DÁIL ÉIREANN

AN COMHCHOISTE UM GHNÍOMHÚ AR SON NA HAERÁIDE

JOINT COMMITTEE ON CLIMATE ACTION

Dé Céadaoin, 10 Deireadh Fómhair 2018 Wednesday, 10 October 2018

The Joint Committee met at 2 p.m.

MEMBERS PRESENT:

Deputy Jack Chambers,	Senator Paul Daly,
Deputy Marcella Corcoran Kennedy,	Senator Máire Devine,
Deputy John Lahart,	Senator Tim Lombard,
Deputy Tom Neville,	Senator Ian Marshall,
Deputy Carol Nolan,	Senator Michelle Mulherin,
Deputy Thomas Pringle,	Senator Grace O'Sullivan.
Deputy Eamon Ryan,	
Deputy Brian Stanley,	

In attendance: Deputy Joe Carey..

DEPUTY HILDEGARDE NAUGHTON IN THE CHAIR.

The joint committee met in private session until 2.10 p.m.

Third Report of the Citizens' Assembly: Discussion (Resumed)

Chairman: I ask members and witnesses to turn off their mobile phones or switch them to flight mode as they interfere with the broadcasting service. On behalf of the committee I extend a warm welcome to Mr. John McCarthy, Secretary General of the Department of Housing, Planning and Local Government, Ms Mary Hurley, assistant secretary in the social housing division general, Mr. Paul Hogan, senior adviser, planning, Mr. Seán Armstrong, senior adviser, building standards, Ms Sarah Neary, principal adviser, housing advisers and building standards and Mr. Martin Hehir.

Before we begin the formal proceedings I must advise witnesses on privilege. By virtue of section 17(2)(l) of the Defamation Act 2009, witnesses are protected by absolute privilege in respect of their evidence to the committee. However, if they are directed by it to cease giving evidence on a particular matter and continue to so do, they are entitled thereafter only to qualified privilege in respect of their evidence. They are directed that only evidence connected with the subject matter of these proceedings is to be given and asked to respect the parliamentary practice to the effect that, where possible, they should not criticise or make charges against any person or entity by name or in such a way as to make him, her or it identifiable. Members are reminded of the long-standing parliamentary practice to the effect that they should not comment on, criticise or make charges against a person outside the Houses or an official, either by name or in such a way as to make him or her identifiable.

I invite Mr. McCarthy to give his opening statement.

Mr. John McCarthy: Thank you very much, Chair. I thank the committee for the opportunity to address members today on issues within our area of responsibility. I know the committee has had a number of interesting contributions and sessions to date and they have given rise to a number of issues that fall within the remit of the Department of Housing, Planning and Local Government. I hope we can address as many of those as possible today.

At the outset, I would like to say a few words about Project Ireland 2040, 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 the country. It includes a detailed capital investment plan for the period 2018 to 2027, which is the €116 billion national development plan, 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 among 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 cities, supporting the rural fabric and targeting more compact growth in the development of settlements of all sizes, from the largest city to the smallest village. 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.

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 the 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.

The NPF also supports transition to a circular bioeconomy, 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.

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 the considerable onshore and offshore 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 national planning framework, NPF, states that the development of offshore renewable energy is critically dependent on the development of enabling infrastructure in order to bring the energy ashore and to connect into where it is needed most.

The Department is currently undertaking a review of the 2006 wind energy development guidelines. The review is addressing several 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 is being undertaken in accordance with the requirements of EU Directive No. 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 in early 2019 following detailed analysis and consideration of the submissions and views received during the consultation phase. When finalised, the revised guidelines will be issued under section 28 of the Planning and Develop-

ment Act 2000, as amended.

My Department, in collaboration with the Department of Communications, Climate Action and the Environment which leads 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 Departments, should the need for specific planning guidance for solar farms be identified, this work will be further scoped and progressed.

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.

On climate adaptation, the NPF makes 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 clear that flood risk assessment is now critical in planning for future development 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.

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; and 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 Departments and agencies.

On 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 with regard to methodologies for the evaluation of the likely costs of carbon emissions and benefits of climate change mitigation. This work is expected to be published in 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.

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, NZEB, performance for new buildings from 31 December 2020. In addition, the directive also requires that major renovations to existing buildings are completed to a cost-optimal level where 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.

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 past decade with the aim of improving the energy and carbon dioxide emissions performance of all new dwellings to NZEB performance levels. As a result, 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 publish 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.

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, the range was 0.7% to 4.2% over current construction costs for typical new dwellings to achieve NZEB, depending on the dwelling type 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, benefitting 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. As I stated, this represents a 70% improvement in energy efficiency and a 70% reduction in CO2 emissions compared to 2005. It also introduces 20% renewables as a percentage of the total building energy use.

The NZEB requirements make it more attractive for builders and homeowners to further incorporate renewable technologies and move away from traditional fossil fuels. A 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 and is performance based and technology neutral. The availability of a choice of 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 five years and regulations will be amended if performance levels deviate from cost optimal. This regular assessment and flexibility provides opportunities to capture in regulations the benefits of innovation and economies developed in industry over time. 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 an 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.

The challenge is inevitably more difficult in regard to existing buildings. 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 insofar as is technically, functionally and economically feasible. The cost-optimal level of 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, which will be typically equivalent to a B2 energy rating.

On social housing, funding of approximately €116 million was provided from 2013 to the end of 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 over 9,000 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 retrofitted. While energy efficiency activity had traditionally been focused on the refurbishment of vacant properties, the current energy retrofitting programme, launched in 2013, is 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 two phases. Phase 1 focused on the lower-cost improvements such as cavity wall and attic insulation. Phase 2, which we will move to shortly, will target higher-cost measures, for example, fabric upgrades and glazing.

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 by in the order of 60% and introduce mandatory renewables on all new nonresidential 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. As part of that, 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.

A new element of the revised energy performance of buildings directive, EPBD, is the provision of infrastructure for charging electric vehicles. Lack of recharging infrastructure is seen as a barrier to the take-up of electric vehicles in the European Union 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 ten 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 publish them for public consultation in 2019. We are consulting 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.

In conclusion, 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 for 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.

Chairman: I thank Mr. McCarthy. I will start with a few questions myself. The committee will soon visit the Tipperary Energy Agency. What has the Department done to encourage other local authorities to follow suit and take similar actions to those taken in respect of the Tipperary Energy Agency?

Mr. McCarthy referred to heating systems. We welcome the move away from fossil fuel heating systems to more energy efficient heating. What will Part L of the building regulations provide in respect of future-proofing our heating systems, particularly in new homes that are now being built? What is the likelihood of these homes having to be retrofitted in upcoming years in order to meet new standards? Deep retrofitting has limited scope at the moment. What are the Department's plans for expanding on that?

On non-residential buildings like schools and hospitals, the committee was told a number of weeks ago that for new schools built today, the Department of Education and Skills has determined that the most suitable heating system is oil. That is under technical guidance document TGD033, which was only issued by the Department this year. Do the witnesses feel that document is misguided, knowing the targets we have to achieve?

On the foreshore amendment legislation, why is that legislation delayed and what is needed to develop our offshore wind electricity generation capacity?

Mr. John McCarthy: A number of issues the Chair has raised relate to energy policy, particularly in terms of deep retrofitting. I will answer them to the extent that I can. The Department of Communications, Climate Action and Environment would take the lead in rolling out local government capacity in terms of functions such as those that the Tipperary Energy Agency discharges. At a broader level, we have macro-level responsibility for the local government sector, while other Departments take the lead on particular issues. At a very broad level, as is reflected in the policy document on local government reform published in 2014, we certainly see local government expanding its role in community development and local development, which would encompass things such as local energy initiatives of this kind. However, the specific energy-related dimension is something on which the Department of Communications, Climate Action and Environment would lead in terms of engagement with individual local authorities.

On Part L and the requirements for new residential developments, as I outlined, we have come a long way on the journey towards nearly zero-energy buildings as far as the residential sector is concerned, through changes that were made over ten years ago. We are very much guided by NZEB and what it requires us to do to complete that journey. We are at a very advanced stage and will shortly finalise the new Part L provisions that will provide for us to get that remaining part of the way along towards NZEB. That will deal with new homes and also with the issue of retrofitting. I will ask one of my colleagues to say a little more about that in a minute.

On the approach on which the building regulations are based, I mentioned in my opening statement that they are and have always been performance based. They set the standards that are to be achieved and it is then left to the designers and promoters of developments to work out the best technology to achieve that. On the impact of the regulations and the changes that were made in 2007 and subsequently, we can trace that the performance-based approach has led to significant change. That approach will be reflected in the revised Part L regulations when they are made.

The policy on offshore energy is a matter for the Department of Communications, Climate Action and Environment but I think the question was more about the legislation. That is complex legislation which we have been working on in collaboration with a number of other Departments for a long period. At the moment we are awaiting legal advice from the Office of the Attorney General. We expect to get that shortly. How quickly we will then be able to bring the legislation forward will dependent on what that legal advice tells us. We are very alert to the fact that the legislation is hugely important in terms of ensuring that there is an appropriate consent regime in place for the expected development of offshore renewable energy which we expect to see in the coming years.

I will ask my colleague, Ms Sarah Neary, to say a few words on the approach in the building regulations, particularly in respect of the performance-based approach.

Ms Sarah Neary: As the Secretary General has said, the building regulations are performance based around energy efficiency and CO2 emissions. In setting standards, we are technology neutral. It is up to the designers of public or private buildings to choose the heating systems that are most suitable for overall compliance.

Setting performance requirements in the building regulations is done through a cost-optimal analysis. As Mr. McCarthy explained, that is a life-cycle cost which takes into account the capital and operational costs over a 30-year period. Mr. Armstrong is involved in producing cost-optimal figures on a five-year basis. They show, in cost-optimal curves, the point at which our regulations should be set. Currently, that point allows a number of forms of heating system to be used, for example, gas boilers, photovoltaic solar panels and heat pumps. These would meet the CO2 emission and energy performance requirements under Part L because they take into account costs over the capital and operational periods. Given the volume of houses and other buildings currently required, keeping a broad supply chain available is important.

Chairman: Is it a question of capital and operational costs as opposed to carbon emissions or is it a balance? Is the dilemma that it is too costly to have a more energy-efficient heating system?

Ms Sarah Neary: The systems achieve the same CO2 emissions.

Chairman: Is Ms Neary referring to oil heating systems?

Ms Sarah Neary: There are a number of ways of achieving the overall required performance. In some cases, oil systems can be used. The CSO figures show a significant decline in the use of oil boilers from 36% to 6% in new dwellings and a significant increase in electric heating. The industry is shifting anyway on foot of the regulations and where they are headed. The cost-optimal five-year review of the economic and environmental aspects affords an opportunity to recognise the changes within the industry and incorporate them in the building regulations. If our regulations deviate from the cost-optimal section of the curve, we will have to revise them. That is set out in the EPBD.

Chairman: The Climate Change Advisory Council has stated that Irish homes are using 7% more energy than the European average and are responsible for 58% more carbon emissions. I take it that cost is factored into the choices being made in respect of public buildings and deep retrofits. Am I interpreting what Ms Neary said correctly?

Ms Sarah Neary: These are European rules for the setting of building regulations or codes. It is a requirement at European level to take both factors into account. I am not familiar with the statistics that the Chairman mentioned.

Chairman: They are from a report of the Climate Change Advisory Council.

Ms Sarah Neary: They may be taking into account broader use rather than just what is accounted for under building regulations, for example, consumer use of products. I am not aware of the details. Does Mr. Armstrong know?

Mr. Seán Armstrong: The council's figures include existing buildings, but we are discussing the performance requirements for new buildings. The council made its conclusion based on the full housing stock in Ireland. One of the important points to make about new buildings and, in particular, dwellings is that we have ambitious performance requirements. They are possibly the most advanced performance requirements in Europe. We are slightly ahead of the curve, and the rest of Europe will be following us in the next 12 months because we are all working to the same directive. That we introduced renewable energy requirements in 2007 gave us a head start. In terms of energy performance, we have done much of the heavy lifting over the past ten years. Our standards are very advanced and ambitious.

In terms of cost-effectiveness, we have done a cost-optimal calculation, as required by the European directive. It is a net present value calculation, which allows us to compare hundreds of options applied to different types of building. When we apply different packages, including all types of renewable from photovoltaic and heat pump to district heating and gas boiler, the calculations show that the best energy performance for the lowest energy cost will be set at the energy performance requirements that the Minister is proposing to introduce in the coming weeks.

Mr. John McCarthy: It may be worth stating that the statistics to which the Chairman referred probably reflect one of the points I made in my opening statement. As Mr. Armstrong said, we set ambitious performance standards for new buildings, residential and non-residential, as well as significant requirements for major renovations. The statistics the Chairman referenced may be a reflection of a broad housing stock, much of which is obviously of a particular vintage. While we set standards for what needs to be achieved in renovations, we do not require those renovations to be carried out. That is territory that the committee has probably covered with the Department of Communications, Climate Action and Environment in terms of the incentives and supports that will be made available in order to encourage people to undertake renovations of the housing stock. Such people would then have to comply with the performance standards.

Chairman: The cross-governmental approach, with joined-up thinking across Departments, is key to our considerations. I will now call Senator Lombard, who has ten minutes.

Senator Tim Lombard: I might not need the full ten. I welcome Mr. McCarthy and his team. It is great to have them here.

Given the Department's role in respect of local government and its policy remit, it is an important player in this debate. Mr. McCarthy explained in detail how the planning of our cities and towns was going to be key and that building 40% of new housing on infill and brownfield sites would be required to proceed. Speaking as a public representative, that is an important initiative that needs to be driven forward. Will the Department get that support from the elected members of local authorities? Most of the 40% will fall under the remit of county development plans and, consequently, local councillors. How will the resistance in some cities and towns

to high-rise developments play out for the Department's proposals? Members of some local authorities are anxious about high-rise developments, so this obvious issue needs to be addressed. Should legislation determine how county development plans are drafted or how would Mr. McCarthy go about ensuring brownfield sites in cities are developed and, if appropriate, developments go upwards?

