was already planned for 2009, the main focus must now be on the very significant amount of money the Government is spending on current services. In this regard the work of the Special Group on Public Service Numbers and Expenditure Programmes will have a significant role to play. We will continue to prioritise our current level of spending on public investment, which at some 5% of GNP, is amongst the highest levels of capital commitment in the EU;

- Secondly, while the immediate Government focus will be on tackling the recent growth in current expenditure, additional revenue through broadening the tax base will also be need to be considered to address some of the funding gap. In this regard the work of the Commission on Taxation will be central to the Government's consideration and the Government is encouraging a speedy conclusion of its work;
- The Government is engaging with representatives of the parties to the Social Partnership agreement to discuss the contribution that the partnership process can make to managing the challenges we now face through a coordinated approach with a clear focus on enhancing competitiveness;
- We must ensure that Ireland is competitive so that the economy is in a position to take advantage of the global recovery when it emerges. Currently our price levels are of the order of 20% above the EU average and this must be reversed. Greater focus on costs and the factors underlying cost differentials will be essential, particularly when facing an immediate period of historically low levels of Consumer Price Inflation;
- Fourthly, pursuing these aims will allow Government to continue to invest heavily in capital projects (see below);
- Finally, underpinning our approach will be a commitment to continue, as demonstrated in Budget 2009, to support the less well-off through our welfare policies.

1.2 Providing an Appropriate Fiscal Stimulus

Changes in interest rates are the primary instrument by which most developed countries endeavour to smooth business cycles. Membership of the eurozone has brought significant benefits such as a more stable trading environment, a favourable exchange rate for Irish exporters and access to ECB funds for the banking sector. However, as members of the Eurozone, we no longer have national discretion over interest rates. While the European Central Bank has been reducing interest rates to stimulate growth, the lack of national control over monetary policy or exchange rate policy means that Government must rely on available instruments in the areas of fiscal policy, wage policy and sectoral policy.

Fiscal policy has played a role in facilitating automatic stabilisers to smooth the business cycle. In Ireland, the large budget surpluses in ten of the last eleven years took money out of the economy in good times, while budget deficits and increases in social welfare spending kick-in in bad times. However, it is important to note that the Stability and Growth Pact limits the extent of the deficits that can be operated.

The EU Commission has proposed that Member States agree a coordinated fiscal stimulus package of €200 billion. Nevertheless, even in less open economies than Ireland, there is a concern that, in difficult times, a significant percentage of the money is used to increase savings or reduce debt which limits the effect of the stimulus. Moreover, once-off payments are more likely to be saved than spent. Additionally, lags in the implementation of such policies or incorrect timing can result in a pro-cyclical policy.

The question is what type of fiscal stimulus can work in an Irish context. Ireland is a relatively small and very open economy. About 80% of GDP is comprised of exports. We therefore rely hugely on the fortunes of the global economy.

The expansionary fiscal policy of the late 1970s of large increases in current spending did not achieve its objectives and led to a massive increase in debt. The difficulty with using a fiscal stimulus in terms of tax cuts or rebates in an Irish context is that a sizeable proportion of extra spending will leak abroad as a result of higher imports. Borrowing for a large extra stimulus of this form would have to be paid back by taxpayers in the future.

The appropriate stimulus in an Irish context is one that will be spent domestically and provide a high return in terms of future economic growth. As part of the broader economic and fiscal framework, we are borrowing significant sums this year and next to support economic activity

and employment in response to the economic downturn. This year the fiscal deficit will be about €13 billion and for next year borrowings will exceed €8 billion. This is a significant fiscal stimulus for the economy and is providing support to economic activity and employment in the short term. Over the last decade sound economic policies reduced our national debt and, at end-2007, this stood at 25% of GDP, down from 38% in 2000. This allows us the headroom now to support activity through borrowing. As the table below shows, our fiscal support is amongst the largest of any Member State according to the European Commission as published in November 2008. Obviously, this level of deficit is not sustainable and has to be reduced over an appropriate timeframe.

Projected Government Balances (% of GDP)								
	2008	2009	2010			2008	2009	2010
Belgium	-0.5	-1.4	-1.8		Bulgaria	3.3	2.9	2.9
Germany	0.0	-0.2	-0.5		Czech Republic	-1.2	-1.3	-1.4
Ireland	-5.5	-6.8	-7.2		Denmark	3.1	1.1	0.4
Greece	-2.5	-2.2	-3.0		Estonia	-1.4	-2.2	-2.8
Spain	-1.6	-2.9	-3.2		Latvia	-2.3	-5.6	-6.2
France	-3.0	-3.5	-3.8		Lithuania	-2.7	-3.6	-4.0
Italy	-2.5	-2.6	-2.1		Hungary	-3.4	-3.3	-3.3
Cyprus	1.0	0.7	0.6		Poland	-2.3	-2.5	-2.4
Luxembourg	2.7	1.3	0.5		Romania	-3.4	-4.1	-3.8
Malta	-3.8	-2.7	-2.5		Slovakia	-2.3	-2.2	-2.5
Netherlands	1.2	0.5	0.1		Sweden	2.6	0.5	-0.4
Austria	-0.6	-1.2	-1.4		United Kingdom*	-4.2	-5.6	-6.5
Portugal	-2.2	-2.8	-3.3					
Slovenia	-0.2	-0.7	-0.5		Euro Area	-1.3	-1.8	-2.0
Finland	5.1	3.6	2.4		EU 27	-1.6	-2.3	-2.6

Source: European Commission Autumn Forecast, 3 November 2008.

*UK: Pre-Budget Report, 24 November 2008 revised forecasts to -5.3% (2008), -8.0% (2009), -6.8% (2010)

Budget 2009 and the subsequent Finance Bill have created a more favourable tax environment for businesses resident here which will provide a boost for that sector. Even more significantly, capital investment in infrastructure provides a significant stimulus that is appropriate to Irish circumstances. Budget 2009 has provided for €8.2 billion of public capital investment. This amounts to over 5% of forecast GNP for 2009. Moreover, as there tends to be a lag in the effect of capital investment on the economy, the unprecedented investment in previous years will have a significant stimulus effect and will offset some employment losses in the years ahead. This level of public capital investment at about 5% of GNP is amongst the

highest in the EU and is being invested in public infrastructure in order to provide the basis for future economic growth and to provide employment.

Action Points:

- Significant borrowing this year and next is being undertaken - this year the fiscal deficit will be about €3 billion and next year borrowings will exceed €18 billion;
- An unparalleled public capital programme (see Action Area 4) of over 5% of GNP is providing a stimulus to the economy. This is being done in a manner that will ensure that the expenditure boosts the economy, provides employment and that important infrastructure and research and development investments drive competitiveness, growth and jobs in the future and provide a return sufficient to justify the borrowing required;
- We are committed to maximising the Exchequer contribution to meeting our capital investment needs. We are also pursuing all options to accelerate investment in the short-run through the greater use of PPPs and by exploring funding options such as franchising;
- We are providing significant incentives to business through enhanced R&D incentives for multinationals, tax incentives to those starting a business, capital allowances for energy-efficiency equipment and further pro-enterprise, pro-environment and pro-employment policies.
- Capital investment allocations will be reviewed to identify scope for reprioritisation towards more labour intensive activities.

1.3 Retaining a Pro-Enterprise Tax Policy

Ireland's low tax burden plays a significant role in attracting foreign investment and ensuring the creation of employment throughout the country. Irish workers now face a lower tax burden than workers in other EU and OECD countries. A low tax wedge makes it easier for employers to employ staff and supports work.

Despite a challenging economic setting, the measures announced in the Budget will ensure this situation will continue for the foreseeable future. After the Budget and Finance Bill, individuals earning the minimum wage will continue to be exempt from income tax, PRSI and health levy and will not be liable to the new income levy.

A low corporation tax rate has also been a central pillar of Ireland's industrial policy since the 1960s and, in the 1990s, became a key driver of economic advancement by making Ireland an

attractive location for FDI. Low marginal rates of corporate taxes have a more positive effect on economic growth in comparison to low taxes on consumption and immobile assets. Despite the deterioration in global economic conditions, Ireland continues to perform well in the attraction of Foreign Direct Investment. In the first half of 2008, IDA Ireland announced 22 investments with a capital investment of €16 million and a potential to create around 1,600 jobs. This was significantly ahead of the performance in the first half of 2007 when there were 18 investments representing €300 million in capital investment and approximately 1,700 jobs.

The Government is also committed to appropriate tax policies to support investment by enterprise in research, development and innovation, to assist start-up companies (see the Action Areas that follow) and to promote the move to a less carbon-intensive economy.

Action Points:

- Continue to pursue a pro-enterprise and pro-jobs tax policy, within the parameters of the serious fiscal challenges already outlined;
- Continue to reform the tax system in this direction, including broadening the tax base, taking account of the recommendations of the Commission on Taxation next year;
- Maintain competitive, low corporation tax rates (including the 12.5% rate) as announced in Budget 2009;
- Ensure that Ireland's R&D tax regime is at the forefront of R&D regimes globally, as shown by the significant measures in the 2009 Finance Bill (see Action Area 2);
- Provide incentives, as appropriate, to support the transition to a low carbon, energy-efficient economy (see Action Area 3);
- Ensure that Ireland's tax regime is suitable as regards the treatment of intellectual property (see Action Area 2).

1.4 Aiding the Restructuring of the Construction Sector

The construction sector is composed of three elements: residential building, commercial and industrial development, and civil engineering. The sharp slowdown in the residential building component of the sector is imposing a considerable drag on the economy and is resulting in job losses in this area. While the sudden nature of the slowdown and the consequent negative effects are unwelcome, there are also some welcome consequences including greater affordability for first-time buyers and those in the rental market, reducing property costs for business and reducing land costs for the implementation of the NDP.

Our priority is to assist in restructuring the construction sector from a situation of over-reliance on residential activity to a situation where the sector, while delivering a level of housing supply consistent with long term demand requirements, has a more broadly based mix of activity across the retail, commercial, industrial and residential sectors.

There is also an opportunity to ensure that spare capacity is re-focused over time towards investment in energy efficiency improvements to homes and other buildings.

This 'green deal' approach will generate long-term competitive and climate change benefits while helping to provide alternative employment opportunities for people losing their jobs in construction.

Action Points:

- Substantial and sustained capital investment will be made under the National Development Plan;
- In 2009, over €1.65 billion in funding will be made available for a range of housing programmes. A new Affordable Homes Scheme was announced in Budget 2009 and the existing local authority mortgage scheme has also been extended. This will assist purchasers who wish to become homeowners but who are, for the time being, unable to obtain loan finance;
- Provide incentives to increase investment in household and business energy efficiency – see Action Area 3;
- The Stamp Duty applicable to commercial property is being reformed to provide an impetus to the commercial property market and help stimulate commercial development and investment;
- Enterprise Ireland will provide a construction sector export service to assist companies and professionals to market their services abroad;
- We will support workers affected by the construction slowdown, including retraining in areas such as installation of sustainable technologies, environmental activity, and compliance and regulatory work;
- In recognition of the special difficulties faced by apprentices who are being laid off, the relevant Departments, FÁS and the Institutes of Technology are working together to facilitate apprentices in finishing their apprenticeships;
- Supports will be provided to promote sustainable development in the Gateways under the National Spatial Strategy. For example, measures are being introduced in the Finance Bill to facilitate the redevelopment of the Cork Docklands, while the Dublin

Docklands Authority and Limerick City regeneration agencies are promoting regeneration in those areas.

1.5 Reducing the Cost-base for Business

Ireland has enjoyed extraordinary economic success over the past decade or more, in part, as a result of providing a highly favourable business environment. However, our cost base has risen and we need to restore our cost competitiveness.

This requires urgent attention across a range of areas including energy (see Action Area 3), wage costs, the cost of utility services (e.g. waste), the regulatory burden and the cost of professional services.

In sheltered sectors of the economy which are not exposed to international trade such as utilities, communications, legal and accountancy services, incomes have been rising at twice the OECD average and the rate of take-up of new technologies is low, thereby suppressing productivity growth and increasing prices.

Higher productivity can counterbalance cost pressures for firms and measures are being taken to improve the capacity of indigenous firms to meet global competition by greater investment in innovation and other value-enhancing activities.

The Government is committed to improving competitiveness across all these areas, with a particular focus on investment in infrastructure under the NDP and by promoting competition, in particular in the sheltered sectors of the economy.

