

## **JOINT OIREACHTAS COMMITTEE ON CLIMATE ACTION**

**10 October 2018**

### **Opening Statement by John McCarthy, Secretary General of the Department of Housing, Planning and Local Government**

Chair, Members.

Good afternoon and thank you for the opportunity to address the Joint Committee on Climate Action today. I know that you have had a number of very interesting sessions to date with excellent contributions from various sectors. A number of issues have been already raised in relation to areas that fall within the remit of the Department of Housing, Planning and Local Government and I hope I can address as many of these as possible today.

At the outset Chair, I would like to say a few words about Project Ireland 2040 (PI2040) which the Government launched earlier this year. Project Ireland 2040 is the overarching planning and investment framework for the social, economic and cultural development of Ireland. It includes a detailed capital investment plan for the period 2018 to 2027 - the €116 billion National Development Plan, or NDP - in support of a long-term transformational spatial strategy – the National Planning Framework, or NPF, with a time horizon out to 2040.

The aligned and shared vision of the NPF in tandem with the NDP represents a joined-up planning and investment strategy for Ireland's future growth and development, focused on a series of ten shared national outcomes. Foremost amongst these is Climate Action and the national objective to *transition to a low carbon and climate resilient society* by 2050.

Policy that will assist in making that transition and meeting our climate obligations is woven through the NPF and NDP. Shared outcomes reflected in both documents that are fundamentally supportive of Climate Action include *Compact Growth, sustainable mobility and sustainable management of water, waste and other environmental resources*. All include significant elements of policy that provide a strong platform for the development of measures and actions in response to climate change.

The overall NPF strategy seeks to achieve a better balance of development between the regions, a greater focus on Ireland's cities, supporting Ireland's rural fabric and targeting more compact growth in the development of settlements of all sizes, from the largest city to the smallest village.

### **Compact Growth**

The benefits of compact growth are that it can bring new life and footfall to the cores of our cities, towns and villages, contribute to the viability of services, shops and public transport, add to housing supply and enable

more people to be closer to employment and recreational opportunities, as well as to walk or cycle more and use the car less. Along with minimising transport demand, higher densities and shorter travel distances will also reduce energy demand and use. Multi-storey and terraced buildings in close proximity require less energy and make renewables-based systems of energy distribution such as district heating, more feasible.

The EU Circular Economy Package indicates that in a circular economy, a cascading use of renewable resources should be encouraged together with its innovative potential for new materials, chemicals and processes. This circular economy approach is also applicable to land use management. Through compact growth, the NPF effectively sets out recycling rates for the reuse of brownfield land by requiring 40% of new housing nationally, to be built within infill and brownfield lands and encourages reuse of existing building stock.

The extent to which we prioritise compact growth, brownfield over greenfield use, encourage the use and reuse of buildings in urban and rural areas, and reduce sprawl, will assist in increasing the efficiency of land use and contribute to meeting emissions reduction targets.

## **Sustainable Mobility**

The NPF identifies the need to progressively electrify our mobility systems moving away from carbon intensive propulsion systems to new technologies such as electric vehicles and introduction of electric and

hybrid traction systems for public transport fleets, such that by 2040 our cities and towns will enjoy a cleaner, quieter environment, free of combustion engine driven transport systems.

### **Resource Efficiency**

The NPF also supports transition to a circular bio-economy, where the value of bio-based products, materials and resources is maintained in the economy for as long as possible, and the generation of waste minimised.

### **Low Carbon Energy Transition**

Central to the NPF is a recognition of the need for energy efficiency and for new energy systems and transmission grids that will be underpin a more distributed, renewables-focused energy generation system. This will provide a basis for harnessing both the considerable on-shore and off-shore potential from a range of energy sources such as wind, wave and solar and connecting the richest sources of that energy to the major sources of demand.

In particular, the NPF states that the development of offshore renewable energy is critically dependent on the development of enabling infrastructure, to bring the energy ashore and to connect into where it is needed most.

## **Wind Energy Guidelines**

The Department is currently undertaking a review of the 2006 *Wind Energy Development Guidelines*. This review is addressing a number of key aspects including sound or noise, visual amenity setback distances, shadow flicker, community obligation, community dividend and grid connections. As part of this work, a strategic environmental assessment (SEA) is being undertaken, in accordance with the requirements of EU Directive 2001/24/EC on the assessment of the effects of certain plans and programmes on the environment, otherwise known as the SEA Directive.

It is expected that a public consultation on the revised draft Guidelines, together with the comprehensive environmental report under the SEA process, will be commenced in the coming weeks, with the aim of issuing the finalised Guidelines, following detailed analysis and consideration of the submissions and views received during the consultation phase, in early 2019. When finalised, the revised Guidelines will be issued under Section 28 of the Planning and Development Act 2000, as amended.