Part of Mr. McCarthy's presentation was on solar farms and the lack of associated guidelines. Will he elaborate? I took a considerable interest in the large number of solar farm applications that had been granted in recent years in my part of the world. There is a lack of planning guidelines. There seems to be a reluctance on the part of Mr. McCarthy's Department and that of the Minister for Communications, Climate Action and Environment, Deputy Denis Naughten, to get involved in drafting and proposing such guidelines. We have guidelines and renewed guidelines for the wind energy but we do not seem to have guidelines for solar farms. Whether it is for a community that might have an issue with a solar farm or for the developer, we must consider security of tender because a gap exists. Perhaps the Secretary General will clarify the following. Does he believe solar farm guidelines are important? Does he believe that we should seek clarity in that market? If so, does he think a body of work will be done?

Amazingly, there is a proposal to build 500,000 units between now and 2040, which is a very significant sum. As one will have seen from the budget yesterday, the local authority element will be a considerable part of that development. I presume that the Department is proposing that there will be an exceptionally high energy standard for those units. How long does the Secretary General think it will take local authorities to retrofit the entire housing stock of 136,000 local authority houses and bring them up to standard? It will take a considerable body of work and finance to retrofit 136,000 units. Where does he see that project fitting into the proposals? Is there a timeline for the project?

Electric cars is a significant issue. The Secretary General mentioned electric cars and the appropriate infrastructure towards the tail end of his speech. In 2010, a programme to provide 1,000 charging points for electric cars was rolled out. Will legislation be invoked to ensure charging points are included in planning permissions? There is a vast sum of money attached to local government and local government developments at present. I am not aware of any social housing or formal housing project that has charging points attached. Where does the Secretary General think the Department's guidelines, planners and engineers will be involved in any plans received? If there was a plan to build a local authority housing estate in Cork tomorrow morning, would the Department insist that one of the qualifying criteria for planning permission be the installation of electric charging points? Should the local government section and local authorities take the initiative and ensure we have so many electric charging points per housing estate? I believe that we should have such core infrastructure and ensure it is attached to planning permission. If the local government does not provide such infrastructure then it is very hard for developers to do so. When does the Secretary General propose to move that kind of technology and infrastructure into the existing housing stock? By investing a significant amount of money in such infrastructure would show leadership. Significant developments, and I mean Part VIII planning permissions, have been granted throughout the length and breadth of this country but we have not seen much infrastructure to allow for charging points. I ask the Secretary General to clarify these issues.

Mr. John McCarthy: I shall answer the questions in order and I might call on some of my colleagues to answer as we work our way through them.

In terms of the NPF, as the Senator has rightly said, the ambitions of the NPF are significant

in terms of what it seeks to achieve around how we plan for future development. It is very clear that the framework aims to deliver a pattern of development that differs from what we have had so far and I suppose it has a disruptive element. Obviously the framework is a high-level national strategy. The two next critically important pieces of the jigsaw will be the regional spatial and economic strategies, which are being worked on by the three regional assemblies at the moment. The strategies will likely go to public consultation in all three cases within the next few weeks. When those are adopted they, in turn, will guide the adoption of city and county development plans. It is really to try and ensure that there is a cascade from the centre to the regional and to the local, and that it all makes sense at the end of the day.

As the Senator rightly said, when it comes to the regional spatial and economic strategies, RSESs, and then to city and county development plans, they are for the elected members to adopt as part of the democratic process. I am sure, and I think there are already, in the context of RSESs, quite a few debates going on and that is as it should be. If the NPF is designed to try to deliver a different form of planning and development into the future, it would be a bit worrying to some extent if there were not debates of that kind going on. I have no doubt that such debates will continue on through the consultation process on the RSESs and down to city and county development plans.

In terms of high rise units being part of the plan, there is high-rise and high-density development. Certainly, in many areas where we have planned and developed over the past while, we have come a long way in terms of higher density without necessarily going very high-rise. One can achieve a lot in that space by good and imaginative design.

The consultation period has just finished for new guidelines on heights for apartment developments and I expect the guidelines will be finalised shortly. I will not say where they will land because we are considering the responses received as part of the public consultation process. There are choices and decisions that must be made if we want to deliver an Ireland in 2040 in the planned way mentioned in the NPF. It does have to differ from the way that it was done heretofore, which presents challenges around density and high-rise issues, and the use that we make of brownfield sites.

Ultimately, one would hope that the process through the RSESs and the city and county development plans would get us to where we need to be. I am around long enough to know that difficult situations arise. There are times when ministerial powers of direction must be considered and, sometimes, deployed. We will just have to see how things progress with the work that is under way. The level of ambition and future way of planning is hugely attractive. I hope that the city and county development plans will recognise and reflect that in due course but we will have to see how that goes.

Senator Tim Lombard: The Secretary General has great faith in elected members.

Mr. John McCarthy: I fundamentally believe in democracy, Senator. People have genuine concerns and issues but the debates that are taking place reflect a sense that people want to get their heads around what these things mean. We will see how all of that pans out.

In terms of solar farms, we are talking to the Department of Community, Climate Action and Environment on the issue and specifically, as part of that Department's renewable energy roll out, whether the need for planning guidelines is something that we need to act on. We tend to roll out planning guidelines sparingly enough in the overall context. Certainly, when one considers other jurisdictions and the extent to which they issue planning guidelines from the centre, we tend to do them for very specific issues and types of development. As I said in my opening statement, we have to go through that process with that Department, and if the outcome of that process is that there is a need for consistency and guidance on how those types of developments are dealt with by individual planning authorities or An Bord Pleanála on appeal, then we will engage with that need as we have on other areas. We are trying to finalise the wind energy guidelines, as I referred to at the start.

In terms of the housing ambition, the Senator was correct to say that the figure is over 500,000 new homes. That is how many units the national planning framework considers will be required over the period to 2040 and the figure takes account of the population projections that are in place.

In terms of social housing, I outlined at the start the ambitious performance-based requirements that we have in place already through Part L of the building regulations. We will accelerate the requirement further once we finalise shortly the revisions to those regulations that are necessary in order to get us the final part of the journey towards nearly zero energy building, NZEB, performance. Social housing developments will have to comply in the same way as any other housing development. Local authorities have a reasonable track record in coming forward with proposals, sometimes ahead of time, that are almost as good as demonstration projects. The performance requirements under the new regulations will be more cutting-edge in terms of energy and emissions.

I will ask my colleague to talk about charging points and their infrastructure. There are requirements in the NZEB directive which we will incorporate into regulations in due course. We will go to consultation on them next year, but any social housing development will have to comply with them, too.

Mr. Seán Armstrong: Under the energy performance buildings directive, we are required to introduce infrastructure for EV charging. Under the directive, for new non-residential buildings and buildings undergoing a major renovation, with more than ten parking spaces, there must be at least one charging point and the installation of ducting infrastructure for at least one in five parking spaces. For new residential buildings and residential buildings undergoing a major renovation, with more than ten parking spaces, the directive requires the installation of ducting infrastructure for every parking space. We will introduce the regulations next year. By March 2020 we are required to put in place regulations to require that existing non-residential buildings, with more than 20 parking spaces, must have a minimum number of charging points from 2025. For new buildings and buildings undergoing a major renovation, there will be a requirement for infrastructure, with recharging points in non-residential buildings.

Mr. John McCarthy: I did not deal with Senator Tim Lombard's question about retrofitting social housing stock. We are transitioning from the first phase of a retrofitting programme for social housing stock which has seen over 60,000 homes provided with cavity wall and attic insulation. We introduced the programme in 2013 and used the resources we had available to tackle some of the easier social housing properties. We are now working to finalise arrangements for a second phase which will be more ambitious. We will try to target the oldest social housing stock. Approximately 40% of social housing stock was built in the past 20 years, 30% between 20 and 40 years ago and the remaining 30% over 40 years ago. The last mentioned would have an energy rating between categories E and G. How quickly we complete this element of phase 2 will depend on the cost per unit and the overall funding available. As there are some 40,000 such units, it is a significant programme that will take a number of years to deliver.

Senator Tim Lombard: On the electric car charge, did I understand correctly that, between now and 2025, we need to retrofit spaces in existing non-residential properties such as industrial estates, business centres, etc., where there are no car parking spaces, or is it only for new builds?

Mr. Seán Armstrong: The requirement is that from 2025 non-residential buildings, with more than 20 parking spaces, in the buildings or adjacent to them, must have a minimum number of charging points. As the regulations must be put in place by 2020, there will be a five-year lead-in period.

Senator Tim Lombard: Will the owners of the car parking spaces pay for the work?

Mr. Seán Armstrong: The owners of the buildings will be responsible for it.

Senator Tim Lombard: Is there any proposal to retrofit private housing estates to provide electric car parking spaces?

Mr. Seán Armstrong: We are implementing the directive, but we will consult the Department of Communications, Climate Action and Environment to see what its plans are. A light electric vehicle, LEV, task force is looking at these issues.

Senator Tim Lombard: When will the consultation take place?

Mr. Seán Armstrong: We have already started consultation with the National Standards Authority of Ireland and the Commission for the Regulation of Utilities. We have to prepare regulations and the regulatory impact assessment will require us to discuss the issue with the Department of Communications, Climate Action and Environment in the coming months.

Senator Tim Lombard: Will ESB Networks be needed as a figurehead or will it be the Department? Will the Department put the regulations in place and leave the industry to sort it out?

Mr. Seán Armstrong: The detail of how the regulation will be written is not yet clear. It is something we will have to work through.

Deputy Jack Chambers: I thank the officials for coming before us. I am looking for clarity on the 2025 target for the provision of infrastructure for electric vehicles. Is that the end date for implementation? When does the Department expect it to be delivered? I fear that there will be an infrastructural deficit at a time when the market will have geared up. We may find that core infrastructure is behind a market that has advanced. Can the Department accelerate the timeline beyond what is included in the directive? Is there a way to fast-track the consultation process to ensure the infrastructure will be in place? I believe we will see huge acceleration by 2020. We do not want the places in which people live not to have been retrofitted. I would hate to think that in ten years' time the reason people will not be using electric vehicles or able to get one is that we failed to retrofit the infrastructure soon enough.

Mr. Seán Armstrong: We need to differentiate between new buildings, or buildings undergoing a major renovation, and existing buildings. For new buildings and buildings undergoing major renovation, we are required to have the regulations for infrastructure in by March 2020, which is quite a short timeframe. We are working with the National Standards Authority of Ireland, NSAI. We must have a specification and a standard, which will go for public consultation by the NSAI standards committee by the end of the year, and the public consultation will have to be reviewed. In parallel, we will develop our regulation to have it in place in the required

timeline, within 15 months, and it will apply thereafter. We will have to develop the exact detail and what the transition arrangements are as part of the development of the regulation and public consultation period. As I said, for new buildings and buildings undergoing major renovation, there will be regulation in place by March 2020 for buildings with more than ten parking spaces.

For existing buildings, there is a five-year lead-in, as the Deputy highlighted, because there needs to be some build-up time to allow buildings to be retrofitted with these charging points. That is why there is a time span given for the introduction of those charging points.

Deputy Jack Chambers: As per the directive, what will the consequence be if they do not do that?

Mr. Seán Armstrong: In the case of new buildings and buildings undergoing major renovation-----

Deputy Jack Chambers: For the majority.

Mr. Seán Armstrong: They will fall under building regulation and, therefore, they will be subject to the building control process. For existing buildings with more than 20 parking spaces, it is an unusual regulation, which we have not introduced before, where we retrospectively go to buildings and put in a requirement if there are no works taking place. It would not fit in building regulations or under the Building Control Act and, therefore, the mechanism for introducing and enforcing it is not clear. The Commission is developing guidelines on how we should introduce the regulation, and we must develop its application a bit further.

Deputy Jack Chambers: What does Mr. Armstrong expect the enforcement procedure to be? When we talk about existing buildings, we are talking about the vast majority of car spaces. What does he expect the retroactive element of the enforcement mechanism to be? We have issues with retroactive laws as they are. How does he see that working?

Mr. Seán Armstrong: That must be developed. The directive was published in July this year, and we are looking at the regulation, meeting the Commission and developing the guidelines. As I said, it is an unusual regulation, not just for Ireland but for other member states as well. How it will be applied is something that needs to be determined.

Deputy Jack Chambers: On the social housing stock, Mr. Armstrong mentioned that 64,000 have been completed to date. What targets are there to ramp up the programme? What is the timeline to get it to an end point where all the social housing stock is retrofitted? Has an audit been done of the category of social housing that falls into the worst energy-rated houses, and are they being specifically targeted?

Mr. John McCarthy: We will complete phase 1 of the retrofitting programme between this year and next year. We will then move to phase 2, on which we have been through some pilot work, but we must do some further work on it before we roll it out.

In regard to the audit, we are working on the basis that, as we roll out phase 2, we will need to target those which are oldest on the clear assumption they are the poorest energy performers. As I said to Senator Lombard earlier, we estimate that approximately 30% of social housing stock, as it stands, is more than 40 years old, which would equate to approximately 40,000 units. They will be our priority for phase 2, albeit not exclusively because there will be areas where there will be mixed areas where there will be some newer buildings also. Therefore, it may make economic sense to be flexible. The timeline for completing a phase 2 retrofitting

on those older houses will be determined by the programme of funding we have available over the following years. On the basis that it has taken us six years to do phase 1, which is a much lighter programme of work, for approximately 60,000, it will be a programme of a number of years to be able to do phase 2 on those priority houses.

Deputy Jack Chambers: How many years does Mr. McCarthy expect?

Mr. John McCarthy: It will depend on the funding available.

Deputy Jack Chambers: The Department has come in for much criticism about approval processes and timelines for housing approval. What is the climate change element of the Department's process of approval for housing submissions that are made by different local authorities? Will Mr. McCarthy provide clarity to this committee and to public representatives on how the Department makes decisions on housing projects that are submitted to it? According to local authorities, it can take two years for the Department to approve various housing projects.

Mr. John McCarthy: On the climate question, we ultimately expect social housing developments to be compliant with the ambitious performance requirements in the building regulations. Therefore, there is no issue of any significance in that way. As I mentioned, we have used social housing projects as demonstration projects. We have some social housing projects, for example, that are delivered to NZEB standard even though we are only now finalising the set of regulations that will introduce it as a requirement.

The Deputy said that some people say approval processes can take the Department two years.

Deputy Jack Chambers: I did not. It was an opportunity for Mr. McCarthy to clarify the matter.