Action Points:

- A large, sustained and targeted capital investment programme will enhance our competitive position – see Action Area 4;
- Within the Social Partnership framework, we will seek to ensure wage moderation and flexibility consistent with our competitive position, while also securing industrial peace and stability;
- We will publish a whole of Government response to recommendations contained in reports of the Competition Authority within nine months of their publication;
- The merger of the Competition Authority and the National Consumer Agency will improve co-ordination of efforts to promote competition in the interests of business and the consumer;

- We will implement measures to reduce administrative burdens on business by 25% by 2012, beginning with concrete measures in the five priority areas identified by the High Level Group on Regulation – Taxation, Environment, Health and Safety, Statistics, Employment and Company Law;
- A consolidated inspections programme will be developed to reduce the number of inspection visits to business. This will reduce the compliance burden on business and will also generate efficiencies and cost savings for the public service;
- We will continue to promote measures in support of productivity growth across a range of areas including investing in human capital, greater use of ICT in business and investing in R&D and innovation (see Action Area 2), which includes workplace innovation.

1.6 Maintaining Financial Stability to Meet the Credit Needs of the Economy

The Irish financial system is a key element of Ireland's economic infrastructure and has a critical role to play in underpinning economic recovery and the restoration of trend growth in the economy.

The unprecedented disruption to global financial markets which commenced in August 2007 and intensified very significantly in September 2008 resulted in significant funding pressures on Irish banks and building societies threatening the stability of the financial system as a whole. The guarantee announced by the Government on 30 September 2008 has been successful in stabilising the liquidity and funding position of Irish credit institutions overall.

The Guarantee Scheme which formally came into effect on 24 October 2008 following its approval by the Oireachtas on 17 October 2008 provides a robust framework for safeguarding the interests of taxpayers and securing the long-term sustainability and commercial viability of the banking system. This is essential in order to ensure that the banking system appropriately meets the credit needs of the economy, a key objective of the Scheme.

On 28 November, the Minister for Finance asked the covered institutions to consider and respond quickly on the contribution that they can make to the economy through appropriate credit initiatives in relation to small and medium-sized enterprises (SME's) and otherwise. A number of financial institutions have already announced new lending initiatives to assist the SME sector and dialogue is ongoing with the covered institutions on this issue.

The Minister also confirmed on 28 November 2008 the State's willingness to supplement private investment in the re-capitalisation of credit institutions in Ireland with State participation on the same terms as private investors.

On the 14th December, the government indicated its willingness to support, alongside existing shareholders and private investors, a recapitalisation programme for credit institutions in Ireland of up to €10 billion.

This would add value to the security and stability of the financial system and its ability to contribute in a positive way to economic development. The Government's priority is to ensure that the banking system continues to fulfil its full role in the economy, while ensuring that it remains strong and stable with capital levels well above the normal regulatory minima.

The Government's focus will continue to be a stable and active banking sector which serves the needs of the Irish economy and it remains committed to take any steps necessary to achieve this objective.

Action Points:

- Fully implement the Credit Institutions Financial Support Scheme;
- Promote sustainable lending practices that support the appropriate availability of credit for the SME sector;
- Ensure that the domestic regulatory framework for financial services continues to meet Government objectives for effective and efficient supervision of the financial sector and the protection of consumers;
- Carefully monitor practices in relation to mortgage arrears and ensure a pro-active approach to any further regulatory or other steps required.

1.7 Enhancing Job Seeker, Training and Education Services to People Who Lose Their Jobs

Unemployment will increase significantly as a result of the current slowdown, with consequent impacts on individuals and their families.

The Government will enhance arrangements to respond to this increase in unemployment and intensify the level of co-operation between relevant Departments.

The aim is to significantly improve access for unemployed persons to job search, training and education, community and employment programmes and to maximise opportunities for up-skilling and re-skilling so that people will be better placed to avail of new job opportunities where they become available, including in new sectors such as energy efficiency.

Action Points:

Additional Job Search Supports:

- In 2009, Job Search Supports capacity under the National Employment Action Plan (NEAP) will be increased to over 10,000 persons per month (from the existing capacity of 6,500 per month). This involves deploying additional staff in Department of Social and Family Affairs to set up interviews, re-deploying additional staff within FÁS and initiating direct referrals to Local Employment Services;
- Discussions are underway with a view to minimising unused FÁS interview slots under the NEAP;
- The Department of Social and Family Affairs is appointing additional Facilitators to its Social and Family Support Service, bringing the total from 40 to 70 and is implementing that service on a nationwide basis for the first time;
- The Department of Social and Family Affairs, together with FÁS, is currently working on an initiative to target young people who become unemployed. This will involve referring young people (18-20 year olds) immediately to FÁS for a new process of immediate activation rather than waiting 3 months. FÁS will, in addition to its normal suite of services, provide short courses designed to improve job search skills. This approach will be tested in two areas in the near future – Clondalkin and Letterkenny.

Additional Training and Education Supports:

- FÁS and the Department of Enterprise, Trade and Employment have identified scope for approximately 30,000 additional places (predominantly in training for the unemployed, but also some in apprenticeships) in 2009;
- All existing full-time further and higher education places in September 2009 will continue to be open to applications from unemployed persons;
- Applications will be encouraged for courses in Institutes of Technology which have vacant places, many of these in the science and technology areas. These will include current NFQ level 6 full-time courses, e.g. Advanced Craft Certificate and Higher Certificate;

- Additional NFQ level 6 programmes are to be developed in the Institutes of Technology from September in areas where employment opportunities exist;
- The Department of Education and Science and FÁS have agreed a scheme to allow apprentices made redundant to move directly to the next off-the-job phase without immediately having to do the “on-the-job” phase first; proposals to facilitate retention in the education system of apprentices made redundant will also be brought forward;
- The Department of Social and Family Affairs is to repeat the under 25s education initiative under the Back to Education Allowance during February/March. This will encourage unemployed people to take up full-time education with the support of the Back to Education Allowance;
- People who are awarded statutory redundancy may now access the Department of Social and Family Affairs’ Back to Education Scheme immediately, provided an entitlement to a relevant social welfare payment is established prior to commencing an approved course of study;
- In addition to the measures specified above, the Government will bring forward further measures to make training and education services available to a greater number of unemployed persons, in the context of existing resources. This work is being undertaken on a cross-departmental basis, with a view to bringing further proposals forward early in 2009.

1.8 Helping People Who Face Difficulties with Mortgage Repayments

The downturn in the economy is likely to worsen the financial circumstances of those who are at risk of poverty and widens the group of people who are vulnerable to experiencing financial difficulties. In particular, the slowdown in the housing market and resulting drops in house prices, combined with an increase in unemployment, has meant there will increasingly be a group of people who can no longer afford to pay their mortgage and are at risk of losing their home.

The Government is fully committed to protecting those who are now facing this situation. In addition to the general strategy for economic renewal set out here, there is also a specific set of policy measures in place to safeguard the interests of households experiencing difficulties in meeting their mortgage payments. A particular priority is to ensure, as much as possible, that mortgage arrears do not result in legal proceedings seeking home repossession.

Action Points:

- The Government has insisted that banks participating in the guarantee Scheme confirm their compliance with the Irish Banking Federation (IBF) Code of Practice on Mortgage Arrears. This Code provides that in normal circumstances the lender will not seek repossession of a property until every reasonable step to agree an alternative repayment schedule has been exhausted. The success of the IBF Code is evident from the very low number of Court Orders for repossession attributable to mainstream lenders that subscribe to the Code (for 2007 as a whole, the total number of houses repossessed by mainstream lenders was of the order of 50). Consideration will be given to extending this Scheme to the small number of lenders not subject to the Code;
- The mortgage interest supplement scheme provides a short-term safety net within the overall social welfare scheme to ensure that people do not suffer hardship due to loss of employment. This Scheme provides for a weekly or a monthly supplement to be paid in respect of mortgage interest for eligible people who are unable to meet their mortgage interest repayments in respect of a house which is their sole place of residence. The 2009 provision for the Scheme of €31 million, represents a substantial increase on the 2008 provision;
- The Government will continue to support the Money Advice and Budgeting Service (MABS), a national, free, confidential and independent service for people in debt or in danger of getting into debt. Funding for MABS in 2008 is almost €8m and is to continue at that level for 2009;
- We will carefully monitor practices in relation to mortgage arrears and ensure a proactive approach to any further regulatory or other steps required.

1.9 Building on Strengths in the Agriculture, Fisheries and Food Sectors

As an indigenous, export orientated sector, agri-food currently accounts for over 30% of net flows into the economy from primary and manufacturing output and has tremendous potential to contribute to the reinvigoration of the economy. Strategies for the development of the agri-food, fisheries and forestry sectors are mapped out in the Agrivision 2015 Action Plan and in the Cawley Report for the fisheries sector.

We will pursue the development at all levels of a more competitive, innovative, and sustainable sector focused on the market place and modern consumer needs, building on the

huge investment in traceability and food safety systems in the last decade. This fits well with the vision of an innovative, environmentally friendly Smart Economy.

The Government remains strongly committed to continued substantial support for the sector to meet the challenges and avail of the opportunities arising from on-going changes in the international economic climate, trade liberalisation, the policy environment and food markets, particularly in the context of the outcome of the CAP 'health check' and negotiations on a new WTO agreement.

The Government is working with the farming and agri-food sectors to overcome the recent difficulties in the pigmeat sector.

Action Points:

Primary Production Level

- Major on-farm investment in infrastructure will ensure more efficient and sustainable production;
- A new Milk Quota Trading Scheme provides a more open market system of transferring milk quotas and along with increased national milk quotas will progressively increase the efficiency and competitiveness of milk production;
- Substantial ongoing investment in sustainable and competitive agriculture through the REPS and other Schemes;
- Ongoing support through the Single Payment Scheme and Compensatory Payment for Disadvantaged Areas;
- A whitefish fleet decommissioning scheme is being implemented to match fishing capacity more closely with available fish resources to ensure the sustainability of the fishing industry; significant investment will continue in developing fishery harbour infrastructure;
- An aquaculture and fish processing investment programme will be implemented in 2009 to drive the further development of the sector;
- Measures are being taken to develop a sustainable forestry sector to support rural employment, provide an indigenous renewable energy source and help mitigate climate change.

Food Industry Processing Level

- The Dairy Investment Fund, amounting to €100 million, will generate total capital investment in milk processing facilities of almost €300 million;

- A Beef and Sheepmeat industry investment fund will be advanced;
- The prepared Consumer Foods Initiative will provide around €30 million over the next five years to progressive companies in the prepared consumer food sector;

Supporting Innovations, Marketing and R&D

- Bord Bia will support the marketing of Irish foodstuffs, and promote Quality Assurance Schemes. Responsibility for seafood marketing will be transferred from BIM to Bord Bia to enhance the marketing of seafood under the “Ireland the Food Island” banner;
- Significant awards have been made to various research institutions under the Food Institutional Research Measure (FIRM) and Stimulus (for farm level research) to underpin the scientific and knowledge base for the further development of the agri-food sector;
- Teagasc will enhance its scientific capacity to enable it foster science based innovation on farms and in firms. The Marine Institute will implement Sea Change, the marine knowledge, research and innovation strategy for Ireland.

1.10 Re-invigorating the International Financial Services Industry

Despite the current international ‘credit crunch’, the international financial services industry has the potential over the medium-term to contribute significantly to the growth of output and employment in Ireland.

Collectively, the initiatives below have the potential to significantly increase Dublin / Ireland’s ranking as a financial centre within the global industry. Ireland is currently ranked 13 in the world on at least one major index and has the potential to become a top 10 centre and cement its leadership in specific niche areas.

Our approach will be based on the recommendations of two key reports, which set out a strategy for the future development of the International Financial Services industry in Ireland, i.e. Building on Success (2006) and the Expert Group on Future Skills Needs Report on the International Financial Services Industry (2008).

Action Points:

- Enhancing the competitiveness and international standing of the Industry in Ireland will be a particular priority for the work of the Clearing House Group chaired by the Department of the Taoiseach;
- The Advisory Forum on reform of the legislative framework for financial services in Ireland will make its first report to Government in early 2009;
- The National Training Fund (NTF) will provide support for a targeted upskilling programme for the industry to address identified skills gaps and enhance the skill base necessary to attract and retain investment;
- Increased support will be given to companies to undertake Research, Development and Innovation (RDI) activity;
- We are expanding our network of Double Taxation Treaties;
- Ireland will be vigorously promoted as the location of choice for high-end international financial services, targeting new opportunities in areas such as specialist leasing, pensions, technology development and sovereign wealth funds as well as complementary employment-generating activities such as business tourism.