## **Solar Guidelines**

My Department in collaboration with the Department of Communications, Climate Action and the Environment who lead on renewable energy policy, is exploring the potential for enhancing national planning guidance on solar energy, taking account of solar energy projects being assessed by planning authorities and the scope for future development

of the sector in the context of the ongoing development of renewable energy policy.

Further to this ongoing engagement between the two Departments, should the need for specific planning guidance for solar farms be identified, this work will be further scoped and progressed.

## **Mitigation**

The NPF highlights the role that Ireland's forests and peatlands can play in climate change mitigation, through carbon sequestration and the provision of renewable fuels and raw materials. Irish forestry is a major carbon sink and afforestation is the most significant mitigation option that is available in terms of land use.

## **Adaptation**

In terms of climate adaptation, the NPF makes it clear that as an island, it is in our interest to ensure we respond to climate change and its impacts such as sea level change, more frequent and sustained rainfall events and greater vulnerability of low-lying areas to flooding. In particular, the NPF makes it clear that, in planning for future development, flood risk assessment is now critical, due to rising sea levels. In the long term, climate change adaptation responses may entail the consideration of barrage or similar technologies to prevent inundation of lower-lying city centre areas during extreme weather events.

Therefore, in summary, in order to contribute to achieving transition to a low carbon, climate resilient society, the NPF provides a strategic framework to link planning, development and investment to climate mitigation and adaptation, through:

- Influencing transformational change in the pattern of development and settlement, by securing more compact growth;
- Supporting resource efficiency and the circular economy;
- Facilitating greater energy efficiency, the development of renewable energy systems and infrastructure and a more diverse energy mix;
- Ensuring that mitigation and adaptation measures are embedded in the operation of the planning system.

It is important to note that the NPF is a national strategy, which integrates a range of cross-cutting objectives. Implementation of the NPF will require shared responsibility, with lead roles across many different Government Departments and Agencies.

### **Capital Appraisal**

In terms of future investment, the Department of Public Expenditure and Reform is currently reviewing all technical factors relevant to the appraisal of capital schemes. This will include changes to the public spending code (PSC) with regard to methodologies for the evaluation of the likely costs of carbon emissions and the likely benefits of climate

change mitigation. I understand that this work is expected to be published within the coming weeks and will include a period of public consultation. The principal measures proposed include new methodologies with the potential to impact on project prioritisation.

## **Building Sector**

At this stage Chair, I might turn to the issue of the building sector.

In Ireland, approximately 40% of total energy produced is used in the building sector. The Energy Performance of Buildings Directive sets ambitious goals for energy efficiency and renewables in buildings by requiring Nearly Zero Energy Building or “**NZEB**” performance for new buildings from 31<sup>st</sup> December 2020. In addition, the Directive also requires that Major Renovations to existing buildings are completed to a cost optimal level, where it is feasible. The implementation of NZEB is a key action for the built environment in contributing to Ireland’s National Low Carbon Transition and Mitigation Plan.

### **NZEB – New dwellings**

I will focus first on what we are doing to achieve NZEB in new dwellings. We have progressively updated standards relating to the Conservation of Fuel and Energy in Dwellings over the last decade, with the aim of improving the energy and carbon dioxide emissions performance of all new dwellings to “NZEB” performance levels. Because of this, the final step on the NZEB journey is not as significant as it might otherwise be.



Many of the techniques introduced in 2007, such as mandatory renewables for new dwellings and more energy efficient boilers, have effectively eased the transition and minimised the additional costs and effort required at this stage to achieve the NZEB performance for dwellings.

We will shortly be publishing an update to Part L of the Building Regulations to achieve these NZEB performance requirements in dwellings. When implemented, it will represent an improvement of 70% in energy and carbon dioxide emissions performance over 2005 standards, for all new dwellings commencing construction in 2019, subject to the necessary transitional arrangements.

### **Cost of NZEB in new dwellings**

A modelling and cost study was carried out to estimate the cost impact of NZEB. When the uplift in cost was calculated for a range of common heating systems, renewables, and ventilation systems, for typical new dwellings to achieve NZEB the range was 0.7% to 4.2% over current construction costs depending on the dwelling types and design specification applied. The average uplift in cost across all dwelling types modelled was 1.9%. When compared with the energy savings to the occupants over the lifetime of the house, this delivers real value, benefiting people's lives by bringing comfort and convenience, mitigating against energy poverty and ill health as well as providing the societal benefits of lower carbon emissions.

Under the current regulations a typical new dwelling is built to an A3 Building Energy Rating (BER). The NZEB requirements will equate to an A2 BER. This represents a 70% improvement in energy efficiency and a 70% reduction in CO<sub>2</sub> emissions compared to 2005. It also introduces 20% renewables as a percentage of the total building energy use.