Mr. John McCarthy: Yes, and in some respects I am glad the Deputy raised it. It is in no one's interest for local authorities to say that something takes two, three or four years while we say it does not. To deal with this, we recognised when we put Rebuilding Ireland in place that we were moving from a situation where local authority house building had virtually ground to a halt and we needed to move and ensure we could move from that situation to delivering the ambitious build programme for which Rebuilding Ireland provides. To position ourselves to do that, we agreed a programme with the local authority sector and that takes us all the way from the first thought of a social housing project to getting on site. We have mapped it versus best practice in private development, and it is a period of 59 weeks from first thought to getting on site. When we have spoken about that, I have heard some people saying that it takes 59 weeks for the Department to approve a project. When I say 59 weeks, I mean that is 59 weeks to design it, take it through the Part VIII process, take it through procurement, and get on site. There are four stages within that period of 59 weeks, and for each stage we have made commitments on how long projects will be with us. Of the 59 weeks in total, a project is with us for 15 weeks, and the remaining 44 weeks is for the design work by the local authorities, the Part VIII process, which takes a number of weeks of public consultation, and the procurement, which takes time.

From all our points of view, and I think the local authorities share this perspective now, our key requirement is that we have that timeline in place and adhere to it in order that we can push projects. It can be seen in the social housing construction status report which we publish quarterly. I think we have published six of those, the first of which was at the end of 2016. As each quarter goes by, therefore, it can be seen that the number of projects and houses in the pro-

gramme is increasing and has increased substantially. Our key aim is to ensure that we honour our commitments as part of that process and local authorities do likewise to build houses for people.

Deputy Jack Chambers: The Department is not exceeding the 15 week window at any level. Is that correct?

Mr. John McCarthy: That regime is not long introduced. We have to measure it for all of the stages. We have a delivery office that is being resourced to measure that so that we can measure compliance versus the 59 weeks for all the stages we have within that and ensure that it is working the way it should.

Deputy Jack Chambers: Mr. McCarthy is saying it is working. The blame in respect of the 15 week window is being pinned on the Department. Is Mr. McCarthy telling this committee that the Department is adhering to the 15 week window? Is the Department exceeding it or has it been exceeded by the Department?

Mr. John McCarthy: There would be cases where it would have been exceeded and that would have been on a certain basis. If we say we will do an approval at a particular point in the process and it is only going take three weeks, that assumes we get everything we need to be able to make a decision. These things can be argued around the place. From where the Department sits, and I can say this for all of my colleagues, including those present and others who work on this, our business is to get houses built for people. That is why we put the 59 week process in place in partnership with the local authorities. It is now up to all of us, including the Department and the local authorities, to honour that process, make it work and deliver for the people for whom we need to deliver.

Chairman: I am mindful of the number of speakers ahead. Deputy Corcoran Kennedy is next.

Deputy Marcella Corcoran Kennedy: I thank Mr. McCarthy and his officials for coming in this afternoon. Is Mr. McCarthy satisfied that there is sufficient interdepartmental connection? It has come across to us from others who have come in to help us with our work that there should be a whole-of-government and a whole-of-society approach. If we are to do that and if we are to be meaningful about it, there needs to be greater engagement across Departments. Perhaps the particular committee could be accountable to the Department of the Taoiseach. What are the views of Mr. McCarthy on that?

Met Éireann is under the remit of the Department. There is a strong view that Met Éireann could play a better role in communicating the need for explaining what is happening with climate change. It is a missed opportunity to reach the citizen. What are the barriers to Met Éireann doing that, if any?

Does the Department have responsibility for food waste? Is that gone from the Department now?

Mr. John McCarthy: No, that is for the Department of Communications, Climate Action and Environment.

Deputy Marcella Corcoran Kennedy: We have witnessed considerable drought this year. Does the Department have any requirements or regulations in terms of water harvesting in new builds, including buildings, single dwellings and commercial dwellings? I imagine that will be required in the long term or short term.

I came across a new word in the Department's document that I had never heard before: "barrage". What does that mean? Has it been successful in other countries? What does it mean exactly?

My next question is on mitigation and forestry. Mr. McCarthy has talked about developing additional forests and mixed species and so on. Does the role of the Department go so far as to engaging with the State agencies that hold large landbanks?

Another question relates to the national planning framework and the role of local authorities. The Intergovernmental Panel on Climate Change report was published in recent days. Is the Department now accelerating the work that it had planned to do under the national planning framework? It strikes me that all the Departments need to put the foot on the accelerator as far as that goes, although not using fossil fuels.

Chairman: It would have to be an electric vehicle.

Deputy Marcella Corcoran Kennedy: Acceleration would be acceptable.

The other point is around the governance of the national planning framework. We are looking at the interdepartmental set-up. What governance structure is in place around achieving what is required? That will do for a start.

Mr. John McCarthy: The Deputy asked about interdepartmental connection. The committee would have had some discussion on this with colleagues from the Department of Communications, Climate Action and Environment when they were before the committee. They lead in the climate agenda, on the mitigation action plan and on climate adaptation. From our perspective I have no sense that a lack of interdepartmental engagement is a barrier. Colleagues here are in different interdepartmental groups. There are a range of interdepartmental structures for how we work together, including in the climate sector. Some colleagues here are on some of those interdepartmental structures. It is evident from some of the conversation today on renewable energy that we have major engagement with the Department of Communications, Climate Action and Environment around the plans for offshore development and what that means for us in terms of the regulatory regime we need to put in place. We have talked to Senator Lombard on solar and what we might need to do from a planning point of view for the roll-out of solar infrastructure. Again, that is with Department of Communications, Climate Action and Environment.

Certainly, we are active in interdepartmental engagement. I suppose it is more the knottiness of some of the issues rather than lack of engagement. Sometimes that is the nut that needs to be cracked.

I might move on to the national planning framework and then I will come back to the other issues because they are similar in a sense. The national planning framework and the national development plan together fall under the Project Ireland 2040 umbrella. As part of the implementation process the Government agreed to put in place a delivery board. The board is co-chaired by me and the Secretary General of the Department of Public Expenditure and Reform, which leads on the national development plan. The board is comprised of all Secretaries General of the Departments that have a role in implementing the national planning framework and in delivering on the national development plan. That structure has been put in place and is now up and running. The board has met on four occasions. The board reports back to Govern-

ment and the relevant Cabinet committee. The intention is that it will produce an annual report to show the work it is undertaking each year in delivering on the national planning framework and the national development plan. For example, one thing we have been looking at in the early meetings is the issue around the regional, spatial and economic strategies that I discussed with Senator Lombard. These form the crucial next steps in taking what the national planning framework aims to achieve and cascading it to regional level before it moves on to local level. Representatives from the three regional assemblies have been in to talk to us about the work they are doing as part of the cascading exercise. Again, it is all part of the process of trying to ensure that the various pieces of the jigsaw are in place and slotting in together as needed.

Deputy Eamon Ryan: We had asked earlier whether we could get a copy of the first report from that forum. I believe the Department has made a single report to date. To aid our work we asked whether it would be possible to get a copy of it. The Secretary General from the Department of Communications, Climate Action and Environment did not seem to be able to say whether he could. Will Mr. McCarthy provide us with a copy of that report?

Mr. John McCarthy: I do not think it was a report. It was a memorandum that went to Government. Certainly, the intention is that we would do an annual report that would be published. If I am interpreting the Deputy correctly, the matter under discussion previously was more of an update on the implementation of the national development plan and it came from the Minister for Public Expenditure and Reform, but it was a memorandum that went to Government as opposed to a report.

Deputy Eamon Ryan: Could we have that?

Mr. John McCarthy: I am not the owner of that memorandum and I did not put it to Government but I can certainly follow up with the Department of Public Expenditure and Reform.

Met Éireann is active in the climate area in several respects, especially in research. It has taken climate and meteorological observations over many years and looked at them, analysed them and tried to draw out scientific evidence to show how weather patterns have changed and continue to change. There has been some discussion of whether an element of climate communication could be incorporated into the weather forecasts routinely broadcast on television. I am unsure that is the right way to get such information across, although I acknowledge that we must communicate it somehow. The communication of the importance of individual behaviour and behavioural patterns and the consideration of how to influence behavioural change must form part of the climate agenda. I am open to consideration of the role that Met Éireann could play in that regard.

I raised the issue of the television weather forecast in that regard because it is a two-minute or two and a half minute broadcast and the audience it attracts very much wants to know what the weather will be in the coming days. If Met Éireann were to take on a role in respect of communicating a climate change message, it would need people with better communications skills than mine to ensure that it would deliver what we want it to deliver. Alternatively, an engagement specifically on climate issues and which would be promoted could be broadcast each month or on another basis. Our colleagues in Met Éireann deliver the weekly farming forecast each Sunday which grabs the attention of farmers, who engage with it because it gives them perspective on the weather for the coming week. We need to tease out those sorts of issues.

Met Éireann is very active in the climate space and will continue to be part of the process of building the evidence base and trying to understand changing weather patterns and how they are

manifesting themselves. It is doing a significant amount of work on climate attribution, which is still in its early stages of development, in terms of trying to understand the extent to which various and changing weather patterns may be attributable to particular climate phenomenon. It is active in the area of climate change and will continue to be so.

Did I neglect to answer any of the Deputy's questions?

Deputy Marcella Corcoran Kennedy: I asked about water harvesting.

Mr. John McCarthy: We have issued non-mandatory guidance on water harvesting. Ms Neary may be better placed to address this issue.

Ms Sarah Neary: Part H of the building regulations contains guidance on rainwater and grey water harvesting.

Deputy Marcella Corcoran Kennedy: To promote a sense of urgency, should there mandatory requirements rather than guidance in that regard?

Ms Sarah Neary: The standards in place ensure that any water harvesting that is done is done properly.

Deputy Marcella Corcoran Kennedy: Yes, but it is not required to be granted planning permission.

Mr. John McCarthy: We are looking more generally at the water sector from a climate adaptation point of view. We must have a climate adaptation strategy for the sector in place by September of next year. Mr. Hehir may be able to provide further information on what will be considered under the strategy.

Mr. Martin Hehir: The Government published the national adaptation framework in January of this year and a decided at the end of March that adaptation frameworks for 12 areas would have to be produced by various Departments and public bodies. We have responsibility for water quality and water services infrastructure and expect to produce the framework by the end of September 2019. We are looking at weather events over the past 20 years and using modelling to consider how such events are likely to change over the next 20 or 30 years. Based on that research we are prioritising what we consider to be the most serious issues and using those to set priorities for Irish Water and the rural water sector. That will encompass how their investment programme works, how resilience can be improved, where assets are located and how they can be climate proofed. Irish Water has been building those factors into its business processes. We envisage a public consultation of approximately six weeks before next summer, and that will be based on a draft plan.

Deputy Marcella Corcoran Kennedy: Mr. McCarthy referred to a barrage.

Mr. John McCarthy: I am not sure I pronounced it correctly. It is a piece of infrastructure such as the Thames barrage in London which is deployed when there is a risk of flooding. It can come in many forms. The OPW takes the lead on such infrastructure. For example, its project in Cork, which is the subject of much media coverage, is an attempt to protect the centre of the city from flooding of the kind it has experienced in the past. Flood prevention measures range from infrastructure as significant as the Thames barrier to micro-measures such as something that slots into the doorframe of a building or house if it is prone to flooding. I was making the point that the issue of flood prevention and flood management must be addressed in the con-

text of climate change and that barrages are one of the pieces of infrastructure that could be deployed as part of the response to flooding.

Deputy Marcella Corcoran Kennedy: Mr. McCarthy referred to the potential of Met Éireann and so on. Is anything specific happening in that regard, such as figuring out how it can be used, or is there a question over whether it is contracted to provide a specific item - the weather forecast - for RTÉ, and there is no scope to do anything further?

Mr. John McCarthy: It is contracted to RTÉ to provide the weather forecast and that arises from a procurement process. That would not be a barrier to it performing the type of role envisaged by the Deputy. For example, it provides the forecasting required under its contract and, in addition, during severe weather events Met Éireann staff appear on RTÉ morning, noon and night in various contexts. We want to ensure that there is clarity regarding the role which we may ultimately assign to Met Éireann in terms of whom a broadcast should reach and whether it sits within the broader programme of communications which must be put in place for communicating climate change and all of the issues that go with it.

Deputy Marcella Corcoran Kennedy: Will it be specifically considered by the Department?

Mr. John McCarthy: Discussions are ongoing between our colleagues in Met Éireann and RTÉ on some of these issues. They are at a very early scoping stage but those conversations are taking place.

Deputy Marcella Corcoran Kennedy: Has the report of the Intergovernmental Panel on Climate Change, IPCC, stimulated urgency within the Department to fast-track its work in this area?

Mr. John McCarthy: My Department was the Department of the Environment, Community and Local Government until two years ago, so although we no longer lead on climate action, we had a lot of engagement with the climate agenda over many years. The report to which the Deputy refers and which was published in the past couple of days is in some respects just another reflection of the urgency of the climate situation. The Department has certainly been aware of that urgency for a considerable time, as evidenced by the changes we made to the building regulations over a decade ago, long before we were required to do so, which have led to us almost reaching the NZEB requirements far earlier than might otherwise have been the case and having far less left to do in that regard.

Deputy Brian Stanley: I welcome the delegates from the Department. This is an important opportunity for the committee to try to deal with some of these issues.

On electric vehicles, did Mr. McCarthy state that from 2020 all new developments containing more than ten dwellings must have charging points in place? Will that come into force on 1 January 2020 or 31 December 2020? On a related matter, are there plans or is there work under way to retrofit charging points into hospitals, local council offices, Government buildings and departmental offices such as those of the Department of Agriculture, Food and the Marine?

It is probably best if I ask all my questions now. On another planning issue regarding solar and wind energy, Mr. McCarthy stated:

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.

This has been going on for years. The witness was in that Department with Mr. Phil Hogan when he was the Minister. I was my party's spokesperson on that brief. Former Deputy Pat Rabbitte and a few other Ministers have come and gone since then. Can nothing be done? What is happening here - and I have told the Minister this - is that the door will be closed after the horse has bolted. The wind farms that should not be built have already been built. We need wind farms but there are some bad examples, particularly in the midlands. These wind farms have been built without proper guidelines, not to mind regulations, being in place. It has already happened. I met representatives of the ESB last Friday to discuss a number of matters, including this one. They said, in respect of the development and roll-out of wind farms, that the grid is almost up to capacity in some areas. There are parts of the country where there will be no more wind farms. The show is over, and without having the necessary guidelines in place. I could see this happening and I am on the record for saying it month after month to Minister after Minister. I am taking this opportunity to put the question to the officials. For God's sake, will somebody try to get those in place?