6. ACTION AREA 2. BUILDING THE IDEAS ECONOMY – CREATING ‘THE INNOVATION ISLAND’

Context

The key objective of Ireland’s Smart Economic Growth framework is to make Ireland the innovation and commercialisation capital of Europe – a country that combines the features of an attractive home for innovative multinationals while also being an incubation environment for the best entrepreneurs from Europe and further afield.

One of the significant factors behind Ireland’s economic success is the country’s highly valuable human capital base, that is to say, its young, well-educated and talented population and the activities within its third and fourth-level sectors. As the economy matures, it is necessary to emphasise value added and the importance of productivity per person.

Ireland should not depend excessively on external investors for its economic future. We already have some notable indigenous enterprises that have become worldwide companies. Ireland must build on this success so that we develop a thriving indigenous enterprise sector.

Building the stock of knowledge and know-how in the economy is critical to Ireland’s future economic development. Innovation is the key building block in developing a thriving indigenous industry as a complement to Ireland’s concentration of multinationals. The presence of multinationals and the evidence of technological convergence - the tendency for different technological systems to evolve towards performing similar tasks - creates a demand for innovation and partnering with start-up companies which gives Ireland a competitive advantage in innovation.

Ireland has already laid the foundations of the ideas economy by investing heavily in education, skills training and R&D under the National Development Plan, which includes delivery of the Strategy for Science, Technology and Innovation involving major investments in basic research through the PRTL, SFI and other funding programmes. €8.2 billion has been committed to research, technological development and innovation. Business expenditure on R&D is targeted to grow to about €3.8 billion per annum by 2013.

Nevertheless, for Ireland to move up the value chain so that it can assert itself not only as an open enterprise economy but also as an open entrepreneurial economy, it is essential that we have the means of converting research, development and innovation into commercialised

products and services. This will provide a major driver of Ireland's future prosperity. It will create high-quality and well paid employment.

Objectives

The medium-term objective of this action area is to establish Ireland as 'The Innovation Island' - by developing the continent's best research, innovation and commercialisation ecosystem. The specific objectives are to:

- Increase significantly the availability of capital and business networks for start-up research-intensive enterprises;
- Build on the concentration of multinational enterprises by encouraging convergence of technologies and processes and the intensification of research investment;
- Continue to expand the research and development base;
- Provide a favourable tax environment for research and development and private capital;
- Develop and support the export services sector, including tourism;
- Minimise red-tape for enterprises;
- Concentrate research investment and recruitment of top international research talent;
- Foster an entrepreneurial culture at second, third and fourth levels;
- Improve the mathematical and scientific literacy of second-level school leavers ;
- Develop a marketing campaign to attract overseas entrepreneurs to Ireland.

Principles underlying intervention

- Productivity per person is a key measure of economic progress;
- Investing in human capital and developing the skills base confers a competitive advantage on the economy;
- Public investment in research and attracting research talent are prerequisites for a strong innovation economy;
- The concentration of research investments is as important, if not more important, than the absolute amount of funding;
- Ireland must complement its inward investment from overseas by developing its own high value indigenous industry to provide quality jobs and support higher wages;
- The presence in key domains of a concentration of some of the world's most successful multinational enterprises confers a competitive advantage by creating a demand for innovation;
- Research and innovation alone are not sufficient for developing the ideas economy - the ideas must be commercialised;

- Capital availability and networks are key drivers for turning research and innovation into valuable commercialised products and services;
- A favorable tax environment is an important driver of research and development and commercialisation;
- The scientific and mathematical competencies of the working population are an important input to innovation;
- An entrepreneurial culture in schools needs to be supported and developed.

Strengths to be secured

- Young, educated and English-speaking population – Ireland has the highest proportion of people under 15 in the EU and the lowest proportion of people over 65. Over 85% of 20-24 year olds have completed at least a secondary education which is the 2nd highest in the EU-15 and 40% of those aged 25-34 have a third-level qualification which is the highest in the EU-15, along with Belgium and higher than the US;
- The IMD ranks Ireland's education system as 4th in the world for meeting the needs of a competitive economy;
- Ireland ranks 4th across the OECD and 2nd in Europe for the proportion of early stage entrepreneurs with 8.2% of adults in Ireland engaged in entrepreneurial activity in 2007 up from 7.4% in 2006;
- A positive Government track-record of being pro-active in supporting enterprise and pragmatic in policymaking. The IMD ranks Ireland as third in the world in terms of attitudes and values;
- Ireland is ranked second in the world in terms of openness to foreign ideas;
- A competitive economy in many respects through its low corporation tax, overall productivity levels, a well-educated and young workforce and a smart approach to business regulation. The IMD ranks Ireland as 4th in the world in terms of productivity;
- Ireland has moved up two places to 12th place in the 2008 IMD World Competitiveness Score Board and is ranked fourth in the world for business efficiency;
- Highly trade-oriented economy with a strong exporting tradition. Exported goods and services are approximately 80% of GDP. This is a strong basis for the development of indigenous exporting enterprises;
- High concentration of leading high-tech multinationals many of which have facilitated a huge technological transfer from Silicon Valley to Ireland;

- A well-organised set of agencies (IDA, EI and SFI) to coordinate the building of an innovation and commercialization ecosystem;
- A favourable location as a gateway from the US to Europe and a suitable timezone to bridge North American and Asian markets;
- Corporate and tax laws are relatively favourable for venture capital - the European Venture Capital Association's 2008 Benchmarking Study found that the gap between Europe's most and least favourable tax and legal environments for private equity has widened considerably but ranked Ireland as second in the EU in this regard;
- Ireland is ranked as 7th out of 182 countries as a place to do business; the 5th easiest place to establish a business; and the 3rd cheapest location for starting a business. Enterprise Ireland has a strong system to support high-potential start-up enterprises and a growing international presence;
- Ireland is investing significantly in education, skills training and R&D under the National Development Plan, which includes delivery of the Strategy for Science, Technology and Innovation involving major investments in basic research through the PRTL, SFI and other funding programmes;
- Above EU-15 average rate of scientific citations and publications and this is growing rapidly;
- Ireland performs well above the EU average in terms of the number of firms engaging in innovative activities (in terms of changing their products and services);
- Ireland is an attractive place to live and work – the UN ranks Ireland as 4th in the OECD in terms of human development and fifth in terms of satisfaction with life measures—supported by recent investment in social and cultural infrastructure as well as historic social capital in voluntary (e.g. sports and cultural) organisations;
- Ireland's two low-cost airlines and their partners provide easy and relatively inexpensive access to nearly 40 US and 130 mainland Europe locations.

Threats to be addressed

- High innovative activity but below average percentage turnover (commercialisation) of innovative activity and below average patents granted;
- Below average business expenditure on R&D also reflected in an average proportion of research staff in business. However, business expenditure on R&D is targeted to grow to about €3.8 billion per annum by 2013;
- Underdeveloped venture capital investment. Ireland ranks 12th in the EU-15 in terms of formal investment outside public capital markets (which represents total start-up, expansion and buyout investments);

- A relatively large number of third-level institutions for the size of the population and a below average spend on R&D, with a need to concentrate investment and achieve efficiencies;
- At post-primary level, Irish 15 year olds' scientific literacy is a little above the OECD average while mathematical literacy is at the OECD average.;
- Below average life-long learning take-up;
- Need to improve international language skills.

Action Areas

2.1 Increasing Venture Capital Availability: 'Innovation Fund – Ireland'

In Ireland, despite the technical human-capital base, the significant public investment in R&D and the extraordinary concentration of major enterprises, there have been relatively few home grown successes. To build a knowledge economy and thereby create a thriving R&D-intensive indigenous enterprise sector, this indigenous base must be expanded significantly. Enterprise Ireland has had considerable success in raising venture funds and is actively supporting high-potential start-up enterprises. Nevertheless, Ireland ranks 12th in the EU-15 in terms of private equity availability and, in trying to create an exemplary innovation and commercialisation ecosystem, there is a need for what is called 'smart capital'.

'Smart capital' can be defined as (a) adequate levels of early stage funds for SMEs; (b) providing value-added networks to key decision-makers; and (c) experienced investment managers. European venture funds have performed relatively poorly in comparison to US funds and so it remains difficult to attract the best (Tier 1) VCs from the US. Nevertheless, it is these types of VCs that provide the best possible networks and management experience that can develop Irish-based companies.

Just as Ireland fashioned itself to become the destination of choice for multinational enterprises, the vision is to establish Ireland as The Innovation Island through:

- Continued substantial investment in science and technology infrastructure and research;
- A substantial investment in early stage venture capital to commercialise and capitalise on this investment, similar to the Israeli Yozma Fund;
- The attraction of experienced and top-tier venture partners (including those described as Tier 1 VCs) operating independently to manage to raise capital and focus on deal-flow creation;

- Marketing and branding of Ireland as The Innovation Island and the destination of choice for European and overseas entrepreneurs.

Action Points:

- Up to €500 million will be generated to create a venture fund, known as ‘Innovation Fund – Ireland’, to support early stage R&D-intensive SMEs;
- This capital will be divided into five venture funds of between €75-150 million as a maximum to invest;
- The new fund will be operated in coordination with existing financial supports, from Enterprise Ireland, for early stage R&D intensive SMEs, in order to ensure efficient allocation of resources and avoid overlapping supports;
- Each venture fund will have a 10-year life with a seven-year investment period;
- Marketing and branding of ‘The Innovation Island’ - the destination of choice for European and overseas entrepreneurs will be developed;
- To attract high-quality mobile entrepreneurs to set up businesses in Ireland and to assist start-up companies to retain employees, we are providing for a tax abatement scheme for restricted shares (see below);
- A more favourable tax regime on the carried interest of venture capital is being introduced at a rate of 15% for partnerships and 12.5% for companies.

2.2 Multinationals as Drivers of Innovation – Intensifying R&D Activities and Technological Convergence

Ireland has a high geographical concentration of multinationals with significant strengths in high value clusters of economic activity in areas such as ICTs, biopharma, medical devices and international financial services.

Currently the FDI sector in Ireland accounts for:

- Approximately 1,000 companies employing c.152,000 jobs directly with a substantial multiple in indirect employment;
- Spend of €16 billion in direct expenditure in Irish economy – of which payroll accounts for almost €7 billion;
- US FDI to Ireland has been increasing quite steadily from \$35.9 billion in 2000 to \$87 billion in 2007; representing a 142% increase.

The pipeline of new business for which IDA Ireland is competing is as strong as at any time in recent years and Ireland is well placed to secure significant investment during 2008 and

beyond from key target sectors such as pharmaceuticals, biopharma, medical technologies, financial services and information and communications technology.

Despite the economic turbulence currently being experienced, this reasonably strong investment pipeline, coupled with our positive reputation in some of the world's leading companies, means we can be optimistic that Ireland will continue to secure the best in innovation and investments from around the globe.

These Multinational Enterprises are located, in global terms, in a relatively small geographical area. This represents significant opportunities for convergence, i.e. previously separate technologies combining to perform tasks more efficiently and innovations in one sector, such as ICT being applied in health. They are not only involved directly in R&D but they also create a demand for innovation in universities and institutes (for example, cooperating directly through the Science Foundation Ireland Centres for Science Engineering and Technology (CSETs)) but also from start-up companies. The strong concentration of multinationals is of great importance as a driver of innovation and commercialisation in Ireland.

Nevertheless, as Irish wage levels rise and there is a move away from traditional manufacturing, we need to increase the proportion of FDI and SME activity that is comprised of research and development. It is therefore essential that Ireland is a fiscally attractive place for businesses to engage in R&D.

We will build on the advantages of the high concentration of multinationals as a driver of innovation by introducing measures to make Ireland one the world's most attractive environments for R&D investment and activity and the convergence of technologies.