## **Heating Systems**

The NZEB requirements make it more attractive for builders and homeowners to further incorporate renewable technologies and move away from traditional fossil fuels. The Central Statistics Office analysis of Building Energy Rating data demonstrates this shift away from fossil fuels; the installation of oil boilers has dropped from 36% to 6% in new dwellings, and electrical systems make up 35% of heating systems in new dwellings with this percentage growing steadily each year.

Part L regulation is set at cost optimal levels, it is performance based and technology neutral. The availability of a choice of different energy systems delivers economic benefits including competition and choice for consumers. It is a matter for the designer to choose the most suitable technologies to achieve the required performance. The cost optimal calculations are reviewed every 5 years and regulations will be amended if performance levels deviate off cost optimal. This regular assessment and flexibility provides opportunities to capture the benefits of innovation and economies developed in industry over time in regulations.

It is estimated that the cumulative improvements to regulations mean that a dwelling built to the 2011 Part L regulations requires 90% less energy than the equivalent dwelling built in 1978 to deliver the same standards of heat, hot water and light. This shows the very significant progress that has already been made in the standards for new buildings.

## **Major Renovations**

In relation to existing buildings the challenge is inevitably more difficult. The Energy Performance of Buildings Directive requires that where buildings are undergoing Major Renovation, the whole building should be brought up to a cost optimal level, in so far as this is technically, functionally and economically feasible.

The cost optimal level performance is the best energy performance that can be achieved in a building for the lowest lifetime cost when both capital costs and operating costs are accounted for over a 30 year period.

Our technical guidance documents provide detailed guidance on how this can be achieved in practice for buildings undergoing a Major Renovation. The performance levels have been set to be proportionate to the original cost of works and ambitious but realistic so as not to create an unintended barrier to renovation.

Of course building regulations will not increase renovation rates in themselves, but they will ensure that when renovations are carried out

they are carried out to this level – typically equivalent to a B2 Energy rating.

## **Social Housing**

In relation to social housing, funding of some €116 million has been provided from 2013 to end-2017 to improve energy efficiency and comfort levels in almost 64,000 local authority homes. In addition, energy efficient measures have been incorporated into the 9,000 plus vacant social housing units that have been returned to productive use since 2014. This effectively means that approximately 50% of our social housing stock has been energy retro-fitted. While energy efficiency activity had traditionally been focused on the refurbishment of vacant properties, the current energy retrofitting programme launched in 2013 was aimed more broadly at the social housing stock, in particular to improve the energy efficiency of older apartments and houses by reducing heat loss through the fabric of the building, in order to improve comfort levels and address issues around fuel poverty. This programme has 2 Phases. Phase 1 focused on the lower cost improvements such as cavity wall and attic insulation. Phase 2 is now targeting higher cost measures– for example fabric upgrades and glazing etc.

## **Buildings other than dwellings**

Turning to buildings other than dwellings, NZEB and the requirements for Major Renovations were introduced for non-residential buildings in November 2017, through an amendment to Part L of the Building Regulations. These new performance requirements improve the energy

performance in the order of 60% and introduce mandatory renewables on all new non-residential buildings. These regulations apply to works to new and existing buildings which commence after 1 January 2019 subject to transition arrangements. In advance of publication we went through an extensive public consultation process and regulatory impact assessment in early 2017. We worked closely with the Department of Education and Skills, the Office of Public Works and Health Services bodies, as well as many Construction Industry bodies to develop, elaborate and introduce the regulations and guidance.

## **Charging for Electric Vehicles**

A new element of the revised Energy Performance of Buildings Directive ((EU) 2018/844) is the provision of infrastructure for charging of electric vehicles. Lack of recharging infrastructure is seen as a barrier to the take-up of electric vehicles in the EU and the revised EPBD has new provisions which aim to accelerate deployment. The EPBD requires the provision of appropriate enabling infrastructure for all new buildings and buildings undergoing Major Renovation with more than 10 car parking spaces by 2020 and, in addition, the installation of the actual recharging point is required in the case of those non-residential buildings. By 2025, it requires the installation of a minimum number of recharging points for existing non-residential buildings with more than 20 parking spaces. We are in the process of drafting these regulations and will be publishing them for public consultation in 2019. We are consulting with the Commission for Regulation of Utilities (CRU) and the National Standards

Authority of Ireland in this process and will have the regulations in place by March 2020.

## **Conclusion**

In conclusion, Chair, the Department will continue to work hard on all of the measures I have outlined, notwithstanding the other challenges we face in terms of building up our national housing stock. We have ambitious targets in terms of the quantity, type and location of homes to be delivered and we are also ambitious for climate action. We will ensure that the quality of the homes we are building for future generations continues to achieve the high standards we are setting for decarbonising our built environment.

I and my colleagues will be happy to address any questions the Committee may have.

Thank you.