The offshore element of wind energy generation has been much more costly up to now, but there is new technology. Some countries are using floating wind farms. In England, Scotland and Wales, 8.5% of total generation comes from offshore wind. In terms of our research, what is the current position on moving into that space? Obviously, we have an advantage because Ireland is an island nation. Some people in the engineering profession claim that we could export that offshore wind energy to France, for example, given that we will soon have the Celtic interconnector.

I will move to the subject of housing. The witness referred to the 59-week process and the four stages. Within those four stages, there are 19 stages. They are on the list circulated by the Department to local authorities. I do not have a copy of it with me. It is in my briefcase in my office. There are a number of steps. I will take the example of the scheme in Portarlington, the 22 houses at Ballymorris. It took three and a half to four years from conception to getting them built. Local councillors and officials are frustrated with this and one can imagine what it is like for the people on the housing waiting list.

I will put something that puzzles me to our guests. When I drive to Deputy Pringle's county, I see houses along the way that are very similar in design to the houses in my county. They were all built in the period from the 1930s to the 1960s. I have talked to officials and engineers in the local authorities about one of the things that is slowing down the process - it would turn one's hair grey quicker than mine is already turning - which is the fact that every house has to be designed from scratch. I accept that this is not the 1930s. People had no technology then whereas we have now. Some of the officials will be familiar with Conniberry Way in Portlaoise. The houses there fit into the category of being nearly zero-energy structures. I have been in them and they are top of the range. One could heat them with a candle even in freezing weather owing to the standard to which they were built. I give full credit to everybody involved in that project. Why can we not use that design? I am told by the engineers in the county councils that what is causing one of the problems is the design for energy. Can we not take that template and use it in Donegal, Offaly, Waterford, Dublin, Mayo and elsewhere? We could have three or four basic designs.

Those who want social and affordable housing will be okay if there are 700 or 800 people

in another county living in similar looking houses. It will not keep them awake at night. It certainly will not keep me awake at night and it should not keep anybody here awake at night if we are getting people housed instead of tripping over them sleeping on the street outside this building. Unfortunately, that is happening in provincial towns as well. Why can we not have four generic designs for one, two, three and four-bedroom houses and get on with it instead of having to go back to scratch? The architects are rubbing their hands about this because they have skin in this game. One cannot blame them. It is their job to design. That is their profession and I am not knocking them for that. My point is that there is no need to start from scratch each time.

I remember when the requirement for houses to be architecturally designed was introduced. If the officials are ever in County Laois I will show them the houses that the council designed. They were built from the 1970s up to the 1990s. My recollection, and I was a county councillor at the time, is that in the period from 2001 to 2003, there was a change to them having to be architecturally designed. I can show the officials both types of houses. The ones that are architecturally designed had huge maintenance problems from the start. The ones that were designed by the council, and it was not by an engineer but by the technician in Laois County Council working at a desk, have very few maintenance problems or recurring problems. They were designed very practically. I hope the witnesses will address that question.

Mr. John McCarthy: I will continue about the four-stage approval process again since it has been raised.

Chairman: I will not ask you to repeat an answer you have already given. In fairness it is veering a little away from climate action.

Mr. John McCarthy: The Deputy has raised the issue.

Deputy Brian Stanley: The energy aspect is causing the problem.

Mr. John McCarthy: I will take the questions in turn. I cannot talk about offshore renewable policy because that is not our area. It is a matter for the Department of Communications, Climate Action and Environment. With regard to the onshore element, we would love to have had the wind guidelines in place. Many policy issues have had to be worked through under many different Governments. Unfortunately, what delayed us at the end was the impact of a European Court of Justice judgment which meant we had to go through a SEA process. We are at a point where we will be able to put that SEA and the environmental report out to consultation in the next few weeks.

Deputy Brian Stanley: How long will that last?

Mr. John McCarthy: We generally allow eight weeks for consultation. That will take us to Christmas so that is why I mentioned early 2019 to finalise them. We will need a few weeks at the end of the consultation period. In the previous round of public consultation on the first revisions to the guidelines we received 7,500 submissions, if memory serves. We will conclude it as quickly as we can after the consultation process is finished but we have to work our way through whatever we get in that.

It has not been a blank canvas without those guidelines. The 2006 guidelines still remain in force. I am not disagreeing with the Deputy in terms of his views on certain projects that have received planning permission or are in place, but I am also aware of many wind projects that have been refused planning permission either at local authority level or at An Bord Pleanála.

We are at the final stage. Once we get through this public consultation on the revisions, we will get them finalised as quickly as possible. However, we will have to take account of the submissions which come into us because that is a critical part of the SEA process.

We are developing standard layouts for local authority housing. If a project is taking four years, such as that to which Deputy referred, not only are the local authority or the Deputy frustrated, the Department is too. There have been projects which have been around for three to four years. The reason they did not progress previously was because, in 2013 and 2014, the funding just was not available for them. If there is a particular project which the Deputy has in mind, I would not mind getting the details of it because it frustrates me. We can discuss it afterwards.

We have introduced a one-stage process for the smaller projects of up to $\notin 2$ million. There are approximately 200 projects which could proceed through a one-stage process. From memory, local authorities have availed of the process for 12 projects. We want to put streamlined arrangements in place and ensure they work.

Ms Sarah Neary: There are two projects on standard specifications on which we are working. One is for standard internal layouts, meaning one does not have to start from scratch for every project. The standard internal layouts would be for two, three and four-bedroom houses, apartments and duplexes. That work should be published early next year. In addition, we are looking at standard specifications. While the layouts are one element, we are looking at standard internals and the works involved which local authorities can use. We are working with several local authorities on this.

All social housing must comply with the building regulations. We have some good examples where nearly zero energy building, NZEB, standards have been piloted. Sustainable communities is another area where social housing projects embrace the climate action pieces such as compact growth and ensuring the location of social housing projects is within walking distance of amenities, etc. Those are the types of decisions we are trying to influence.

The Deputy referred to a number of sub-stages within the four stages. I think that might be the guidelines which we produced last year with local authorities. That was in the interests of clarity and improving the quality of submissions. It is to simplify the process in terms of the box-ticking exercise, namely, to ensure that one has all the required information in order the approval process can happen quickly within the three or four weeks allowed.

Deputy Brian Stanley: Ms Neary referred to internal design and uniform specifications. Why can we not just have four or five types of external design?

Ms Sarah Neary: That is just a choice of materials and would be covered in the specifications. It is just a choice.

Deputy Brian Stanley: I am not talking about material, I am referring to the design of the houses. One would have, say, four designs for a three-bedroom house and we could let the local authorities build them? Why can we not have a uniform design? In the past, the Land Commission had three types of houses and one can still see them in every county in the State. The county councils used uniform designs. That was how large-scale social housing was built in the 1930s and the 1950s.

Chairman: Can we come back to that issue, particularly as it is not necessarily in the area of climate action?

Deputy Brian Stanley: Is there a plan for electrical vehicle charging points at Government-owned and departmental buildings?

Chairman: I think that was answered earlier by Mr. Armstrong.

Mr. Seán Armstrong: There are just a few points to add to that. The current requirement under the directive is for non-residential buildings with more than ten parking spaces inside or adjacent. It does give some optional exemptions for small to medium-sized enterprises and public sector buildings which are covered by a different directive. Those public sector buildings are addressed by the energy efficiency directive, which is managed by the Department of Communications, Climate Action and Environment. In terms of the EPBD, it refers to a different directive that is managed by the Department of Communications, Climate Action and Environment of Communications, Climate Action and Environment for public sector buildings

Chairman: Existing buildings will be by 2025.

Mr. Seán Armstrong: Yes.

Chairman: Mr. Armstrong answered that already.

Mr. Seán Armstrong: Yes but the regulation needs to be in place by March 2020.

Mr. John McCarthy: To be helpful to Deputy Stanley, the OPW has a lead role regarding energy efficiency in public buildings. Representatives from the OPW are due to appear before the committee in the next week or two. That would be an opportunity to raise the matter.

Deputy John Lahart: I thank the witnesses for attending and for their public service. For the record, while it has nothing to do with climate change, I would be appalled if we were to restrict ourselves to three or four public housing designs. In south County Dublin, there was an architect, Thomas Joseph Byrne, who designed several Carnegie libraries and local authority houses using innovative architectural techniques. He won many architectural awards for his designs. Architecture needs to take context into account. There is something Stalinist in having three or four housing designs, particularly in view of the scale of social housing we are going to build.

As a former local authority member of long standing, I am of the view that cycle parking facilities have been overlooked for many years. We tend to locate cycle parking outside residential buildings as opposed to within and, certainly, outside commercial and office buildings. I do not see why they should not be incorporated within. It would encourage much more use. In Dublin city, for example, there is only one car park where one can park a bike for free, namely, that on Drury Street. As we are encouraging more people to use bicycles, the Department needs to put its stamp on this and mandate local authorities, particularly in urban areas, to start providing this. I was in Utrecht with a colleague recently. The biggest bicycle park in the world right is located right in the heart of that city.

The witnesses spoke about reusing existing building stock and encouraging the use and reuse of buildings in urban and rural areas while influencing transformational change in the pattern of development and settlement by securing more compact growth. Everything is local. I know Mr. Paul Hogan from sitting opposite him in the South Dublin County Council chamber. He was highly esteemed by both his colleagues and elected representatives. When we were going through the last development plan, I noted they are quite mature areas in my constituency where one has incredibly long back gardens. In the city, they tended to be used for the

development of mews buildings in the past. Under the development plans, it is allowed for their development but the public is not aware of this. In my constituency, there are gardens between 120 ft and 200 ft long. I presume that ties into the compact growth the witnesses were talking about because it uses existing land, facilities, utilities, roads, transport and schools. I would not like to see the idea of the much maligned granny flat binned because in all probability - I am just throwing out this figure - one in five houses in my constituency is an empty nest. The reason often is that there is no alternative to trade down in the area. I would favour an incentivised scheme where somebody could look at the opportunity-----

Chairman: Could the Deputy try to keep to climate issues? I know the issue the Deputy raises is very pressing but I am afraid the debate will drift into the general issue of housing.

Deputy John Lahart: Okay Chairman, I do not want to do that but it was in the context of securing compact growth. If we want the city to expand within the boundaries of the M50, to which I subscribe, and not to stretch to Portlaoise, then these are some of the issues at which we need to look.

I agree with designated high-rise areas in Dublin. I was talking to a geographer in UCD and in the course of discussions I became aware for the first time that because we are a northern hemisphere city, the sun is quite low in the sky, so there are only certain places one can build high rise without blocking out the sunlight from the entire city. There is a need for public education on that. I wish to hear the view of Mr. McCarthy on the five or six designated high-rise areas in the context of compact growth, as nothing seems to have happened. Does Mr. McCarthy have a view on what needs to be done to encourage that?

Chairman: Thank you Deputy.

Deputy John Lahart: Chairman, I have one more point.

Chairman: Does the Deputy wish to allow the witnesses to answer his questions and I will allow him to come back in when he thinks of his last question.

Deputy John Lahart: That is very fair, Chairman.

Chairman: I call on Mr. McCarthy to respond to the questions in whatever order he chooses.

Mr. John McCarthy: Chairman, may I conclude my response to Deputy Stanley? Let me clarify that Ms Sarah Neary was talking about internal layouts and specifications. We are very clear on that. I do not think local authorities would thank us for imposing a limited number of external designs on local authority housing. What one sees from the outside of a house has to take into account context and location. We have seen some very creative designs from the local authorities that others in the private housing development have latched on to. I would not want anything we do to try to standardise and streamline processes to curtail creativity and good design in any way.

As the former planner who we in the Department poached is held in such high esteem, I might ask him to comment on compact growth. However, I wish to say a few general words. I do not disagree with the point made by the Deputy on the cycling strategy. We look forward to the Department of Communications, Climate Action and Environment rolling out a broader cycling strategy. We would look to that to inform planning policies and approaches in development plans that would then facilitate that as part of an overall national strategy. We would be very keen on that. Whether it is the use of long gardens or other ideas, the point Deputy Lahart

makes is essentially what we are about when we talk about compact growth. We are trying to prioritise the use of buildings or areas of land that are underutilised for development, so that the roll-out of the carpet of development does not continue but becomes more concentrated in areas where there already are established services that can be relied on to support them. I will not dwell on the granny flat proposal but as we recognised two years ago, one of the five pillars of Rebuilding Ireland is how to utilise the existing housing stock. We are very conscious of the fact - and I do not want to stray into territory the Chairman wants to keep me out of - that this development is important from the compact growth point of view and how we plan better in order that it can have a positive influence in respect of emissions. We are very conscious that in any country, inevitably there are houses that are underutilised by virtue of life cycle. We put in place a competition designed to bring forward a proposal or concept that would look at what might be called an empty nest home and how it could be modified for an older person to continue living in the ground floor, and this makes sense in terms of mobility and so on, but perhaps converting the upper floor into a self-contained unit. We conducted that competition and the project that won through on that is now moving on to the concept testing stage in a house in Clondalkin. I think there will be a lot of learning arising from that project and - incentives aside - that learning and the promotion of that learning could be hugely important in terms of supporting people who might want to do that. We have had previous discussions on whether we were forcing people into this but that is not what it is about. We are trying to support and facilitate-----

Deputy John Lahart: -----and respecting the fabric of the area as well.

Mr. John McCarthy: Absolutely.

I will now deal with the issue of high rise. High rise is ultimately a relative concept and sometimes it is better to talk in terms of higher rise because there are probably locations in parts of our main cities where houses are fundamentally two storeys high. Even going to three or four storeys in those locations would not be considered high rise by many people but it is certainly higher and potentially a better and more efficient use of land, with all of the climate benefits flowing from that.

When we talk about high rise, people automatically assume sometimes that we are talking 20 or 30-storey towers all over the place, that is not the case, it is the concept of higher relative to two storeys and how we can move from what is a very low-rise scenario to something that makes better use of land and provides us with a way of achieving what the national development plan provides for. I will ask Mr. Hogan to comment as he is more expect on this than I am.