Action Points:

- IDA will continue to pursue foreign investment opportunities, targeting three new additional sectors: convergence (particularly convergence between the life sciences and the ICT sector), 'cleantech' (see Action Area 3) and innovation and services;
- We are significantly enhancing R&D tax arrangements, including:
 - increase the rate of tax credit for R&D expenditure from 20% to 25%;
 - allow for the carry-back of unused tax credits for set-off against corporation tax paid the previous year and to allow for any remaining unused tax credit to be refunded over a three year period;

- provide that 2003 will be the permanent base year against which to measure incremental R&D expenditure for the purpose of the tax credit;
- allow a proportion of the expenditure on new or refurbished buildings to be used in part for R&D purposes to qualify for the tax credit; this recognises that much R&D actually takes place outside traditional laboratories.
- We will roll-out the industry-led Competence Centre Programme, starting with industry groups in six areas: Applied Nanotechnology, Advanced Manufacturing Productivity, Energy, BioEnergy, Composites and Advance CMOS Circuits;
- An action plan will be developed for expanding research and development in converging technologies, combining our science base strengths with enterprise capacity;
- Fast-track visa arrangements will ensure timely processing of visa applications for key researchers and highly skilled staff and applicants in these categories will also be eligible for fast-track progression to long term residence under the Immigration Residence and Protection Bill 2008;
- We will support the creative industries and film/media which have a key role in driving and enabling technological convergence across platforms;
- Legislation underpinning the Strategic Development Zone planning process will be examined to determine whether changes should be introduced to support the establishment of high value enterprise development clusters under the IDA's strategic sites initiative.

2.3 Supporting the Manufacturing Sector

Manufacturing will continue to play a fundamental part in our economic future, with an increasing focus on securing competitive advantage through innovation, R&D and design.

- We are establishing a Manufacturing Forum under Towards 2016 in line with the recommendations of the High Level Group on Manufacturing

2.4 Continue to Investment Heavily in Research and Development

Science, Technology and Innovation are vital to our economic and social progress. In an increasingly globalised world, high levels of investment in research and innovation are essential, both for economic competitiveness, and to yield innovations in areas such as ICT, healthcare and environmental technologies, which create employment opportunities, increase economic progress and make tangible improvements to our quality of life.

Growing research capability is a core component of the European Union's drive under the Lisbon Agenda to become the most competitive and dynamic, knowledge-driven economy in the World. Ireland has fully embraced that challenge in acknowledging the important role of Government in addressing market failures associated with research and development.

The Strategy for Science, Technology and Innovation is a crucial building block in this effort. It is based on a shared vision of placing Ireland firmly on the global map in terms of the excellence of our research and its application for the benefit of society and its implementation is overseen by the Cabinet Committee on Science Technology and Innovation.

The Strategy encompasses the steps Ireland needs to take to develop a world class research system, building on the model of competitive excellence adopted by the PRTLTI and SFI initiatives. It addresses key human capital investments across the education system and industry. It provides a building block for the translation of knowledge into jobs and growth.

The Strategy establishes agendas for public sector research in Agriculture, Health, Environment, Energy and Natural Resources. It also addresses the vital international and all-island dimensions of research and innovation while supporting Ireland's active participation in the EU-wide research effort, where we have a target of securing €600m worth of funding under the EU's 7th Framework Programme.

Our economy-wide R&D spend has trebled in the last decade and now stands at around €2.5 billion – two thirds of this from the enterprise sector.

Action Points:

- We are committed to implementing the Strategy for Science, Technology and Innovation, despite fiscal pressures. This is demonstrated by Budget 2009 where we committed €265 million (a 44% increase) for overall capital funding in third-level institutions, €135 million to enable Enterprise Ireland to assist R&D-intensive companies and €179 million to Science Foundation Ireland to support research and development. We will continue to focus research efforts in strategic areas allied to the needs of enterprise;
- Enterprise Ireland and Science Foundation Ireland will jointly promote the commercialisation of opportunities arising from research undertaken under the SFI programmes, including through the Commercialisation Fund, the Incubator Space Scheme, and the Technology Transfer Strengthening Initiative;

- We will continue to implement the all-island Innovation Voucher initiative for small companies;
- We will bring forward an Action Plan for Health Research by June 2009 in order to exploit opportunities for stronger linkages between our health sector, the health sciences and related FDI and indigenous sectors such as medical devices and biopharma. The Action Plan will contribute to implementation of the Advisory Science Council's report, *Towards Better Health: Achieving a Step Change in Health Research in Ireland*;
- Concern about delays in the conduct of clinical trials and other research due to the process of ethical approval will be addressed in the Health Information Bill currently under preparation;
- A particular focus will be opportunities arising for research in the renewable energy and environmental technologies areas (see Action Area 3), including the development and commercialisation of ocean energy. This is reflected in the fact that Science Foundation Ireland recently added a third pillar of energy to its remit;
- The recently formed Procurement Innovation Group will continue to work towards creating an environment in which the potential for innovation in public procurement can be realised;
- In the context of the objective of incentivising and facilitating an increased number of start-up companies, an immediate review will be undertaken of the suitability of ownership and licensing arrangements for Intellectual Property arising from state-funded research and development programmes (including SFI and EI funded projects) and R&D activities in third- and fourth-level and other government-funded research institutions;
- To accelerate Ireland's global science reputation, by 2013 SFI will:
 - attract to Ireland a premium cohort of world class researchers who have been nominated for or secured prizes, awards and honours that will drive up the international visibility of Ireland to the global research community and the global high tech business community;
 - recruit 50 new overseas Principal Investigators (PI's) to supplement the existing 100 overseas PIs recruited up to 2008; and
 - conduct Tier 1 international conferences (e.g. Keystone, AAAS, EMBO, etc) in Ireland.
- Ireland has just won the European 2012 City of Science for Dublin and we will use this opportunity to establish Ireland's reputation internationally.

2.5 Encouraging Entrepreneurship, Business Start-ups and Employment Creation

Creating a positive environment for starting and growing a business is crucial for the generation of employment and development of an entrepreneurial economy. The challenging economic environment is likely to persist in 2009 and 2010 and Government is committed to doing whatever is possible to support people who want to start and grow their own enterprise.

Ireland has a strong network of public agencies devoted to supporting the small enterprise sector and we will continue to provide the best possible range of supports through these agencies while removing barriers to business start-ups where they exist.

Action Points:

- A number of taxation measures are being introduced including:
 - exemption from corporation tax arising in the first three years of operation for business start-ups;
 - tax abatement scheme for restricted shares, and a refund in the case of forfeited shares, to assist companies, including start-up companies, in retaining key employees;
 - a Remittance Basis of Taxation scheme which will apply in appropriate circumstances to income earned from the exercise of an employment in this State where the payment is made outside of the State;
- Following the implementation of the major recommendations in the Report of the Small Business Forum, and taking account of the measures in the EU's Small Business Act, we will continue to explore further measures to assist the small business sector;
- A review will be conducted by Forfás to ensure that there is maximum coherence and collaboration between the enterprise development agencies (Enterprise Ireland, IDA Ireland, Science Foundation Ireland, Shannon Development and Údarás na Gaeltachta) and to identify any gaps in support;
- Science Foundation Ireland will continue to build Ireland's world class research capacity in strategic areas allied to the needs of industry;
- The establishment of the County Enterprise Board Central Coordination Unit within Enterprise Ireland (EI) will ensure greater cohesion in the strategic and operational activities of the County Enterprise Boards and greater cooperation between EI and the CEBs.

2.6 Expanding International Services (including tourism)

We need to restructure the composition of Ireland's economic growth. In the past number of years, economic growth has shifted from being export-led and productivity-led to domestically-driven growth dependent on new jobs in construction and public services. Domestically-driven growth has proved to be unsustainable over the long term in a small open economy.

Despite our good performance in absolute terms, Ireland has slipped below the OECD average for growth in exported goods and services and, in this regard, is behind developed countries such as the UK, US, Germany and Japan². Ireland is growing its share of world trade in international services (particularly business and finance) but its share of merchandise trade is falling as is its total share of world trade. The contribution of net exports to economic growth has been low since 2004. While we can introduce measures to speed the restructuring of the construction sector, the export of goods and services must be the principal medium- to long-term driver of economic growth in Ireland. In addition, we must enhance the amount of Irish services that are traded internationally by establishing a commercial presence in the country of destination (through outward direct investment).

Increased emphasis needs to be given to growing services that can be traded internationally. Forfás has published a Services Strategy that sets out some of the actions we will be pursuing to ensure we take this opportunity. Between 2000 and 2007, the share of Irish exports constituted by services doubled from 21% to 43%; it is projected that this could reach 70% by 2025. Furthermore, the EU Services Directive is expected to increase trade in commercial services by as much as 30%. There are many advantages to services as a source of exports:

- they fit well with many of our inherent strengths, including our relatively young, English-speaking and flexible workforce;
- given their low import content, services exports have a bigger multiplier effect on the domestic economy;
- services are generally more consistent with a low-carbon economy; and
- international services also tend to cluster, mainly in or near urban centres where mobile, high skilled workers want to live.

Action Points:

Development of internationally traded services out of Ireland will be prioritised by the development agencies: Enterprise Ireland have published a comprehensive Strategy for

²NCC (2007). *Annual Competitiveness Report 2007, Vol. 1*. Dublin: National Competitiveness Council.

Internationally Traded Services while IDA Ireland have established a Services Innovation Department. In particular:

- The Tourism Renewal Group will examine tourism policy and programmes and develop a Framework for Action in the first half of 2009 to maintain the long-term sustainable growth of Irish tourism;
- A new suite of tourism marketing and promotional material will be launched in 2009 in key international source markets as part of the Tourism Marketing Fund under the NDP and we will continue to upgrade and improve tourist attractions and facilities;
- We will develop a nationwide strategy for eco-tourism and associated marketing campaign;
- We will seek to position Ireland as a destination of choice in the international education market through new regulatory and marketing co-ordination arrangements that will enhance the promotion of Irish education overseas;
- We will implement a strategy to develop Irish construction companies to a scale and level of sophistication where more of them can successfully compete for major contracts across the world;
- The Department of Transport and Irish Maritime Development Office (IMDO) are pursuing initiatives in the maritime sector including the creation of growing international ship finance and management capability based in Dublin, and will continue to explore opportunities in the maritime sector, for example assistance to re-skill former fishery sector employees for positions in the merchant marine fleet;
- Legislation on international arbitration, which is due to be enacted next year, will provide a single reference point for all arbitrations based upon a modern code which is widely recognised as being consistent with best international practice in this area. This will be followed by a co-ordinated international drive to market Ireland as a centre for arbitration;
- We will explore potential business opportunities for Ireland in the area of international Digital Trade Facilitation;
- Our Enterprise promotion agencies are carrying out in-depth sectoral analyses with a view to identifying further key sectors that Ireland should target.

2.7 Incentives to Create and Acquire Intellectual Property (IP)

A growing number of companies are re-evaluating their global business models in a bid to remain competitive and maximise overall efficiency. In doing so, there is an increasing tendency to disaggregate the various corporate functions, so that elements of the business may be undertaken in different locations based on the comparative advantage of each particular location.

As companies spread such activities out to lower-cost locations across the globe, there is also an increasing tendency to centralise some or all of their key, high-value-added activities into a smaller number of global or regional headquarters, or hubs. From the commercial perspective of the company, a centralised model can maximise the efficiency and profitability of the operation. Ireland is ideally placed to exploit this trend.

A key part of facilitating such consolidation, and of developing a knowledge economy, is the ability of companies based in Ireland to own and exploit intangible assets out of Ireland. Taxation of those intangible assets can play an important role in making a country attractive as a location for companies for whom such assets form a large part of their value. The current Irish system is orientated towards licensing, rather than purchasing, intangible assets into Ireland. In order to further build the knowledge economy, a more favourable regime for the purchase of intangible assets into Ireland, and their exploitation from here, is required. Currently there is no tax deduction available for acquisition of IP (except in very limited circumstances – principally software and patents). Other EU jurisdictions such as the UK, the Netherlands, and Luxemburg allow tax write off for IP. To support an R&D-intensive environment in Ireland, it is necessary to bring our incentives in line with such countries.

Action Points:

- Revised arrangement for the taxation of Intellectual Property will be developed during the course of 2009. We are committed to reforming the corporate tax regime in this area having to regard to the recommendations of the Commission on Taxation with particular emphasis on:
 - a tax deduction for trading companies for capital expenditure on intangible assets;
 - unilateral credit relief for all trading companies;
 - any other measures recommended that the Commission consider will support the development of the knowledge economy;
- In light of the above, we will review the potential for the active management of Intellectual Property, whether generated or domiciled in Ireland, leveraging the business services infrastructure already associated with the financial services sector.

2.8 Supporting Life-long Learning

Ireland cannot afford to leave anyone behind in the drive to improve the skills and competencies of our work force and to ensure that workers possess the skills required to service a Smart economy.

This effort starts with pre-school education, which has been demonstrated as a very effective intervention with proven and social benefits, and extends throughout the formal and informal educational system.

In the modern economy, a particular focus needs to be on efforts to increase participation in lifelong learning by providing opportunities for education and training, in order to facilitate required upskilling and reskilling.

Our efforts will have a particular focus on assisting those who lose their jobs during the current economic downturn (see Action Area 1), fostering entrepreneurship, mathematical and science skills in schools (see Action Area 2) as well as general upgrading of skill levels across society.

Action Points:

- We will publish in early 2009 an Implementation Plan for the National Skills Strategy;
- We will continue to enhance the educational element of early childhood care and education services, and will publish and implement a National Childcare Training Strategy;
- Through FÁS and Skillnets we will provide training to people in employment. This includes the FÁS Strategic Alliance initiative aimed at training the low skilled, and the FÁS Workplace Basic Education Fund targeting on employees with the lowest skills levels and particularly those with literacy and numeracy difficulties;
- We are reviewing current training programmes, including those provided by FÁS and Skillnets, in the context of current and future labour market challenges, including the goals of the National Skills Strategy;
- Through the education system we will continue to provide learning opportunities to a wide range of people, including adult literacy services to over 40,000 learners, 5,000 places for participants in the Vocational Training Opportunities Scheme (VTOS) and over 30,000 places in Post-Leaving Certificate (PLC) courses, while 9,000 places will be provided under the Back To Education Initiative (BTEI);
- Fáilte Ireland will continue to support upgrading staff skills as well as management capacities in the tourism sector.

2.9 Restructuring the Higher Education System

Ireland has a relatively large number of third-level institutions. International research shows that the concentration of investment in research and development is important in advancing research innovation. In successfully advancing our knowledge capacity, there is now a need to re-examine the roles and relationships of higher education institutions across the Irish system. Through the last ten years of the Programme for Research in Third Level Institutions (PRTLTI), and more recently the Strategic Innovation Fund, impressive new inter-institutional collaborations have been created. However, the next phase of economic development will require an even greater concentration of resources and expertise. This will involve re-thinking future institutional roles and organisational relationships in higher education to enable the Irish system to reach new levels of research and innovation performance.

A new Higher Education Strategy will seek to address the need for rationalisation and re-configuration of roles across the system. This will address the challenges of both enhancing research performance and improving effectiveness and quality across the wider remit for teaching and learning. The challenge to the higher education sector itself is to create new possibilities through new alliances and new organisational arrangements that can advance our knowledge capacity and generate opportunity for new levels of efficiency, performance, innovation and growth.

The Strategy for Science Technology and Innovation (SSTI) is an essential foundation for economic renewal and expansion. In recent years Irish universities and institutes of technology are becoming much more internationalised. In addition, Ireland has been enjoying some success in attracting world-class researchers into our higher education institutions. Science Foundation Ireland's schemes have played an important role in this regard. The presentation of Ireland as a location of choice for business R&D and as the innovation capital of Europe should be underlined by the attraction of a number of world-class established names in research areas of critical importance to us. In order to do this it is necessary to provide suitable facilities in which these and Ireland's other top researchers can be accommodated.

A call for proposals under Cycle 5 of the PRTLTI will be central in providing concentrated infrastructure for delivering on the objectives of the SSTI. The creation of more concentrated research-intensive excellence will enhance the country's reputation internationally and its ability to attract top-level researchers and will underline Ireland's intentions in terms of the development of the Smart Economy. It will also enhance the international exposure of Irish universities and institutes of technology.

Action Points:

- A call for proposals under Cycle 5 of PRTLII will be launched, supporting concentrated research investment in priority facilities;
- A new Higher Education Strategy will enhance system wide performance;
- Higher Education institutions will be supported in pursuing new organisational mergers and alliances that can advance performance through more effective concentration of expertise and investment;
- Under the Strategic Innovation Fund, priority will be given to flexible learning initiatives that can be targeted at up-skilling people in the workforce;
- We will use research funding through SFI, Enterprise Ireland and IDA to instil a commercialisation culture in third-level institutions alongside the now embedded teaching and research culture;
- Establish a specific Visa and Citizenship Programme to attract (and retain) first-class scientists to Ireland.

2.10 Fostering Entrepreneurship, Mathematical, Science and Language Skills in Schools and at Third Level

To help make ‘The Innovation Island’ a reality, we need to enhance the entrepreneurial culture in Ireland and enhance skills in mathematics and science. In particular, we need to increase the flow of high quality graduates in key areas of Science, Engineering and Technology, while also nurturing an interest in innovation and setting up their own businesses.

One essential building block is to improve the number of students taking higher level mathematics at second level and ensuring they are attracted to further study in priority areas for economic development in line with the vision in this document.

In addition, the ICT Strategy Group Report, which was published in July 2008, provides a clear direction to inform actions to further the integration of ICT into teaching and learning in our schools. While there are significant challenges in implementing some of the Report’s recommendations, investment in school infrastructure will be pursued within available resources.

Action Points:

- We will promote study in priority areas through the Discover Science and Engineering programme, which will now assume a role in relation to maths;
- Implementation of Project Maths will be prioritised, with mainstreaming beginning in 2010 prefaced by a national programme of professional development for teachers beginning in 2009;
- We will explore, in partnership with industry, development of a targeted programme of bursaries to increase participation in key engineering programmes at third level;
- Further measures will be considered to encourage high quality students to undertake priority areas of study which align with the objectives of this Action Plan;
- The number of summer schools in science and engineering will be expanded with an emphasis on innovation and commercialisation;
- The HEA will progress the provision of entrepreneurship and management training skills on scientific and engineering doctoral programmes in universities;
- Young scientist winners will be linked with a third-level institution and/or a firm to enable them to bring their idea to development and the top 3 finalists will have laboratory/research space, as appropriate, in universities for summer;
- We will raise the profile of the Student Enterprise Awards run by the County and City Enterprise Boards to encourage participation and ensure that students are motivated through role models to consider careers in enterprise; We will encourage second level students to participate in an enterprise-related programme;
- We will continue to strengthen bilateral education relations between Irish and Chinese authorities at third level, including further development of economic and cultural links and the learning of the Chinese language;
- We will work to enhance ICT's role in the education system, working in partnership with industry to invest further in the provision of equipment and connectivity;
- Provision of ICT equipment budgets as part of major school building projects is being extended to primary school projects;
- The Schools Broadband Programme will be continued, the range of services available to schools will be expanded and the range of digital content available to schools will also be expanded;
- We will pursue the objective of equipping second-level schools with 100Mb per second broadband connectivity;
- We will publish a new Knowledge Society Strategy by mid-2009 with an action plan for the use of new high speed broadband networks to further our enterprise, educational and environmental objectives.

2.11 Improving Trade, Investment and Tourism Links with New and Fast-developing Markets

The growth of World trade has contributed greatly to Ireland's economic and employment growth of recent years. Last year we exported €89 billion in goods and €65 billion in services. Further reducing trade barriers will help to open new export markets and we will continue to support balanced multilateral trade agreements as well as seeking to extend the range and scope of bilateral trade agreements between the EU and third countries.

Given the recent unprecedented developments in the global economy, greater strategic use could be made of the Government's network of overseas offices, including those of Enterprise Ireland, IDA Ireland and the 70 bilateral diplomatic and consulates around the world. Embassies are expected to represent the political and economic interests of the State and their contacts and knowledge need to be fully exploited.

In particular, we need to focus on new and fast-developing markets. While developed economies are experiencing low or negative growth, some emerging markets - although not immune from the effects of the slowdown in the US and Europe - offer significant growth potential. To this end the focus of the export drive should be on markets in East Asia, in particular China, building on the progress achieved under the Asia Strategy. It will be important to redirect resources to encourage export growth to this part of the world. In particular it will be necessary to develop market information for exports. We also need to prioritise other high growth markets such as the Gulf States, Brazil, Russia and other emerging markets.

In addition to trade opportunities, it is important to pursue the potential for attracting tourism and investment from these countries, with a focus on the potential of sovereign wealth funds in particular.

Action Points:

- The Government will develop an Action Plan for improving trade, investment and tourism links with new and fast-developing markets by end-2009, following the progress achieved under the Asia Strategy. This will build on the specific actions set out below;
- The Minister for Foreign Affairs will undertake a review of the network of diplomatic and consular missions in order to ensure a proper alignment of resources with

strategic objectives, taking account, in particular, of the earnings potential of markets. Changes will be made through reallocation of existing resources;

- Enterprise Ireland will build on its existing network of offices in Asia and other high-growth markets to ensure the expansion of Irish exports to these countries;
- The IDA will shift resources from non-business generation to business generation and expand the number of people based in the United States, opening new offices in Boston and Southern California. The IDA will also seek to diversify the source of foreign direct investment and recently set up offices in Mumbai, India and Beijing, China;
- Tourism Ireland will open its New and Developing Markets Hub in the United Arab Emirates in early 2009, to drive the development of key new markets such as India and China;
- The programme of Ministerial-led trade Missions will be expanded to build on both existing markets and also new opportunities, including Asia, Gulf States, Brazil, Russia and the new EU Member States;
- There will be more effective coordination of the activities of the Government's promotional activities overseas. Ambassadors in major overseas markets will be asked to play an active role in this regard. The emphasis will be on informal but effective structures which focus on maximising opportunities in overseas markets. This proposal will not have implications for the normal reporting lines of the various agencies;
- Government departments and agencies will work on proposals to promote a positive image of Ireland's economic potential and to respond to any negative coverage in foreign media;
- Enhanced efforts will be made to optimise the economic potential of visits by Ministers abroad. This requires effective coordination across Government Departments;
- We will establish a consultative mechanism with public and private sector representatives to advise on issues related to the economic work of Embassies;
- Detailed proposals will be brought forward to stimulate and enhance economic links with the overseas Irish. In addition, the vital issue of Ireland/US Economic Relations is being considered as part of the Strategic Review of our wide-ranging relationship with the United States, which the Taoiseach has asked Ireland's Ambassador to the United States to carry out;
- We will continue to promote Ireland's trade interests in the EU and WTO systems and encourage the completion of the WTO's multilateral trade negotiations where

they provide balanced tangible advantages to the economy and especially our exporters.

2.12 Leveraging the Arts, Culture and Creative Sectors

Ireland today survives and prospers by the talent and ability of its people. Today's goods and services require high value added input. Some of it comes from technology or financial capital but more of it comes from people's ability to innovate, to adapt, to be creative. In economic terms, the cultural and creative sector is globally one of the fastest growing. Estimates value the sector at 7% of the world's GDP and forecast 10% growth per year. Creative industries are also a key driver of the digital and knowledge economy. Consumer demand for creative content is driving new sales in computers, broadband, cell phones, and e-commerce. The creative sector also has strong linkages with tourism. In major cities internationally, cultural tourism is estimated to be as high as 40% of annual visitor arrivals.

The arts, cultural and creative industries are key and primary economic contributors. They consist of real businesses, enduring employers, differentiators of us as a cultural and tourist destination. Future investment in this sector must be based on world-class ambition and achievement, and it must also be based on engaging and attracting the business sector.

The challenges for creative industries differ from those in traditional export sectors. First, intellectual property protection and commercialisation are top priorities. The creative industries cannot survive in the marketplace without adequate protection from copyright infringement. Second, research and development (R&D) must be placed higher on the agenda. In the cultural industries, R&D means investment in human and creative capital. For example, the Recording Industry Association of America estimates that the U.S. music industry spends at least 15% of its turnover on research and development, which is higher than in the computing, chemicals, and aerospace industries. Marketing and branding are crucial because audience, customer and visitor loyalty is difficult to build and to predict.

We need to pursue an integrated policy framework to maximise the return economically, culturally and socially from these sectors.

Action Points:

- We will improve Government-industry relations through the harmonization of government policy on trade, industrial, and intellectual property;

- We will codify the economic impact of the cultural industries and establish benchmarks to promote jobs, business development, and export expansion;
- Niche cultural tourism markets will be developed with globally-recognised branding;
- Access to finance, credit and business support services for emerging and export-ready firms and artists will be improved;
- We will seek to expand, embed and develop the linkages between the cultural industries, the tourism sector, and the wider economy;
- The human resource capabilities of the cultural sector will be upgraded through training in the arts, as well as training in arts administration, management, and cultural entrepreneurship;
- Investment in key arts culture and creative industry infrastructure will continue.