Mr. Paul Hogan: On bicycle parking, there is good guidance on parking bicycles from the National Transport Authority and this is being incorporated into the development plans as they are being reviewed. The apartment guidelines were recently reviewed, and provide more generous off-street parking standards for bicycles within the buildings, even in cases where car parking is now optional or is not necessary depending on location, in recognition that apartments are more likely to be built in areas where the inhabitants use bicycles. We are also due to update the national development plan guidelines. Certainly we would be seeking to incorporate the latest best practice thinking from the NTA, which is quite expert on these matters. This now goes beyond residential or workplace standards, and looks at city and town centres where people might park their bicycles.

The second point was the reuse of building stock and compact growth, the biggest gains probably are to be made in former industrial estates closer to the city, where people can cycle

or take public transport or have the Luas near them. By modest increases in density, as Mr. McCarthy has said, we can achieve quite significant changes. It is trickier, as we know from our former discussions and deliberations in the suburban areas, where there is an established character and existing residents are quite concerned about change, but an incremental element of change is okay. I think the issue the Deputy and I discussed previously - at the county development plan stage - was whether it was acceptable to change the proportion of an area based on subdivision. We were not necessarily talking about granny flats - we were talking about subdivision generally, as is found in other cities. It think it merits further examination, particularly where there are large gardens and where cars are not a necessity in all cases. It depends on location. More work is required on it. We would be better placed to look at it in our role in the Department.

The issue of sunlight in the context of high-rise developments is a more complex one. To a certain extent, different forces are at play in such locations. The designated areas in a city are of interest. In the main, this is considered from a commercial perspective, as opposed to a residential perspective. I think there was a degree of uncertainty about building heights because of local development plan standards. One of the benefits of the imminent publication of the Department's height guidance will be that a degree of certainty or flexibility will be offered depending on what is required. This guidance will provide for decisions to be made in the future.

Deputy John Lahart: What percentage of social housing stock is over 40 years old?

Mr. John McCarthy: Approximately 30% of social housing stock, or some 40,000 units, falls into that category.

Deputy John Lahart: I would like to mention two other things. Massachusetts, which is probably the leading state in the US with regard to building regulations, has introduced regulations in the last two or three years to provide that from the moment one turns on one's hot water tap, hot water must arrive to the spout within something like eight seconds. It was only when I heard about those regulations that I realised we waste a great deal of clean water as we wait for it to get hot. It just goes down the sink. Have we any plans in that regard? What is the best practice standard in this area? As a rider to that, I would like to ask about the water we use in the bathroom when we flush the toilet. It costs money to clean the water in question. We have not yet separated the system of water going into houses. We still spend enormous amounts of money cleaning water regardless of whether it is going to be used in bathrooms for flushing purposes or as drinking water from the sink.

Chairman: Who would like to respond to that query? If no one has expertise in this area, we can get clarification on it from somewhere else.

Mr. Seán Armstrong: I would like to say one thing on Part L and NZEB. We have improved the fabric of apartment blocks a lot. There is not much space heating demand. We are finding that 80% of energy use in apartment blocks relates to hot water. In the calculation methodology of the new NZEB standard, we give a credit for efficient hot water use. If one installs efficient showers or taps for hot water use, one will get a credit in the calculation methodology for NZEB.

Deputy John Lahart: Will that credit accrue to the developer or to the purchaser?

Mr. Seán Armstrong: The performance of the dwelling-----

Deputy John Lahart: All right.

Mr. Paul Hogan: It is about being able to show compliance with the-----

Deputy John Lahart: Okay.

Mr. Seán Armstrong: We have introduced a credit for efficient hot water use in dwellings.

Chairman: I will move on to Senator O'Sullivan

Senator Grace O'Sullivan: I support what Deputy Corcoran Kennedy said about the role of Met Éireann in communication. I have been thinking about phenology, which relates to plant species. Met Éireann is a communication tool. I think it could serve as a good way of bringing the public on board with regard to climate change. If this is done on a monthly basis, we will have missed all the storms that are passing so I suggest it should happen on a daily basis. I was reading on my phone last night that eight people had died during severe flooding in Mallorca. We have a task that requires urgency. We have to apply that urgency in how we go forward as a State and as a nation. As we saw in yesterday's budget, we are losing opportunities.

The question of getting the minutes of interdepartmental meetings arose during our last meeting. Deputy Eamon Ryan referred to a memo. I ask the officials to think of all documentation that could support us in this process. We only have until January to come up with a report. If we could access the minutes of cross-departmental or interdepartmental meetings on climate change, it would be useful in bringing us up to speed.

I would like to raise the question of mitigation. Is provision being made at the moment for houses in low-lying areas that are in flood zones? Winter is coming, which brings with it the potential for severe weather. Given that we know sea levels are rising, what is being done to mitigate the current stock of housing, as opposed to new builds, in low-lying areas?

Which Department is responsible for peatlands? At present, the total level of peatland emissions is approximately 9 metric tonnes per year. What is the potential reduction in peatland emissions? The national peatlands strategy is almost aspirational regarding the rewetting of degraded peatlands. When will we have a coherent plan to reduce peatland emissions? Action needs to be taken to provide for the rewetting of bogs. No one has spoken about peatlands at today's meeting. Issues relating to greenhouse gases and methane arise in the context of peatlands.

The officials mentioned that 50% of our social housing has been refitted in the first phase of the programme. What building energy ratings, BERs, have been achieved? Will all of the stock that was refitted in the first phase be involved in the next phase, which will involve deep retrofitting? If so, questions have to be asked about the efficiency of the programme. I wonder why all of this work could not have been completed in the first run. Are there any policy measures to drive refitting in private rented housing? Have standards been revised to introduce a minimum building energy rating for rented housing?

No climate impact assessment was done with regard to Project Ireland 2040 before it was announced. The Environmental Protection Agency's projections up to 2035 were announced after the launch of Project Ireland 2040, which meant they could not be included in it. A special report of the International Panel on Climate Change was published this week. If any assessments are being carried out or any reports are being prepared on foot of all the information that has become available recently, we should have access to them as soon as possible.

The final matter I would like to raise is the offshore renewable option. A week ago, I at-

tended a meeting at Waterford Institute of Technology which was attended by the Minister of State, Deputy English, and Mr. Philip Nugent. They were launching the maritime planning framework baseline report. I would like the officials from the Department to tell the members of the committee whether we will have to wait for a draft to be published in mid-2019 before a maritime area and foreshore Bill is introduced. We know from evidence we have heard during recent meetings that this country has significant offshore potential. This is a huge opportunity for Ireland. When will we see the legislation to facilitate that? Are we going to have to wait for the marine planning framework? Will the legislation be introduced before that?

Chairman: The representatives of Bord na Móna and the Department of Agriculture, Food and the Marine who are due to come before the joint committee might be able to give us more information on peatlands. I am not sure whether the Department of Housing, Planning and Local Government has any responsibility for peatlands. The officials can answer Senator Grace O'Sullivan's questions in any order they wish.

Mr. John McCarthy: I thank the Senator for her questions. While there is probably a Department of Agriculture, Food and the Marine dimension to peatlands, the Department of Communications, Climate Action and Environment takes the lead role in this respect. I do not doubt that the representatives of Bord na Móna who are due to come before the committee will have something to say about peatlands.

There are two elements to the question of flooding, the first of which relates to housing, commercial or other developments in areas of flood risk. The Office of Public Works is rolling out a significant programme of flood relief and flood protection works through its CFRAM programme. Mr. Hogan will say a few words about development in areas which potentially are prone to flooding.

Mr. Paul Hogan: Guidelines for planning in areas of flood risk were published relatively recently by the Department in association with the Office of Public Works. There is a process for zoning lands, making development plans and assessing planning applications on a case by case basis.

Senator Grace O'Sullivan: What about existing stock in low-lying areas? What will happen when the next flood occurs in November. There is a storm predicted for this weekend, with onshore southerly winds. We know that the sea level is rising and that families are living in housing in low-lying areas. What is going to happen?

Mr. Paul Hogan: There has been a programme of flood improvement works directed according to where the risk is greatest. In Cork and Clonmel, for example, the OPW has implemented these schemes. The process continues in the relevant areas. In the long term the strategy includes providing barriers or barrages, where necessary, because the reality is that all of our cities are built on estuaries and flood plains. That is their nature and it is a reality that has to be considered. Clearly, it will be an ongoing issue.

Mr. John McCarthy: On the flood issue raised by the Senator, we are working on a four to five-year project with Met Éireann and the OPW to develop more robust flood forecasting capacity. We are in a process to expand and develop Met Éireann's expertise into the area of hydrogeology. There is a great deal of modelling work to be done to bring it to fruition in four to five years.

The Senator referred to the Project Ireland delivery board. I think representatives from the

Department of Public Expenditure and Reform are coming to the committee and have no doubt that the minutes will be publicly available, like any other document. There is no mystique about this. We have had four meetings of the delivery board thus far and it is has been about taking the NPF document and working our way through the things we need to roll out to ensure they will progress as envisaged under the framework. I referred, for example, to the regional spatial and economic strategies which are of critical importance in moving things on and which have been the subject of one of our discussions. Another matter which may be of direct relevance is that four funds were provided for under Project Ireland, one of which is a climate fund. We also have our own urban regeneration development fund within the Department. We are talking about how to move these on to have the available funding deployed to support projects of relevance as quickly as we can.

Retrofitting residential stock in general has two angles. We set the performance standards which apply to new dwellings and those which apply when dwellings are being renovated. The piece on which the Minister, Deputy Denis Naughten's Department is leading relates to incentives and measures which may need to be put in place to bring forward retrofitting. We cannot force people to carry out renovations under the building regulations, but we set the standards which need to be achieved when the renovations are being undertaken. However, there is a broader economic issue surrounding the economics and supports available to encourage people in the homeownership or private rented sector to bring forward renovation projects.

Senator Grace O'Sullivan: I understand there is a phase 1, but I am getting to the deep retrofit where the State gets in with grants and all of the incentives to do a full and thorough job in one run, as opposed to bit by bit, with such an amount being done this year and a requirement to come back next year to do a deeper job. I am talking about efficiencies and scale.

Mr. John McCarthy: I was just about to come to that matter because it is slightly different. The point I was making was that the Minister, Deputy Denis Naughten's Department was leading on the housing stock issue generally and how retrofits could be encouraged. However, social housing stocks falls within our remit. Through the local authorities, we are the custodians of that part of the housing stock and, as such, are involved in and support the retrofitting process in the sector. Phase 1 retrofitting was designed to use the limited resources available in 2013 when we started doing this work to try to have as much attic and cavity wall insulation work done as we possibly could from a comfort and fuel poverty perspective, as much as from any other. It was clear that the level of funding available at the time was only sufficient to cover these basic, albeit important, works. Phase 2 will be a much deeper exercise. While we are still working to finalise the arrangements for that phase, our ambition is to achieve a B2 BER standard for these social housing units. As I said, the 30% of our stock which is more than 40 years old is where we will target our initial efforts most as they are the buildings in greatest need of this deep level of retrofit.

A strategic environmental assessment of the national planning framework was completed and the report has been published and is publicly available to anyone who wishes to access it. While the maritime area and foreshore (amendment) Bill and marine spatial planning are obviously connected, they are moving on parallel tracks. Senator Tim Lombard asked about the Bill. I note that we are awaiting legal advice from the Office of the Attorney General. As soon as we receive it and have a chance to assess it, we will move on with the Bill as quickly as we can. However, I cannot say what the legislative timeline will be until we receive the legal advice and can see the issues that arise from it.

Senator Grace O'Sullivan: Can the Department set the BER standard for rented proper-

ties?

Mr. John McCarthy: The performance standards we set in the building regulations apply if renovation work is undertaken in a rental property, as they do in an owner-occupied property. The performance standard would have to be achieved. However, we cannot mandate people to retrofit their properties. It is going to be an issue for the Minister Deputy Denis Naughten's Department as to how we can encourage people to do so.

Senator Grace O'Sullivan: The same problem of fuel poverty arises for those who are renting social housing to have a high standard for comfortable living.

Mr. John McCarthy: It is also the case in part of the owner-occupied stock.

Senator Grace O'Sullivan: It would be good.

Deputy Thomas Pringle: Deputy Naughten's Department is going to be very busy after all this. It seems we might have to have his officials back again. This has been a very interesting meeting, although it has also been somewhat depressing. The initial submission read very well but it is actually a work of fiction. It reads as if this is fantastic but, when one gets down to it, that is not what emerges. I will be the fourth Deputy to ask about the refurbishment of the existing housing stock. The Department has outlined that 30% of housing stock is more than 50 years old and that this will be refurbished to B2 standard. How much will that cost? The Department will not give a timeframe or indicate how long it will take. It says that it depends on the budgetary process. The Department must know how much it will cost. Will it tell us how much it will cost and how long it will take to complete?

On offshore wind, and I will be the third Deputy to ask about this, when was legal advice sought? On the role of local authorities and the Tipperary energy body - I cannot remember its exact name - Mr. McCarthy again said that the Department of Communications, Climate Action and Environment would be responsible for whether this would be rolled out to other local authorities. What role does the Department of Housing, Planning and Local Government actually have in terms of local authorities? Will Mr. McCarthy expand on that because it seems the Department does not have any role? Will he expand on that issue because it would be very interesting to hear more about it? Surely the Department, as the governing body for local authorities, could instruct local authorities to roll out this function. While the local authorities might have to seek funding from the Department of Communications, Climate Action and Environment, but surely the Department of Housing, Planning and Local Government could exhort them to do this. The Department provides circulars and sets regulations and planning guidelines, all of which must be consistent with the national planning framework. It has the role of reviewing local authority development plans. An Bord Pleanála is also under the Department. Given that it is in charge of development and such matters, the Department must have some role in determining whether the local authorities will deal with this issue.

On Part L regulations and the future-proofing of housing, the Department stated that these changes have been flagged since 2006 or for ten years. I went on Donegal County Council's website yesterday while preparing for this meeting to look at current planning applications for housing. Of the nine applications covering 11 houses, which I was only able to briefly look at in the time available, only one would comply with the regulations the Department is talking about. As far as I can make out, and Mr. McCarthy will advise me if I am wrong, ten of those 11 houses had at least two chimneys. As I understand it, that would not comply with the regulations the Department is talking about.

these regulations for ten years, why is that the case? These are applications on which Donegal County Council has not yet decided. Why is that happening? What is the role of the Department if that is the case?