2.13 Marketing The Innovation Island Internationally

In order to make ‘The Innovation Island’ a reality, it will be necessary to attract high-quality entrepreneurs to Ireland by making them aware of the highly favourable innovation and commercialisation ecosystem that exists here.

Action Points:

- The IDA, Enterprise Ireland and SFI, will develop a marketing campaign for ‘The Innovation Island’ with support from Tourism Ireland;
- We will highlight the attractiveness of the Irish social and cultural environment for knowledge workers and innovators by a cultural tourism initiative supported by global marketing through Tourism Ireland.

7. Action Area 3. Enhancing the Environment and Securing Energy Supplies

Context

Traditionally, the environment was seen as an important input to economic progress only insofar as natural resources were raw materials for production. In recent times it has become accepted that a high quality environment is both an important dimension of quality of life and a key requirement for economic performance in a much more sophisticated way than was widely accepted in the past.

In Ireland, the success of our economy is intimately related to how well we manage our environment. For example, tourism depends on high quality landscapes and built environments and certain high value-added parts of the food industry depend on Ireland's 'green image' for competitive advantage. More fundamentally for the purposes of this action plan, any society wishing to keep talented Irish people working in Ireland, as well as attracting the most talented people from around the world to Ireland, cannot afford to offer a poor quality living environment. High-end, innovative 'silicon-valley'-type businesses do not usually locate in poor quality environments.

The economy faces two central energy challenges: securing the supply of reliable and affordable energy and achieving the transformation to a low-carbon, high-efficiency, sustainable and smart energy system. These are urgent challenges for all global economies, the European Union and for Ireland.

The EU has committed to reducing overall carbon emissions by 20% by 2020. Agreement on a climate change package in Copenhagen next year will further increase our responsibilities and we must plan for this transformation now. The International Energy Agency has also warned that the 'era of cheap oil is over'. Ireland which is over 90% reliant on imported fossil fuel must alter this dangerous dependence. We need to protect our economy from future oil and gas supply shocks.

The small scale and peripherality of the Irish energy market and our over reliance on imported fossil fuels has resulted in comparatively high energy costs for enterprise and consumers with consequent adverse impact on competitiveness. Radically enhanced energy efficiency across all sectors of the economy, together with actions to diversify supply through investment in renewable energy will deliver reduced costs, reduced emissions and greater energy security. Putting energy efficiency at the heart of this Plan will protect us from the inevitable rise in the

cost of the energy 'inputs' and the pollution 'outputs' from our economic activity. As one of the most fossil-fuel dependent countries in the world, we must prepare for a future when the prices and volatility we recently witnessed become the norm.

Finally, and very significantly, as the importance of improving environmental performance has resulted in significant developments in national and, particularly, international environmental policy, the environment and energy areas are beginning to provide great opportunities for industrial and enterprise development. This has been recently emphasised in the United Nations Environment Programme's *New Green Deal* which focuses on mobilising and re-focusing the global economy towards investments in clean technologies and 'natural' infrastructure. Thus, in addition to its merits as an important factor in influencing well-being, the environment is an important consideration in the formulation of an economic plan.

Objectives

- To make Ireland's economy and environment mutually reinforcing;
- To put the energy/climate change agenda at the heart of Ireland's economic renewal;
- To deliver a sustainable, competitive and secure energy future from now;
- To move the economy onto a low-carbon pathway;
- To radically enhance energy efficiency across all sectors of the economy;
- To ensure energy security and reduce dependence on fossil fuels;
- To maximise the business opportunities presented by the clean energy/green economy;
- To mobilise the public sector as energy-efficiency exemplar and as a driver of green innovation;
- To advance the integration of the environment in measures of economic progress.

Strengths to be secured

- Ireland's environment is generally of a high standard according to the EPA;
- Some progress has been made in decoupling greenhouse gas emissions from economic activity - emissions per unit value of gross output are currently half the 1990 level;
- Significant progress has been made in advancing the use of renewable energy sources.

Threats to be addressed

- Rising baseline trend in greenhouse gas emissions which will impose a significant cost on the economy if credits must be purchased to meet international commitments;
- Limited development of the ‘GreenTech’ sector in comparison to other sectors such as biopharma and ICT which, *inter alia*, limits employment opportunities and technological convergence possibilities;
- Higher energy costs due to heavy reliance on imported fossil fuels and energy consumption per capita higher than the EU average.

Action Areas

3.1 Ensuring Energy Security and Reducing Energy Costs

Secure and reliable energy supply at competitive cost is critical for Ireland’s ability to retain and attract foreign direct investment and for the competitiveness of all sectors of Irish enterprise. Ireland’s dependence on fossil fuels in an era of high prices and considerable volatility leads to high energy costs which impact on competitiveness. It is imperative that Ireland reduces its dependence on imported fossil fuels and diversifies energy sources.

More energy efficiency and the accelerated delivery of renewable energy, together with interconnection with the UK, and over the next decade with Europe, are critical to reducing energy costs. More competition and investment in the power generation sector will deliver better performance and operational efficiencies putting downward pressure on wholesale electricity prices and improving security of supply. In addition, we are giving priority to creating the conditions to enable enterprise to opt to produce their own electricity (auto-generation) from renewable energy sources.

Action Points:

- The Government will increase the production of renewable electricity to meet the new increased target of 40% of electricity from renewable resources by 2020 in a cost-effective manner. This will be assisted by the Government’s feed-in-tariff prices for onshore and offshore wind, ocean energy and biomass CHP;
- Over the next two years an estimated €400 million will be spent by the private sector building an additional 400mw of wind power to meet our 2010 target for 15% of our power to come from electricity supplies;
- EirGrid will spend €4 billion between now and 2025 building a new electricity

transmission system to tap into renewable energy resources;

- The ESB has set out its own zero emissions corporate plan for 2030 and a related €22 billion long term investment budget;
- Bord Gáis has set out a €5 billion investment strategy to develop the Gas network and clean energy technologies;
- In 2010 our offshore grid connection will be in place in Belmullet Co Mayo to allow the deployment of new wave power devices;
- The East West interconnector will be completed in 2012 along with the planning of further interconnection to the UK and the Continent;
- A framework will be in place in early 2009 to support the development of auto-generation projects by large industry as well as micro-generation in the small business, agriculture and domestic level;
- 21,000 smart meters will be placed in Irish homes as a test project prior to the roll out of the new smart grid to every home in the country;
- We will fast-track development and commercialisation of ocean energy technologies under the Ocean Energy Development Programme 2008-2012;
- We will ensure that the Commission for Energy Regulation carries out a fundamental review of energy prices and tariff methodologies which will take account of the needs of all energy consumers, including the need to support economic competitiveness;
- We will progress restructuring of the electricity sector through finalisation of the CER / ESB Asset Divestment Strategy by end year and the process of transfer of the national transmission assets to EirGrid;
- The consent process for energy developments on the foreshore will be modernised in 2009.

3.2 Energy Efficiency

Energy efficiency is internationally recognised as the most cost effective means of reducing dependence on fossil fuels and reducing emissions. For Ireland, radically improving the level of energy efficiency and managing energy demands in our economy will reduce energy costs for business and consumers and reduce emissions.

The Government is committed to a range of actions to improve energy efficiency and reduce energy use. The forthcoming National Energy Efficiency Action Plan will set out the measures designed to deliver at least 20% energy savings progressively by 2020. It will take account of the strong new impetus in Europe to deliver major energy efficiency improvements

with substantial impacts on energy consumption and security.

The improvement of energy efficiency in the building stock is one of the most cost-effective ways of reducing Ireland's green house gas emissions and this is a key Government priority reflected in the significant funding provided in Budget 2009. Energy-efficiency measures to tackle deficiencies in households will also support employment in the construction sector.

Action Points:

- €30 million will be spent in 2009 helping the installation of better insulation in over 25,000 houses;
- Funding is being provided to Sustainable Energy Ireland to support high performing, energy efficient demonstration projects in the social housing sector;
- A full energy efficiency audit of the public housing stock will begin in 2009 and €5 million will be spent on the first retrofitting projects;
- 21,000 smart meters will be placed in Irish homes as a test project prior to the roll out of the new smart grid to every home in the country;
- We will explore ways to further reduce the carbon impacts of new housing;
- We are increasing the range of energy efficient equipment purchased by companies that can qualify for accelerated capital allowances, including energy efficient data-server systems and, vital in these times of high energy costs, electricity provision equipment and control systems;
- We are pursuing national cycling and walking strategies and a cycling package for Dublin;
- The Government will publish early in 2009, the Sustainable Travel and Transport Action Plan which will provide a new policy framework for travel and transport in Ireland. It will promote a shift to alternative modes of transports, including walking, cycling and public transport as well as encouraging technological innovation to improve energy efficiency in the Transport Sector;
- We will work towards our target of 10% of Ireland's road transport fleet being electrically powered by 2020;
- In the first quarter 2009 the Government will publish its National Energy Efficiency Action Plan including the targeted 33% improvement in energy efficiency in its own services by 2020.

3.3 The Public Service as a Driver of Environmental Innovation – Greener Procurement

The Government, as the largest purchaser of goods and services in the economy, is examining how public procurement policies and practices can contribute to the achievement of our environmental objectives.

The Government is also examining how Irish public procurement practices might contribute to improving the capacity of Irish firms to compete successfully in international public procurement markets and in supplying high quality and competitively priced goods and services that meet high environmental and carbon emission standards.

Action Points:

- Environmental considerations will be further integrated into the public procurement process in 2009, with the goal of bringing us into line with the best performers in Europe;
- Current capital appraisal and cost-benefit analysis guidelines will be amended in early 2009 to incorporate best practice in reflecting the cost of CO2 emissions in cost benefit analyses.

3.4 Mobilising the Market to Protect the Environment Through Environmental Tax Reform

The environment can be defined as those parts of our physical and psychological endowment which we share, which are 'open access'. It is precisely this shared nature of many environmental endowments which threatens their quality and character. In a market system, goods are allocated by the price mechanism. In a free market, the price of a good is determined by the demand for, and supply of, the good. Price is therefore a reflection of society's willingness to pay for, or the valuation it places on, the good in question. However, the shared nature of many environmental assets such as air, the atmosphere and water resources means that they are not owned and so do not have a price. When goods are seen as free they are overused.

Thus, the market fails to protect environmental assets adequately. Unless some mechanism is found to 'internalise' environmental externalities, there will be a misuse of society's scarce resources. This provides the basis for Government intervention in the market.

Market-based approaches harness the power of incentives to encourage individuals acting more-or-less in their own best interests to interact with the environment in a way which is in the best interests of society. A key policy approach is to create a set of surrogate prices e.g. through environmental taxation or direct charges per unit of pollution, such that individuals and firms pay for the pollution they produce. This is known as the 'Polluter Pays Principle'. Those who pollute less are rewarded financially since they avoid having to pay for their use of the environment.

The general underlying principle of Environmental Tax Reform is to shift taxation from economic 'goods' (like work, income or property) to environmental 'bads' (like pollution). Depending on the way fiscal revenues are recycled, taxes may generate some benefits in addition to those resulting from pollution abatement. These additional benefits may be divided in two categories:

- An 'economic double dividend': recycling tax revenues by reducing distortionary taxes may have positive impacts on economic growth, employment, and/or technological development;
- An 'environmental double dividend': e.g. reducing CO₂ emissions may be accompanied by a decrease in local pollution.

As well as the broader mandate to consider options for the future financing of Local Government, the Commission on Taxation, which is due to report by the end of September 2009, has also been asked to investigate fiscal measures to protect and enhance the environment including the introduction of a carbon tax.

The EU emissions trading scheme places a surrogate price on greenhouse gas emissions at around €40 per tonne of CO₂. Therefore, the projected overshoot of the Kyoto targets and the difficulty of achieving emissions reductions in agriculture and transport by 2020 will have significant implications for the Exchequer. There is a need to send that price signal through the economy to stimulate changes in behaviour so that the economy becomes less carbon intensive. This can be achieved through a number of measures which incentivise less carbon-intensive activities e.g. cycling instead of driving, driving more environmentally friendly cars and improving the energy efficiency of housing.