Mr. McCarthy said that 63% of all capital spending on climate change comes from non-Exchequer funding. Where will the other 37% come from? How much will come from Mr. McCarthy's Department? How will it be spent?

We want to encourage people not to develop in rural locations. The rural development we have has been used as an excuse for not complying with climate change targets. The Department, however, is not doing anything to encourage people to move into towns and villages. Even in the small towns and villages such as are found in my area or in any area of the country, nothing is done to encourage development to take place or to encourage people to develop in the town as an alternative to developing outside of those areas. What is being done in practice in that regard? Does the Department have any role in that regard?

Senator Michelle Mulherin took the Chair.

Mr. John McCarthy: To start with, I would not agree that my opening statement is a work of fiction. I just want to make sure that is recorded. The question I was asked previously related to the retrofitting programme and how long it would take. I honestly said that it would depend on the resources that were available. The Deputy has asked me a slightly different, but obviously related, question on how much retrofitting would cost. We are still finalising the phase 2 work but our estimate is that it will probably cost somewhere between $\in 20,000$ and $\in 30,000$ per unit.

Deputy Hildegarde Naughton resumed the Chair.

Deputy Thomas Pringle: What is the global figure?

Mr. John McCarthy: If we are talking about 40,000 units, it would come to somewhere between €800 million and €1.2 billion. Our relationship with local authorities is an issue which is raised with us quite a bit. If one goes back 20 years, virtually all significant local authority functions were carried out at central government level and were vested in what was then the Department of the Environment and Local Government. The landscape has changed significantly since then. Responsibility for roads was transferred to one Department, community development responsibilities were transferred to another and environment was transferred to yet another. To ensure we are clear in respect of our role, we do not instruct local authorities on what to do in respect of roads or energy. We do not have that responsibility. The Department of Transport, Tourism and Sport looks after the roads programme and deals directly with local authorities in that regard. If I was to do as the Deputy suggests and instruct local authorities to do something in the energy space and tell them to seek money from the Department of Communications, Climate Action and Environment, it would not make sense. It would not achieve anything because I would be instructing local authorities to take an action in the energy space which I am not qualified or competent to ask them to do. That is why it is for the Department of Communications, Climate Action and Environment to roll this out. As I made clear at the start, at a general level we are very keen to see local authorities become a strong vehicle for dealing with a whole range of public functions at local level, but they have multiple relationships back to the centre, not just to us but to the Department of Communications, Climate Action and Environment and-----

Deputy Thomas Pringle: What is the Department's role in respect of local authorities?

Mr. John McCarthy: Our role in respect of local authorities is to ensure that they have the necessary legislation and broad funding arrangements in place to discharge their general functions. However, we do not fund roads programmes. The people who have a policy perspective in respect of roads are in the Department of Transport, Tourism and Sport. We have no engagement with local authorities with regard to roads. If, however, the Department of Transport, Tourism and Sport wanted to take from the local authorities the remaining roads functions they discharge, we would certainly have an interest in that because it would not fit within the broad policy framework that is in place, under which local authorities should continue to discharge significant functions at local level. That is just to clarify that matter.

Deputy Thomas Pringle: Basically what Mr. McCarthy is saying is that his Department would have no role in the matter if local authorities wanted to appoint an information officer for renewable energy or do something similar. It has no role in that regard.

Mr. John McCarthy: We would certainly encourage local authorities to be creative and progressive and to-----

Deputy Thomas Pringle: I could encourage local authorities to be creative and progressive too but that means nothing. Does the Department have no role in the matter?

Mr. John McCarthy: We have a general central governance and development role in respect of narrowing or broadening the functions of local authorities. We want local government to be a broad vehicle for delivery of services locally. That is why we would encourage local authorities to take opportunities of this kind. We do not, however, have the competence to tell them what they should be doing in this area because we are not energy experts and we do not have funding for that area. Those matters come through the Department of Communications, Climate Action and Environment.

Chairman: Is the Deputy referring to a one-stop shop such as was mentioned in the committee a number of weeks ago?

Deputy Thomas Pringle: Yes. It was mentioned by a number of members.

Chairman: The issue raised was that local authorities would be like a one-stop shop or trusted intermediary for private householders, who would be able to go in and get information on retrofitting. That was raised as part of our discussions.

Mr. John McCarthy: It is not that we do not have a role in this area. I am simply answering the question honestly. I do not have the knowledge of what is required to roll out that sort of information in respect of retrofitting. That rests in the Department of Communications, Climate Action and Environment. If I was to say that local authorities should do X, Y or Z, I would be speaking from a perspective that was not fully informed.

Deputy Thomas Pringle: Does Mr. McCarthy have a role in the matter? That is what I am asking him.

Chairman: Not at the moment, but that was something we were considering in respect of our interaction with the Department of Communications, Climate Action and Environment working with the local authorities. It is a proposal that may come from our committee. That is not the case at the moment but the committee could consider making a recommendation on that matter.

Deputy Thomas Pringle: Can one Department not look at it with another Department?

Chairman: That is my personal view.

Deputy Thomas Pringle: We have to tell them to look at it.

Chairman: Yes, we would have to look at measures ourselves. Does Deputy Pringle have other questions? Could he remind us of them briefly?

Deputy Thomas Pringle: I asked a question about offshore wind and another on the 63% capital spending.

Mr. John McCarthy: Could the Deputy help me on the 63% capital spending?

Deputy Thomas Pringle: Non-Exchequer funding will account for 67% of capital spending on climate change measures. Where will the remaining 37% come from and how will it be spent? Maybe that is not relevant to Mr. McCarthy, either. Could he answer the question on offshore wind farms?

Mr. John McCarthy: That was about the legal advice.

Deputy Thomas Pringle: When did the Department ask for legal advice?

Mr. John McCarthy: We have been engaging with the Office of the Attorney General for probably about 12 months. I will come back to the committee with the precise timeline.

Deputy Thomas Pringle: This has been going on for about five years. Deputy Enda Kenny answered questions about it years ago in the Dáil when he was Taoiseach.

Mr. John McCarthy: The process has been moving on. We developed a general scheme and put it out to public consultation and there was pre-legislative scrutiny of it. As the process moved on, it gave rise to legal issues on which we needed to get legal advice and we have been engaging on those.

Chairman: If there is any timeframe on that, maybe the Secretary General could send it on to us.

Mr. John McCarthy: Absolutely. As I said earlier, the timeframe for moving it on will be dependent on the legal advice.

Deputy Thomas Pringle: Could Mr. McCarthy outline what the issues are?

Mr. John McCarthy: I do not want to get into the legal issues at this stage. When we get legal advice on the issues we have raised, and we have a better sense of a pathway forward, I will certainly come back to the committee with an update.

Chairman: Mr. McCarthy will put that in writing.

Deputy Thomas Pringle: We cannot ask what the issues are that have been the subject of the legal advice.

Mr. John McCarthy: The Deputy can certainly ask. They are tricky and detailed and I would prefer not to get into them, but I will come back to the committee with further informa-

tion to the extent that I can.

Deputy Thomas Pringle: I do not know how it could take a number of years to arrive at that conclusion.

Chairman: We have asked the Secretary General to come back to us with a written response on those legal issues when he can.

Senator Máire Devine: I have put together a document on human-positive spaces for well-being and some guys in UCD are working on it as well. Maybe Mr. Hogan will be able to answer on this because it falls within the planning regulations and it is essential when a construction firm or anybody is submitting an application for planning permission. It is to do with providing more natural environments in our cities, given that cities now hold 50% of our population. It is projected that 70% of the population will live and-or work in cities within the next 20 years, worldwide and in our own country also. Is there a comprehensive set of regulations around greenery and public natural spaces? City planners should be trying to imitate nature as much as possible, not just for people's well-being but also to cleanse the environment of all the pollutants that humans bring. Has South Dublin County Council heard about that? I know the local authority in Tipperary has adapted it.

In terms of recycling and zero tolerance, plastic and polystyrene are prominent in the headlines and people are much more aware of them. The public has a sense of guilt about what is being shown on nature programmes and news reports on the toxic seas have had a significant impact on people's behaviour. The Houses of the Oireachtas are using recyclable disposable cups instead of plastic ones, for example. On trying to phase out plastic and polystyrene, those materials have been used in the construction of roads and some buildings. They are quicker to process, recyclable and much more durable and robust that other construction materials. Is that a legend or is there anything that we might be able to consider doing to use up these seas and mountains of plastic? As an island nation on the periphery of Europe, we have much more access to the pollutants in the sea which we could try to recoup and put to some positive use.

I love Met Éireann as I think do most people in the country. It is about educating the public. Many of the anachronisms of this place go over people's heads. Met Éireann was to conduct much more research on flooding and how to report it. Although the young do not watch the State news, a majority of people watch the news followed by the weather. Could there be a daily or weekly segment in the Met Éireann broadcast giving three points of education, including the positive as well as the negative? We need to use it as an educational tool. Propaganda is the wrong word but it should be an advertising tool because people listen to it. Ordinary people would not understand the terms we use in these committees or that are used by the various State agencies. They shut down and the message goes over their heads. Something very simple, clear, concise and eye-catching would be effective. The positive must be reinforced as well as the message about what else needs to be done.

Considering yesterday's €121 million increase for landlords under the housing assistance payment, HAP, and rental accommodation scheme, RAS, and getting back to the points made by Deputy Pringle and Senator Grace O'Sullivan, there is significant investment in rental accommodation. The private market is taking a significant chunk of what we would have had for social, affordable or cost-rental housing. The BER rating, I understand, is a private matter for a private household. The regulations were amended recently for rented units for which RAS or HAP are paid. The emphasis is now more on the landlord's responsibility. The provision that rodent infestation was the tenant's responsibility has been removed and landlords are now

responsible for fire alarms, laundry facilities and so on. Could that be further amended to introduce a BER rating? We do not want to scare off landlords in the current climate but they are getting substantial support from local authorities. Surely they also need to have responsibility for the energy efficiency of the properties they are offering tenants.

Chairman: There are some issues with plastics with which the Department of Communications, Climate Action and Environment may want to deal, but perhaps it is in the marine space that this Department could deal with them.

Deputy Marcella Corcoran Kennedy asked a question about Met Éireann. I do not want to repeat-----

Senator Máire Devine: That is not a problem.

Chairman: I think the question was answered earlier.

Mr. John McCarthy: On the well-being piece, Mr. Hogan might want to talk about what is happening in the public space.

Mr. Paul Hogan: It is in line with the overall compact growth agenda we have set out in the planning framework. If we are expecting more people to live within existing towns and cities, we must improve their liveability and quality of life. The old-fashioned planning word is "amenity". It is a word that comes up a lot, whether in planning applications or reference to the amenities of a place. However it is described, it is just about things like providing quality public spaces and routes for people to take exercise and clear their heads. There are great examples in the docklands in Dublin, along the river and the quays and also in some of the greenways, particularly the ones in rural areas, but there are ones on the way in urban areas that are taking a little longer to provide. These are important in the context of what we are talking about. There are four funds being assessed on foot of Project Ireland 2040, two of which relate to urban and rural development. To go back to the point raised by Deputy Thomas Pringle about encouraging people to move into towns and villages by choice, the point of the funds is to make a difference, to make it more attractive to develop and invest in urban places, whether cities, towns or villages. Over a period of ten years €2 billion has been committed for urban regeneration and €1 billion for rural regeneration. The Department of Housing, Planning and Local Government is considering the urban fund, while the Department of Rural and Community Development is considering the rural fund. The Department had received 170 or 180 bids before last week's closing date, while the Department of Rural and Community Development had received 300. The things for which the Departments would be looking are exactly what the Senator described such as, for example, investment in public spaces to make places more attractive but also to generate real development and provide for things like water services to improve the capacity of small places. That is very much on the agenda. The Department recognises that people will not change their behaviour by choice and that there must be a degree of prioritisation from an investment perspective.

Senator Máire Devine: Will it be an essential criterion when a planning application is received?

Mr. Paul Hogan: It can be difficult at the level of the individual planning application where one particular site or scheme has to fit in. It is often better to capture it at the level of area planning.

Another initiative that has come from Project Ireland 2040 is the establishment of the Land

Development Agency. One of the possibilities in having such a development agency is that it will have an overview of master planning sites, or site assembly, starting in particular with State lands, and working with the local authorities. There is that opportunity to see what is required on an area wide basis. It has already been thought about where individual sites are being developed because it can be a considerable burden on a particular applicant or site if it is not spread in an equitable way.

Senator Máire Devine: I understand that. It could be that one site will have to adhere to the regulations and tick the boxes for the percentage of the area that needs to be in green spaces or water. Is there a percentage per planning application to which they will have to adhere to spread the burden?

Mr. Paul Hogan: Generally, there are planning standards which stem from the development plan, say, a figure of 10% for public open spaces. We need to be a little more sophisticated in order that it is not just about the allocation of space, that it will be actively managed and usable or a route that connects with other things.

Senator Máire Devine: We need to consider what is in that space.

Mr. Paul Hogan: It is always on an area by area or a case-by-case basis. It is hard to generalise. One of the problems we have had - we are familiar with this in parts of west Dublin where there has been a standard - is that areas have been lumped together and just become a mass of green spaces with no particular purpose, other than providing pitches or something like that. Oftentimes they are not used intensively to provide real value.

Senator Máire Devine: They are often neglected.

Mr. Paul Hogan: That is what we are trying to do, particularly within urban areas. It applies on a city scale but also a smaller scale. Very often smaller cities, towns and villages do not have dedicated parks or walking routes and it is common to see people walking along roads, which is highly dangerous.

Chairman: Does Mr. McCarthy want to come in on the issue of the BER?

Mr. John McCarthy: The imposition of a minimum BER standard for rental properties could be considered once there is greater clarity on the level of supports and incentives to be put in place to bring properties up to standard for use. If the two were not moving in tandem, particular requirements could be imposed. I spoke to Deputy Thomas Pringle about the fact that the cost of retrofitting the social housing stock could be between $\in 20,000$ and $\in 30,000$ per unit. If a requirement was imposed that gave rise to that level of cost without some mechanism for the investment to be supported, units could be taken out of the rental stock, which might create a problem. It is more about how the two can move forward in tandem.

Senator Máire Devine: It should be legislated for soon.

Senator Michelle Mulherin: I am mindful, as we discuss climate action, that in the past few days there have been terrible winds and rain, a tropical-type storm in counties Mayo, Sligo and Donegal, with bad flooding and road closures and people being discommoded. Crossmolina is under threat of flooding and facing into another weather warning. It underlines the importance of adaptation works, the work the OPW is undertaking under the catchment flood risk assessment and management, CFRAM, programme and the work it undertook before it. Crossmolina was listed in advance of the CFRAM programme and that body of work, but, unfortunately, it

has still been flooded twice in the recent past. Some people have no insurance cover.

Many of the flooded areas in County Mayo are not areas where new development has taken place. They are in the old parts of towns built on rivers, as Mr. McCarthy said. The surges from rivers are different, as are the weather conditions. The communications from people lliving in them are stark. I hope people have not been flooded, but we are fearful of what will happen over the weekend.

Some minor work schemes have been approved by the OPW in Crossmolina, as in other areas, until the major flood defences are built. I hope they will provide protection up to a certain height.

I have a few points to make and questions to ask. We are facing the prospect of not achieving our 2020 targets. It is fair to say that in 2009 when we signed up to our renewable energy directive commitments, nobody thought we were being overly ambitious in the areas of electricity generation and renewable energy. Ireland has the best onshore and offshore wind energy resources. We have an abundance of renewable resources, including wave energy. For us to move forward there is a need for an exposé, perhaps by somebody like Mr. McCarthy. He has been less involved on the climate action side of things in the past two years, but up until this point, it has fallen within the remit of his Department. Why have we not achieved the targets set? We have better resources than other European countries, but we have not achieved the targets set. Will the witnesses comment on our planning process, delays in planning and lack of guidance? How can it take so long for a review of the 2006 wind farm guidelines? What are we learning from this?

Planning for electricity has been a problem. I agree with Deputy Pringle about the issue of agreeing a marine spatial plan and looking at our marine resource in a sustainable way and as part of the solution for our renewable energy needs. People like Mr. McCarthy, under whose stewardship this was happening, need to answer the question. Many people point fingers at Government, saying it is not hitting targets. Not much drilling down is being done into different moving parts and community acceptance. The witnesses did not have the review of wind energy guidelines. It was promised to many people and many people have objected. I would also like to know how many energy projects have been refused.

I would like to tie into that, when Mr. McCarthy is addressing the planning system, the Apple project in Athenry, which included a proposed wind farm. I understand there are questions on environmental concerns which were to be referred to the European Court of Justice. I do not know if they are technicalities. I have asked for more information on it.

Every time we try to develop in this country, there seem to be problems with environmental designation. I have talked about this in different contexts relating to the building of infrastructure, special areas of conservation, SACs, habitats, birds and so on. Derrybrien wind farm was built on a bog. I presume it was an SAC. It is said that proper environmental studies were not done but when one is building a wind farm in a remote area where it is not interfering with people, it would seem it cannot be built on an SAC. Will the witnesses give some analysis of where it has all gone wrong when, on the face of it, we should be head of the class, especially with renewable electricity?

I welcome the energy retrofits that have taken place in local authority housing stock. Mr. McCarthy referred to more than 64,000 houses in his presentation. How much has that cost? What building energy rating, BER, has that brought those houses to? What BER had they pre-

viously? Mr. McCarthy mentioned 20,000 or 30,000. Is that for deep retrofitting?

Mr. John McCarthy: Yes.

Senator Michelle Mulherin: Ms Neary mentioned works done in different local authority areas. The test on the heating system or whatever system is being made in the local authority is for the cost-optimal technology, meaning whatever is more cost efficient. In a county such as my own, Mayo, when the councils went and did an energy retrofit, which is very good, they also changed the heating system. They changed the heating system to an upgraded oil boiler. There are many people who are now locked into a fossil fuel, oil. I could never understand why more was not being done. People complain that we are not levying more carbon taxes but, at the end of the day, these people have no choice about switching their heating system. They are very much dependent on State policies, whether of the local authority or what central government is doing for them. I suggest that is a missed opportunity and, going forward, those heating systems will not be pulled out again.

The point made to me the most by many people who had this work done was that, while they were glad to get new windows and such, there could be older people who had ranges, fires or even back boilers taken out of their houses. They were no longer allowed solid fuel because it was wrong and it was a fossil fuel, but they were allowed to have oil. At the same time, from their point of view, they had more control over burning solid fuel on an open fire with a back boiler than they had with oil. There are now people living in a form of fuel poverty because they are watching whether the price of oil is going down and if they will have enough. I fully appreciate that where people are on basic incomes, they are getting a fuel allowance, but it is not conducive to comfort people who are older or sick and who need much more heating. It does not make any sense. The Department has presided over that and it is wrong.

I refer to the witnesses' presentation. We would like to think that, as we move forward with energy efficiency and renewable energy, there comes a point at which it becomes more economically viable. If we invest in renewables, over the longer term, we will pay less, whether as a business, a home or the State. There is an initial cost, whether it is changing the heating system, upgrading, etc. I want to look at the issue of cost.

At a previous meeting of this committee, I asked the question, maybe of the Department of the Minister, Deputy Naughten, if there was a committee or group of people who were looking at the cost of building houses to nearly zero energy building, NZEB, standard, and the answer was that it would be better if the witnesses gave us costings. I see the witnesses gave us a costing of 0.7% to 4.2% of an additional cost on a social house. I presume that would also apply to the private sector generally across the board. That will be an additional cost for all the houses we need to build in the country to address our housing situation, not that many houses were built in the past ten years. I know there have been complaints, even prior to the operation of the NZEB standard, about new building regulations. These have not just been about energy performance but also about structural soundness, making sure there are no problems with blockwork, and the fact the procedures required have created additional costs. I wonder about the effect of that, apart from the cost of building materials, when it comes to the cost of houses. Besides NZEB requirements, what have changes in building regulations and standards in the past ten years added to the cost of building a basic house? Do the witnesses have that information?

What is the witnesses' term for the major upgrading of a house?

Mr. John McCarthy: Deep retrofit?

Senator Michelle Mulherin: Major renovations.

Mr. John McCarthy: Major renovations.

Senator Michelle Mulherin: A situation in the country has been identified. The witnesses might confirm the number of units that are empty, vacant or derelict around the country. I know there are many in my own county which could be used for housing. Many Government plans intend to bring those into our system and for people to be housed. What is the cost, going forward, of a major renovation of those second-hand properties? I appreciate it can vary depending on the state of the properties. To give an example, in the most recent census, in Mayo, 24% of houses were deemed empty. There has been no construction done on many of them since 2010. We can say that many of these houses are not built to a high energy rating standard. What extra costs are the witnesses talking about that might account for the fact that, despite all these schemes they or the Minister have on the go, such as lease and repair, buy and renew, and so on, there does not seem to be much take-up of the schemes? Are we factoring in the real cost of renovating properties?

Chairman: I might put those questions now. There is an awful lot there. The witnesses can answer in any order they wish.

Mr. John McCarthy: We would love to have had the revised wind guidelines put in place a long time ago. The 2006 guidelines remain in place. There is an energy policy and planning piece, and trying to reconcile those into a new set of guidelines has been very difficult. Deputy Stanley mentioned it earlier and, as we got to that point, a European Court of Justice judgment in either a Belgian or Dutch case was handed down, meaning we had to go through a strategic environmental assessment, SEA, process on them. The preparation of the SEA is now pretty much done and we will start the consultation on those in the next few weeks. It will be for eight weeks and we are looking to finalise the process in early 2019.

There was mention of renewable electricity but again I do not have the data on this. It may have arisen when representatives of the Department of Communications, Climate Action and Environment were before the committee. My recollection is we had made very significant progress towards the target in terms of our level of renewable electricity generation. I do not have the figures. Notwithstanding all the matters that have arisen, it is an area where there has been a fair amount of progress over the past decade.

Senator Michelle Mulherin: As the witness stated, there have been many planning refusals.

Mr. John McCarthy: Absolutely.

Senator Michelle Mulherin: Does Mr McCarthy have the numbers?

Mr. John McCarthy: I do not have the numbers for particular projects. What can be seen is not so much the numbers of projects but the capacity and extent to which renewable electricity contributes to the overall electricity generation on any given day. Electricity people track this almost daily. It can be seen over time that the curve has gone up quite significantly.

Senator Michelle Mulherin: We are still going to miss our target, by the looks of it.

Mr. John McCarthy: That may well be the case. I was asked a general question and I will venture into the territory as I do not want to be seen as being afraid to address it. I know from

my previous experience, and this comes with the health warning that it is from a number of years ago, that some carbon emissions are dealt with under the emissions trading system and some are dealt with outside the system through domestic programmes. Ireland's emissions profile stands out very much apart from many other EU countries because of the extent of the emissions from agriculture. I am sure representatives of the Department of Agriculture, Fisheries and Food will come before the committee at some stage. It is a big challenge for Ireland and, from memory, it seems only Denmark has a non-emissions trading profile that would see agriculture accounting for anything near the share of emissions that it accounts for here. It is a matter that has had an impact on our capacity to work towards our emissions target. The committee will hear from experts in agriculture who can speak to that space.

Senator Michelle Mulherin: I am asking about our renewable electricity targets as opposed to our emissions. I understand they are intertwined but, in fairness, I am asking about the commitments we gave in 2009 which we are not going to achieve, notwithstanding the resourcing. It is a balancing act but we must address the issues around electricity, transport and heat. I am asking about electricity because, invariably, there are problems with the planning system and the witness has himself mentioned the review of wind energy guidelines that has been so slow.

Mr. McCarthy mentioned a strategic environmental assessment, but it is disappointing to see the number of planning applications refused on environmental grounds because of a technicality in many cases. This might be going into different issues. An appropriate assessment might not have been done or a strategic environmental assessment might not have been done. It seems to crop up regularly. Are we on top of that?

Chairman: Some of those questions would be more appropriate for the Department of Communications, Climate Action and Environment.

Senator Michelle Mulherin: I am interested in the planning issues.

Mr. John McCarthy: I have spoken about the wind guidelines and where we are with them. The planning process has given planning permission for a very significant quantum of wind energy infrastructure. I do not have the data as I do not look after electricity but the departmental personnel would certainly have the data and be able to show the extent to which renewable energy has increased its contribution to the overall electricity generation profile. Our key requirement is to get the wind energy guidelines finalised so the planning process would have the most up-to-date set of guidelines that it needs to be able to deal with applications as they continue to come in.

Chairman: EirGrid will come before us on that matter. I know there are some questions Mr. McCarthy cannot answer but I will allow him give the rest of his answers without interruption.

Senator Michelle Mulherin: I appreciate and acknowledge that Mr. McCarthy is not dealing with energy and climate action now other than as part of the interdepartmental group, but he did so for several years, including the period I referred to. We are here to reflect on and decide how we will go forward. I am interested to know the key reasons we are not hitting our targets.

Chairman: Okay. I will allow Mr. McCarthy answer the rest of the questions without interruption before bringing in Deputy Eamon Ryan. I am just conscious of time.

Mr. John McCarthy: There was mention of vacancy. The figures we have, insofar as they

are national figures, are from the 2016 census. There is a headline figure for vacancies. We have done a fair bit of drilling down into that and I can point to the position in my home county of Cork. There are certainly parts of the country where vacancy continues to be a significant matter. We have tried to do a number of things. We have tried to introduce schemes, including those mentioned by the member, to try to bring some of those vacant properties back into use. For example, with the repair and lease scheme we allow up to \notin 40,000 in capital funding to repair a property and it would be leased for a minimum of five years. With the buy and renew scheme we are more flexible. In reality, with a buy and renew property, comparatively less money would be spent because the property would be in such bad nick, with the bulk of the money having to go into a renovation.

A number of local authorities have people on the ground doing surveys in areas where the census suggests there should be vacancy hotspots. Fingal is one and Waterford is another, and the information coming back is that the level of vacancy in the areas that have been examined is massively less than what the census suggested. We should bear in mind that when the census counted vacancies, it included properties for sale and rent that were just turning over in the normal market. We have established a vacancy office in the local government system, which is run from Mayo and is trying to promote among property owners the fact that we have funding available to try to bring vacant properties back into use. We are providing a web facility where vacant properties can be notified to the local authority so they can be investigated to see if they can be added to the housing stock. It is about trying to harness the vacancy potential with the willingness of owners and availability of capital to make all this gel to bring a unit back into use.

Senator Michelle Mulherin: That relates to housing, which is relevant, but I am asking the average cost or price range that allows houses to be retrofitted to the nearly zero energy building, NZEB, standard through major renovation. It was suggested to the committee, perhaps by the Sustainable Energy Authority of Ireland, that this could be anything from \notin 40,000 to \notin 70,000 per house. What is the opinion of the Department's experts who told us the additional cost on a new build? What will it be, on average, on an existing property?

Mr. John McCarthy: Our knowledge of existing properties is based on our knowledge of the social housing stock. When one looks at what people refer to as private housing, it would have to be determined property by property. In terms of retrofitting social housing, we would do it at least one road at a time, if not one estate at a time, which yields economies of scale. Our analysis at this stage would suggest that it costs somewhere between \notin 20,000 and \notin 30,000 for a deep retrofit on the social housing stock. However, that includes the economies of scale that can be realised by virtue of doing a large number of units together. The profile that the Senator may have got from the SEAI for individual houses might be different from that.

Chairman: I will let Mr. McCarthy answer the remaining questions, if there are any outstanding.

Senator Michelle Mulherin: I asked about the cost of changes to the building regulations in recent years, aside from the energy performance side.

Mr. John McCarthy: I will ask Ms Neary to respond to that.

Ms Sarah Neary: I do not have the cumulative cost here but every time we change the building regulations we conduct a regulatory impact assessment. We are very conscious of costs. The areas that we cover in the building regulations concern the health and safety of

people in and around buildings. In the past ten years, for example, we have made changes to the regulations governing fire safety in dwelling houses, sound between houses, proper ventilation in houses, the introduction of carbon monoxide alarms, standards for flues from heating systems, waste water treatment systems and so on. There are basic functional requirements for buildings and homes in the interests of health and safety, but we are very conscious of costs in that context. As I said, we carry out a regulatory impact assessment on each regulatory change, showing the additional cost involved, if any. In some cases, it is very-----

Chairman: Would the Department have a breakdown on those that it could send to the committee?