The Minister for the Environment, Heritage and Local Government works closely with the Minister for Finance in this regard and presents a Carbon Budget the day after the Budget.

Action Points:

- An announcement on the issue of a Carbon Levy, assisted by recommendations of the Commission of Taxation, will be made in Budget 2010. Particular attention will be paid to ensuring that any Levy does not impact adversely on the most vulnerable or on the economy;
- Further appropriate modifications to the motor tax system will be considered to encourage continuous improvements in the efficiency of the car fleet and to encourage a move from advanced plug-in hybrid vehicles to full electric vehicles;
- Introduction of a flat rate levy on parking and tax incentives for promoting cycling to work;
- The Government will support EU measures to have a lower rate of VAT apply to eco-friendly products.

3.5 Developing the GreenTech sector

A recent study by Forfás and IntertradeIreland estimated that the value of the Environmental Goods and Services (EGS) sector was in excess of \$600 billion worldwide in 2005 and is likely to exceed \$700 billion by 2010 and \$800 billion by 2015.

Instead of merely taking technological developments from other countries, Ireland has an opportunity to play a leading role in developing a green economy and thereby benefiting from the associated job and wealth creation opportunities. While a wide range of enterprise opportunities are expected to arise in the growing EGS sector, the sub-sectors which are seen as having the greatest potential are:

- Renewable Energies;
- Efficient energy use and management, including eco-construction;
- Waste management, recovery and recycling;
- Water and wastewater treatment;
- Environmental consultancy and services.

Some years ago we harnessed the State's industrial, educational, enterprise and development resources to develop biopharmaceutical and ICT sectors in Ireland, leading to significant inward investment and highly productive employment. The Government intends to take a similar approach to the development of the green technology sector.

We have already made significant steps towards embracing this growth area, including establishing sustainable energy technologies as a new pillar of Science Foundation Ireland.

However, a major whole-of-Government, initiative is required to ensure that the green economy is effectively fostered. The Government is determined to guide our economic development and well-being onto a sustainable and low-carbon path. By successfully developing a thriving green technology sector, we can also look forward to making a significant contribution to emission reductions.

Action Points:

- We will establish a High-Level Action Group on Green Enterprise. The Group will report to Government within four months, setting out an Action Plan for developing green enterprise in Ireland;
- This Action Plan will include a response to the policy recommendations of the Forfás /InterTradeIreland report in the areas of:
 - development of skills through the education and training systems;
 - environmental research and development;
 - the role of public procurement;
 - environmental legislation;
 - incentives for developing the sector;
 - access to start-up and growth finance;
 - collaborative business networks;
- The mandatory requirement under the Building Regulations for new homes to source some of their energy from renewable sources and a Building Energy Rating system will create a new market for renewable energy technology in this country and stimulate opportunities for innovative new approaches in the Green Tech sectors;
- We will support the development of eco- and green tourism including measures to “green” enterprises in the sector as well as developing specialist tourism products;
- The enterprise development agencies will continue to work to win FDI projects and grow indigenous firms in this sector.

3.6 Integrating the Environment into Measures of Economic Progress

Traditional economic performance measures such Gross National Product (GNP) and Gross Domestic Product (GDP) are limited indicators of the performance of the economy and of society. They fail to measure the sustainability of an economy and society.

The depletion of, or improvement in, environmental goods is not valued in such measures, despite the fact that they may be critical to continued consumption and to sustainable development. The use of monetary indicators alone to measure economic and social performance may leave governments in the position of having to resolve subsequent environmental problems such as past pollution or excessive carbon emissions. Alternative methods of assessing the performance of nations include 'genuine savings' and 'green national product'. Such estimates have been able to show that some countries are on an unsustainable path though their GNP is positive. Currently there is no initiative in Ireland to measure sustainable development systematically and the necessary data for such calculations are difficult to obtain.

Action Point:

- The Central Statistics Office will develop more comprehensive measures of Sustainable Development in Ireland to take account, in particular, of the environmental impact of economic development.

8. Action Area 4. Investing in Critical Infrastructure

Context

Continued commitment to high levels of investment in line with the NDP is vital both for the competitiveness and productivity of the economy. It provides an important basis for economic recovery and growth. Investments in infrastructure also support employment and stimulate economic activity. This forms part of the stimulus package during the economic downturn. Many international studies have shown that the impact of public capital on private output and economic growth is positive and significant.

Given the current economic and financial circumstances, there is a need to prioritise projects and expenditure on those with the most immediate positive impact on the economy and employment. The investment must also be delivered in a coherent and efficient manner. It must be consistent with the vision of a 'Smart Economy' and international thinking on the key role that strong cities play in driving economic growth and in enhancing regional and national competitiveness by acting as economic engines for their regions and providing a critical mass of public and private institutions.

The National Spatial Strategy (NSS) provides a framework for regional investment consistent with this vision with a prioritised focus on those strategic locations that have the capacity to grow and reach the critical mass necessary to drive the development of the wider regions and boost national competitiveness. This focus on the development of NSS gateways and hubs also reflects the fact that the continued success of Dublin is critical for the performance of the entire economy.

Objectives

- Invest in public capital to provide the infrastructural basis for the next phase of economic growth;
- Provide a stimulus to the economy through investments that create employment and inject money into the economy;
- Contribute to sustainable development and the generation of sustainable communities;
- Reduce costs and increase competitiveness through infrastructure provision;
- Enhance productivity through technological infrastructure, communications and investments in human capital and research and development;
- Reduce 'hidden inflation' such as traffic congestion;

- Enhance quality of life by improving physical infrastructure, transportation, and environmental services;
- Ensure energy competitiveness, security of supply and enhanced efficiency.

Principles underlying intervention

- Infrastructural investment improves competitiveness;
- Infrastructural investments stimulate economic activity and provide employment;
- Capital investments that stimulate the economy should receive priority;
- Borrowing is acceptable for productive investments with a good rate of return;
- Strict attention must be paid to value for money and opportunity costs.

Strengths to be secured

- Ireland has a strong capital investment programme and considerable investment in R&D. The country has a rapidly improving physical infrastructure;
- NDP investment is tackling both our infrastructure deficits and providing the up-skilling, training and education that the workforce needs. The NDP is also supporting the enterprise and innovation sectors;
- Transport 21 provides a ten-year framework for major investment in transport which aims to complete the development of the five major inter-urban motorways and the Atlantic Road Corridor, transform the public transport system in the Greater Dublin Area and make major improvements in regional public transport. Excellent progress is being made. A total of 426 km of the major inter-urban motorway network is already open to traffic and the remaining 314 km is on schedule for completion in 2010. Irish Rail is completing a major intercity rolling stock renewal programme which has resulted in more and better services across the railway network and substantial growth in passenger numbers. Passenger carrying capacity is being increased across the public transport network with the purchase of new buses and the extension of Luas trams;
- Some €670 million in NDP investment in 2007 helped to upgrade environmental infrastructure and facilitated commercial and housing development. This investment also supported the NDP's objective of enhancing environmental sustainability;
- Large-scale and ongoing investment programmes of the Dublin Airport Authority, the ESB, EirGrid, Bord Gáis and Bord na Mona were supported by the NDP. Key achievements in 2007 included the completion of Pier D in Dublin Airport which can handle up to 10,000,000 passengers a year. The all-island energy market was also launched in 2007;

- NDP investment also went into the tourism sector to market Ireland and to provide people working in the sector with the skills and training that will enhance Ireland as a tourism destination. It also enabled work to begin on the new Convention Centre in Dublin, whose progress is highly visible on Dublin's quays;
- The NDP also invested some €1.2 billion in 2007 in enhancing infrastructure and supporting enterprise in rural and coastal areas, particularly in the agriculture and food sector.

Threats to be addressed

- Despite rapid and substantial improvements in recent years, addressing remaining infrastructural deficits in transport, environment, energy and communications, in particular, is crucial;
- There is a need for increased adoption of technology to enhance productivity.

Action Areas

4.1 Maintaining and Prioritising the Public Capital Programme

In the Budget, the Government has prioritised physical capital expenditure towards projects that promise the best economic return and provide a firm basis for sustainable job creation.

The 2009 Budget provided for €8.2 billion of Exchequer capital investment in 2009. This amounts to around 5.2% of forecast GNP for 2009. Budget 2009 also provided for a multi-annual capital envelope for Government Departments for the period 2009-2013 amounting to €43.6 billion of Exchequer investment.

Exchequer capital investment in 2009 will be complemented by capital projects financed under PPP arrangements, commercial semi-state body investment and by the proceeds from local development contributions. The multi-annual envelopes for the period also allow for some €9.4 billion of investment under PPP arrangements, including user charges.

There will also be a review of the investment strategies of commercial semi-state companies to rebalance more in favour of domestic investment where possible. For instance, the Dublin Airport Authority is building a new terminal from non-Exchequer resources and the energy companies will continue to invest substantial sums. Investment decisions will seek to

maximise returns and focus on priority areas as well as encompassing a review of lower cost options where feasible.

The slowdown in the construction sector should provide greater value for money for public investment. Ireland is borrowing over €2,000 per citizen in order to invest in our future. Spending on areas where there is an economic return, in the short term, in relation to transport and environmental infrastructure and in the longer term in respect of the education and R&D will be prioritised to enhance competitiveness and provide the basis for future economic growth.

Action Points:

- Continue investment under *Transport 21* concentrating in particular on the following priorities:
 - (i) completion by 2010 of the five major inter-urban motorways;
 - (ii) continuing development of the Atlantic Road Corridor;
 - (iii) increased capacity on the public transport networks, especially investment in additional bus capacity, bus priority and various forms of rail-based capacity;
 - (iv) maintaining the momentum on project planning and statutory approvals.
- Invest some €2 billion over the coming years in Dublin Airport;
- €300-600 million in capital investment will be made in our commercial seaports over the period to 2013;
- Investment of €1.3 billion in social housing in 2009, €102.5 million in affordable housing initiatives and other private housing supports, and €560 million in Water Services;
- The capital allocation for 2009 for the school building programme is €581 million, with a third-level capital investment of €265 million;
- The Arts, Sports and Tourism capital allocation of €148 million in 2009 will develop sporting and cultural infrastructure and enhance infrastructure aimed at tourists and foreign visitors. The Convention Centre Dublin and Lansdowne Road Stadium are scheduled for opening in 2010;
- ESB, EirGrid and Bord Gáis are investing over €1 billion in 2008 and in 2009 in extending and upgrading the national electricity and gas distribution and transmission networks while ESB is investing €2 billion up to 2020 in the electricity network, the national smart meter programme and renewable energy R&D and commercialisation projects;
- EirGrid will also invest €4 billion from now up to 2025 in the national transmission

grid under the Grid 25 Strategy and is delivering the electricity interconnector between Ireland and Wales to schedule by 2012 and undertaking the feasibility work on next phase interconnection with UK/mainland Europe;

- We will continue to invest in scientific and other research infrastructure;
- We are committed to maximising the Exchequer contribution to meeting our capital investment needs. We are also pursuing all options to accelerate investment in the short-run through the greater use of PPPs and by exploring funding options such as franchising.

4.2 Investment in Communications and the Knowledge Society

Broadband is a key enabling infrastructure for the knowledge-intensive services activities on which future prosperity will increasingly depend. We now have over 1 million broadband subscribers, giving penetration levels approximating to EU and OECD averages. The National Broadband Scheme will ensure 100% national coverage, with full roll out of services by 2010 to areas of the country not currently served by the market.

While investment is mainly a matter for the private sector, there are a number of areas where the State will incentivise or facilitate investment in line with the Consultation Paper on Next Generation Networks published in July 2008 and thereby support the vision in this Action Plan.

Action Points:

The Government will pursue the following approach to ensure continued upgrading of our broadband quality and coverage:

- We will support the continued investment of some €700 million each year by the private sector in upgrading our broadband network via a telecoms regulatory framework which has the promotion of competition as a core objective;
- There will be a requirement for open access fibre to be installed, where practicable, in new premises;
- We will roll out the National Broadband Scheme, which will ensure that every part of the country has full access to broadband coverage;
- We will support investment of €70 million in international connectivity through Project Kelvin;

- We will establish a new ‘one stop shop’ to allow better access for telecom operators to fibre optic ducting contained within public infrastructure and mandate the provision of such ‘open access’ ducting in new state projects;
- We will promote Ireland as a world leader in the flexible use of the wireless spectrum including the creation of new ‘ubiquitous’ broadband connectivity zones;
- We will introduce a new terrestrial digital television service in 2009 and secure a digital dividend in 2012 with the switch off of the analogue transmission service;
- We will continue to develop the Digital Hub and the National Digital Research Centre.

4.3 Ensuring Sustainable and Balanced Development

Successful development will be increasingly reliant on unlocking the full potential of all our regions to contribute to growth and jobs based on their distinctive strengths and capabilities. It will also reflect a deepening appreciation of the role of dynamic city-regions in supporting knowledge-intensive enterprise and development.

Action Points:

- An analysis of National Spatial Strategy (NSS) implementation will be completed by end March 2009; this will be used to assess the extent to which sectoral programmes are aligned with the NSS and to recommend to Government any necessary re-prioritisation;
- The Strategic Corridor Frameworks for the Atlantic Gateway cities (Waterford, Cork, Limerick, Galway) will be completed early in 2009; work on implementation of the cross-border North West Gateway Initiative (Letterkenny/Derry) will also be well underway at that stage. This will further assist in achieving the critical mass necessary to attract high-value employment and strengthen education and research facilities, in identifying investment priorities, and in providing a collaborative approach for development;
- Under the Rural Development Programme, funding of €25.4 million will be provided for the diversification of the rural economy, creating up to 12,000 jobs in rural areas;
- The CLÁR and Gaeltacht schemes will also continue to provide key rural infrastructure and supports for small enterprises.

4.4 Ensuring Effective, Timely and Value-for-Money Delivery of Infrastructure

As well as investing in key projects, the Government will secure better value for money, particularly given the spare capacity in the construction industry, and give renewed emphasis to reviewing lower cost infrastructural options. A comprehensive VFM framework has been put in place in recent years including:

- the 5 year rolling multi-annual capital envelopes for public capital investment;
- revised guidelines for the appraisal and management of capital expenditure;
- fixed price contracts as the norm;
- full Cost Benefit Analysis of capital projects over €30m;
- appointment of individual project managers for all capital projects.

In the roll-out of the NDP, efforts will continue to enhance value-for-money, streamline planning and delivery systems and promote competition and private investment wherever appropriate.

Action Points:

- Analysis of strategic, fast-growing areas under the Developing Areas Initiative will provide a complete inventory of priority water and waste water services, roads and public transport, broadband, schools and community facilities required to support consolidation of housing development in these areas;
- The land zoning for development purposes will be further modernised by mid-2009 to ensure that the location and quantum of zoned land continues to be adequate for future economic development but is more closely aligned to national and regional planning policy, Government infrastructure plans and policies on issues such as climate change and sustainable transport;
- Statutory Guidelines will be published early in 2009 on Sustainable Residential Development which will be given a stronger legal underpinning;
- A strategic review of the organisational and delivery arrangements in water services will inform further prioritising of investment and delivery approaches in this area;
- The Dublin Transport Authority will be established in early 2009;
- A Public Transport Regulation Bill will be enacted in 2009 to reform the licensing of access to the bus market.

9. Action Area 5. Efficient and Effective Public Services and Smart Regulation

Context

Reform and renewal of the public service is essential if Ireland is to achieve the ambitious economic and social challenges set out in this document. Currently Ireland's public service compares well with other OECD countries in size and cost and in delivering what citizens require. Nevertheless, present economic circumstances require that we achieve more for less without any diminution of the quality of public services. Ireland's public service must not operate merely in line with OECD averages in terms of staffing levels and expenditure, it must become a recognised leader in delivering quality public services. We must display the highest rates of productivity increases, develop strong indicators of quality outcomes and adopt smart applications of new technologies, while continuing to take account of the changing and diverse needs of citizens.

Efficiency and effectiveness in the delivery of public services is critically important in progressing economic recovery and reform. There is great talent and dedication in the public service, which needs to be harnessed and directed strategically through the fast-track programme of reform set out in the recent *Government Statement on Transforming Public Services*. Ireland's public servants must be open to change and innovation. They must show flexibility and be willing to meet the rigours of performance management and external accountability. Their deployment and activities must reflect new and emerging Government priorities and the core values of the public service: serving the citizen while providing value for money to the tax-payer. As part of this process, consideration must be given to involving the private and not-for-profit sectors in the delivery of certain services where they can deliver cost efficiencies or offer better local networks and public access.

Progress has been made in developing and implementing performance measurement systems and accountability mechanisms across Government Departments. We must build on this success by strengthening these systems and extending them to each public servant so as to raise performance and address underperformance.

Regulation is a key instrument at Government's disposal, along with taxation and spending policy. Citizens and businesses are required to comply with legislative and administrative requirements including the sourcing and provision of information which can be quite onerous and complex (In this section, we will deal with regulation as it impacts on citizens. Action

Points to reduce the regulatory burden on business are detailed in Section 5 which deals with competitiveness issues).

Ireland's regulatory environment is perceived as being highly favourable and has been the subject of significant improvement through the reforms achieved since 2004 as part of the Government's Better Regulation Programme, including the introduction of Regulatory Impact Analysis to improve new laws and revision and simplification of the Statute Book. Nevertheless, in order to maximise competitiveness and the accessibility of the system for business and citizens, Government and the Public Service must accelerate reform in this area through striving to ensure that regulation and red tape is minimised where possible. Where regulation is necessary to achieve policy goals it should be clearly communicated, and regularly evaluated. Enforcement should be based on risk so as to minimise the burden on citizens and businesses.

Objectives

- Restructure and reallocate public expenditure and redeploy public servants in line with changing priorities set by Government in order to achieve maximum efficiency and value for money;
- Create a modern, flexible and effective public administration with clear measures of performance and accountability;
- Reduce the administrative burdens for citizens and improve the quality of regulation through tools such as e-government, regulatory impact analysis and by enhancing the accessibility of the statute book.

Principles underlying intervention

- In the current economic climate, resources need to be allocated strategically and utilised efficiently and effectively in order to deliver policy objectives and public services while achieving maximum value for money;
- We now face extremely complex economic, social and environmental challenges which necessitate a flexible, dynamic and modern public service capable of implementing innovative policy solutions whilst meeting the diverse needs of citizens in the delivery of public services;
- A more effective, simple and transparent regulatory and administrative environment is essential to effectively achieve Government objectives, maintain the trust of citizens, reduce transaction costs and increase regulatory compliance.

Action Areas

5.1 Efficiency, Effectiveness and Value for Money

In the current economic climate it is vital that available resources are allocated strategically with a view to successfully implementing the economic reform programme set out in this document while achieving maximum efficiency and value for money. As part of Budget 2009, the Government agreed a number of measures to focus spending on areas of greatest priority and to reduce sharply those activities which are not essential including:

- a four percent reduction in the public service payroll bill in 2009 (after provision for 2008 pay increases),
- closure and amalgamation of forty-one State Bodies and the streamlining of other functions, and
- significantly reduced expenditure on consultancies, advertising and other support activities.

A number of actions are now proposed to further promote efficiency, effectiveness and the achievement of value for money within the public service.

Action Points:

- A Special Group on Public Service Numbers and Expenditure Programmes has been established to examine the current expenditure programmes in each Department and to make recommendations for reducing public service numbers. This will include the scope for further rationalisation of State Agencies and for reallocating staff or expenditure resources between Public Service organisations;
- Achieve efficiency and value for money through the use of centralised and specialised procurement driven by a new National Operations Unit. This will allow all central Government Departments and Offices, agencies and non-commercial bodies to acquire a range of goods and services more effectively, efficiently and at lower cost to the taxpayer. The Unit will further develop web-based tendering including through the introduction of e-auctions (i.e. online bidding by tenderers in real time to secure contracts);
- Public Bodies will share services for functions such as payroll, human resources, financial management, procurement and ICT systems management. This will provide for significant savings in both personnel and expenditure. The increased use and development of e-government for the delivery of services (see section 5.3 below) will

also reduce the cost and speed of transactions and allow twenty four hour access to Government.

5.2 A modern, Flexible and Responsive Public Service Designed to Maximise Performance and Delivery

While the Public Service contains many dedicated, talented and motivated staff, its framework and structures must be reformed to allow for the flexibility, responsiveness and accountability necessary to meet the complex policy challenges we now face. There is a need to remove barriers to mobility across the Public Service to facilitate the redeployment of staff so as to reflect changing circumstances and policy priorities. Public servants who have experience and skills across a range of organisations and sectors are also needed. Improved performance measurement must be introduced at organisational, sectoral and individual level to ensure that policy goals and service needs are being met as efficiently and effectively as possible and to detect and deal with underperformance where it exists.

Action Points:

- Improve performance measurement through the development of specific outcomes and performance indicators for all sectors, organisations and individuals. Independent Regulators should demonstrate more awareness of public policy goals such as price, competition and sustainability in setting their objectives and these objectives should be linked to performance indicators. All public agencies will be required to produce Output Statements relating resources to planned achievements and all public bodies will produce an integrated Annual Report as a basis for a comprehensive Oireachtas scrutiny. The system for measuring and reporting outputs will be subject to external validation;
- Performance and underperformance of staff within the Public Service will be addressed through strengthening, standardising, and monitoring the performance management system in the Civil Service and Local Government Sector to clearly link performance ratings with achievement. Performance assessments will be developed in areas of the Public Service where none currently exist. A new emphasis will be placed on leadership skills and a Senior Public Service will be developed to centrally manage and deploy top public servants and promote a stronger culture of individual performance and accountability.
- Identify and remove barriers to a unified public service labour market to include new arrangements on redeployment and exit options where people cannot be redeployed.

5.3 Improving and Simplifying the Regulatory Environment

While statutory and administrative rules and regulations are necessary to achieve policy goals and to deliver goods and services efficiently, it is vital that regulations operate effectively and that the cost and complexity of compliance is minimised. There are a number of tools which can be used in this regard including e-government and the use of technology for information sharing, regulatory impact assessment (RIA) and the simplification of the Statute Book.

Action Points:

- Priority e-government projects will be developed in all sectors of the Public Service to facilitate information sharing across public service bodies and to improve value for money and standards of service;
- Accelerate the Administrative Burden Reduction Programme to reduce the volume and frequency of data required from the public and a central data store will be established to allow public bodies maximise the re-use of data;
- The current system of Regulatory Impact Analysis will be strengthened and enhanced including through increased publication of impact statements and better measurement of the administrative burden on business and the citizen;
- Accessibility to legislation will be improved by early 2009 through updating the Electronic Statute Book to include all 2008 Acts and Statutory Instruments from 2005 to 2008. A Programme of Statute Law Restatement will result in the restatement in plain language and in consolidated form of 45 Acts by end 2009. In addition, a further Statute Law Revision Bill will be published in early 2009 to repeal in excess of 800 redundant Local, Personal and Private Acts.

10. ENSURING IMPLEMENTATION

Given the gravity of the economic challenge facing the country, and the fast-changing nature of the international environment, the agenda set out here will command first attention by the Government and all Ministers and Departments.

This Framework does not seek to list all policy areas or all the actions which need to be taken, but it does set down a clear direction and focus for Government efforts in conjunction with the Social Partners and other stakeholders. These must, and will, receive priority in order to return the country to a sustainable economic position.

The success of this strategy will depend on giving it sufficient priority, making sure that all parts of the public and private sectors work together to pursue the opportunities which exist, and sustaining that effort over a period of time.

The Government will ensure that we remain focused on what is within our control and achievable given current fiscal constraints. This strategy for Building Ireland's Smart Economy will be prioritised and driven across all levels of Government. On occasion, that will mean other policy issues having to wait until the economic situation has improved, and we will make those choices.

There will not be overnight results – but there can be, and will be, successes over the period ahead. Success will come from taking the right decisions, implementing them quickly and effectively and continuing to support the enterprise sector in generating growth and jobs.

Relevant Ministers will report regularly and systematically on progress in the key action areas we have identified through the Cabinet Committee on Economic Renewal, which is chaired by the Taoiseach. Each Minister will also be asked to develop and bring forward new proposals consistent with this strategic direction in their respective areas.

The Cabinet Committee will be supported by the work of the National Economic and Social Council and by regular analysis from the National Competitiveness Council.

The Tánaiste and Minister for Enterprise, Trade and Employment is establishing an Advisory Council of Business Leaders who will report regularly to her and the Cabinet Committee on measures the Government can take to return the economy to a sustainable growth path in line with the Vision in this Framework.