Ms Sarah Neary: They are all on our website. They are all publicly available and are publicly consulted on for a period of three months each time.

Senator Michelle Mulherin: Is that the costs or just the regulatory changes?

Ms Sarah Neary: Both.

Senator Michelle Mulherin: The other unanswered question relates to the rationale, in the context of energy retrofits by local authorities, behind installing upgraded oil boilers.

Ms Sarah Neary: In terms of the social housing retrofitting, as Mr. McCarthy has explained, the first phase focuses on attic insulation and either cavity fill or internal insulation, which are simple measures. Phase 2 is a deeper retrofit and will involve heating systems. It is important when a heating system is being changed to a heat pump, for example, that there is better fabric insulation. A heat pump would only be suitable when it is going hand in hand with a better energy performing building, that is, a building with a lower heat demand. There may have been a specific situation, in the case to which the Senator refers-----

Senator Michelle Mulherin: It is not an individual case. It is universal, for every house in which the heating system was replaced. I am familiar with this because many people were very disappointed that they lost their back boiler and lost control. They were all just given oil fired central heating systems which did not make-----

Ms Sarah Neary: In the roll-out of phase 2, we would be very keen to see that the fabric is improved to lower the energy demand in the first place. Then we would look to put in a heating system that is the best possible option and we will be encouraging the use of heat pumps in that regard. That phase has not fully launched yet.

Chairman: Deputy Pringle sought clarification on a point and I will return to that at the end. Deputy Eamon Ryan is next.

Deputy Eamon Ryan: A strategic environmental assessment, SEA, was carried out on the national planning framework, NPF, to which the Green Party made a submission. Why was no such assessment done on the national development plan, NDP?

Mr. John McCarthy: Mr. Hogan will correct me if I am wrong but, as I understand it, the Department of Public Expenditure and Reform formed the view that it was not required.

Chairman: Will Mr. Hogan explain that?

Mr. Paul Hogan: Yes, because it is a financial or budgetary framework, the Department was satisfied that it did not require an SEA under the European directives.

Deputy Eamon Ryan: Does Mr. Hogan think the European institutions will accept that when they come to meet us and look at what is happening with our climate approach?

Mr. Paul Hogan: As I said, the Department is satisfied that it is not required and has legal advice to back that up, so that is a matter for the European institutions to determine themselves.

Deputy Eamon Ryan: The strategic environmental report recognises that it is strategic in nature and is concerned with broad objectives. It is not at project level like the NDP. There is a completely different context if one goes for project level. I do not think the European institutions will accept it. Three months after the NPF was agreed, the EPA publicly acknowledged that it does not have faintest idea of its climate implications. Any assessment done since indicates that it will result in an increase rather than a reduction in emissions, particularly in the key sectors of transport and agriculture. We are going into a European negotiating process which requires us to cut our emissions by at least 30% to 40% and, in that context, the European institutions are going to find that we have got the whole process wrong again. We got it wrong in the early part of the previous decade when our strategic planning framework was completely divorced from the NDP at that time and the exact same thing has happened again. Do the witnesses not agree that there is a real divergence between the NPF and the NDP in terms of our environmental results and objectives? The NPF is on the right track but the NDP ignores it.

Mr. John McCarthy: I do not believe so. There was a huge amount of collaboration and engagement right across Government as part of the process of preparing the NPF and the NDP. Obviously, when it comes to the roll-out of individual projects under the NDP, the proof will be in the pudding at that stage. The NPF is very clearly, as the Deputy has acknowledged, in the space of urban compact growth, where we can make better use of existing services, including public transport, and of land. Through the engagement across Government as part of the process of preparing the two documents together, we believe that the NDP and the NPF are very closely aligned.

Deputy Eamon Ryan: Can I give some examples of why I disagree with that? First, Transport Infrastructure Ireland, TII, appeared before the Committee on Transport, Tourism and Sport and was asked about its key transport objectives in terms of tackling gridlock in Dublin. The answer was that it was going to widen the N11, N7, N6, N4, N3 and N2, thus allowing for greater long-distance commuter traffic into Dublin, despite Dublin being gridlocked. How does that fit in with the NPF objectives of compact development?

Mr. John McCarthy: The NPF's compact urban growth thrust is dependent on and will be realised through new housing development taking place in the areas that have been targeted for it, including for example, the proportions that we aim to achieve within the M50 in Dublin. If we can get that piece right and carry it through to the spatial economic strategies and into the city and county development plans and if housing development takes place in the right locations, in proximity to urban centres where economic activity is happening, then that will achieve-----

Deputy Eamon Ryan: Does Mr. McCarthy think the expansion of the motorways and approach roads into Dublin will help that?

Mr. John McCarthy: Do I think it is going to help the-----

Deputy Eamon Ryan: The compact development of Dublin and development at the right location.

Mr. John McCarthy: The roads development programme aims in part, to my knowledge, to address existing congestion problems in some respects at least. Regardless of whether motorways are built, if we can get residential development and the associated services required to support it in place in the right locations, that will be a fundamental driver of what the NPF seeks to achieve.

Deputy Eamon Ryan: Does Mr. McCarthy think the NDP will achieve the emissions reductions that we know we must achieve in the context of the European shared responsibility for 2030 and 2050?

Mr. John McCarthy: That is a question that our colleagues in the Department of Communications, Climate Action and Environment would be better placed to answer. As a result of the engagement we have had as part of the process of preparing the NPF, we are satisfied that the NDP is aligned to support what the NPF seeks to achieve in a way that it was not before.

Deputy Eamon Ryan: I think that is utterly wrong. The Minister has spoken, non-stop, about how he has cornered \notin 23 billion in spending but \notin 13 billion of that is existing investment by the ESB and EirGrid, which they do every year in any event. For retrofitted buildings, which should be the most carbon-reducing element of the package, there is \notin 3 billion for the next ten years. When Mr. McCarthy was asked how much retrofitting of social housing he would do, he said it would depend on the money. In other words, it is dependent on the Department of Public Expenditure and Reform. How much would the carbon saving be from retrofitting the 40,000 houses, which Deputy Pringle discovered would be done at a cost \notin 1 billion?

Mr. John McCarthy: I do not have that calculation with me.

Deputy Eamon Ryan: We are facing the European Commission in a couple months and we have a shortfall of at least 50 million tonnes. Why not state that our project is to retrofit 40,000 houses in order to save a specified amount of carbon to meet our treaty-based obligations, rather than going cap in hand to the Department of Public Expenditure and Reform for money? If the NDP was based on climate objectives and he knew the figure, Mr. McCarthy would be in a much more powerful position with the Department of Public Expenditure and Reform. Why is that level of engagement between Departments not happening?

Mr. John McCarthy: The speed with which the retrofitting is completed is down to the financial resources which are made available. That is not to say we would not marshal all the positive impacts that flowed from the retrofitting programme, not just in terms of carbon emissions but in terms of health too. It is difficult to quantify but there are health and comfort benefits.

Deputy Eamon Ryan: How much of the €3 billion is Mr. McCarthy going to get?

Mr. John McCarthy: I cannot tell what is going to happen in the future but we will certainly strongly press for as significant a programme of investment as we can get as we move on with phase 2 to develop the retrofitting programme.

Deputy Eamon Ryan: How did the Department sign off on a \in 3 billion figure in the NDP without knowing where the money was going or what the carbon reduction would be?

Mr. John McCarthy: The \notin 3 billion is targeted towards retrofitting generally and we are prioritising public funding for public housing stock as part of the overall pot of money. However, it is ultimately going to be a fight for resources.

Deputy Eamon Ryan: We received a submission in respect of the public consultation paper from the Department of Communications, Climate Action and Environment on the national energy and climate action plan, the first draft of which has to be done by the end of the year. It is unintelligible on first reading and God help any member of the public who wants to make a submission. Surely, as part of this process, Mr. McCarthy will have to have an answer to my question. The figure needs to be a multiple of \notin 3 billion because we are facing \notin 600 million in fines in respect of the carbon gap we have. Professor John FitzGerald suggested \notin 5 billion should be spent on the retrofitting of public buildings for social housing alone.

In the wake of the budget, our reputation as regards climate is in tatters and the Government's management of the matter is now open to question. Surely Mr. McCarthy will have to go to his colleagues before Christmas saying what our contribution would be to the \notin 50 million, what the carbon saving would be and what the reduction in poverty would be if we did 100,000 houses. Why is he not doing that as part of this process?

Mr. John McCarthy: As part of this process, we are doing a great deal in the context of the building regulations. We are going to introduce new performance requirements that will apply across housing developments generally and across major renovations. We have the public housing stock and we are move onto phase 2 to deal with the 40,000 oldest houses. The key thing will be how the remaining resources are going to be deployed to bring private housing stock into a better place.

Deputy Eamon Ryan: I am with Ms Marie Donnelly on the continued use of fossil fuel for heating and I agree with her that it makes sense to stop it now. I have heard the arguments from the Department that it continues to use it to keep the supply of houses going and to bring competition for gas and oil but I do not think we need that. We have to stop using gas and oil now. Mr. McCarthy spoke of cost-optimal levels. What is the cost of carbon in the context of that issue or any other work the Department is doing?

Mr. Seán Armstrong: We did a cost-optimal study and took our forecasts from the SEAI 15-year forecast of the cost of carbon. It starts off at around \notin 20 per tonne and increases year on year. We applied 2% sensitivity to it by increasing it by that amount year on year. At the end of 30 years that meant an increase of 60%.

Deputy Eamon Ryan: What is the Department's discount rate?

Mr. Seán Armstrong: We applied discount rates from a societal perspective. These were 3% and 5%. We used the 5% rate to set building regulations. We set 7% and 10% rates from a financial perspective, which we used to inform our analysis. We decided that the 5% discount rate was the most appropriate for setting our performance requirements because we wanted to look at the situation from a societal perspective, which will give better future savings.

Deputy Eamon Ryan: Were the same carbon costs applied in the NDP?

Mr. Seán Armstrong: I was not involved in the NDP. These were the official forecasts from the SEAI.

Deputy Eamon Ryan: The Part L regulations deal with capital costs up front and then running costs. Does the Department include the cost of carbon in all calculations?

Mr. Seán Armstrong: From a societal perspective we include the cost of carbon but from the financial perspective we do not include it. We used the societal perspective to set our per-

formance requirements.

Deputy Eamon Ryan: Does the Department accept my assessment of the modelling that it shows us to be 100 million tonnes short in the next decade, and that we will have to make up that gap?

Mr. John McCarthy: The EPA does an annual profile of this and I would rely on that. It carries out a very precise annual exercise on it and clearly identifies the gap to which the Deputy refers.

Deputy Eamon Ryan: Three Secretaries General have been before us and not one of them has engaged in the process of closing the gap. Why is that? They have refused to recognise the reality that our NDP is not good enough, our national mitigation plan will not do it and our ambition needs to be a multiple of what we are doing at present.

Mr. John McCarthy: Our further move towards NZEB is important in closing the gap. Our intention to move to phase 2 of retrofitting of the social housing stock is an important step in closing the gap. As part of the process that I think the Department of Communications, Climate Action and Environment officials mentioned to the committee about the process they are engaging in, we are working to look at the range of options from which Government must choose in order to ensure the gap is bridged.

Deputy Eamon Ryan: How much did yesterday's budget allocate to the next phase of social housing deep retrofits?

Mr. John McCarthy: It is €25 million for next year.

Deputy Eamon Ryan: We do not know because Mr. McCarthy could not give me the figure for what the emission savings would be, but we need to be on a particular trajectory to meet the 2030 target. Our transport emissions are rising by 4% per annum. Our agriculture emissions are rising; they are rising everywhere. Improving the NZEB building standards will not deliver the scale of emission reductions that would see the Department of Housing, Planning and Local Government contributing to getting the country out of a hole in respect of the €600 million in fines we are facing. Europe will not let us off on this one. That €25 million is not enough. If it had been €250 million, we might be able to say we are on track. Would Mr. McCarthy not accept that we need a tenfold increase in ambition if we are to be serious about closing that gap?

Mr. John McCarthy: As stated earlier, we are migrating from phase 1, which was a much lower cost programme, to phase 2. I have acknowledged very clearly that the costs will be higher. As our capital ceiling increases in the years after 2019, I expect that figure will increase and that will accelerate the momentum in the phase 2 programme. Apart from phase 2 and NZEB, the NPF is obviously designed at a very high level to be the strategic driver to underpin much of the progress. I accept that we will need to rely on other Departments to deliver on it. If we did not have it as a strategic planning framework, however, our climate change challenge would be considerably greater.

Deputy Eamon Ryan: For these meetings I have been trying to get Departments to provide in advance their additional projects that would help close the gap. We would then debate them and identify the better ones which are most economic, offer the best social benefits, etc. None of the Departments have done that yet. Given that we are in this process with the European national energy and climate action plan, and given that we need to have additional measures, the Secretary General of the next Department to appear before the committee needs to come in and outline those measures.

Following this meeting, Mr. McCarthy should present analysis in written form as to what the emission reductions would be from the currently planned or even a scaled-up version of deep retrofit of buildings and rough cost abatement curve in terms of what it will cost. I bet it would be the winning project and Mr. McCarthy would scoop the pot. The Department of Housing, Planning and Local Government should be doing it but it should be carbon-led and not just the Department of Public Expenditure and Reform.

I was very keen on the memo that Mr. McCarthy had from the forum his Department has with the Department of Public Expenditure and Reform and other Departments on the implementation of the national development plan because Marie Donnelly from the European Commission recommended that there should be a monthly meeting of top civil servants on the climate issue, reporting to Government every month, with much more significant quarterly reports. We seem to have something close to that structure in place with the forum, but it needs to realise that the NDP needs to completely change and really implement what was set out in the NPF, which the current NDP does not do. We need to turn the NDP forum into a national climate forum for senior civil servants because this is the big game for the public service. If we do not achieve this turnaround in our approach, Europe will roast us.

Chairman: Deputy Pringle would like clarification on a point.

Deputy Thomas Pringle: One of the questions I asked earlier relating to Part L of the planning regulations was not answered. The officials outlined previously that they have been in gestation for ten years. It has been well flagged that these are happening. On examination of Donegal County Council's planning website yesterday, out of nine applications covering 11 houses, ten of those were for being in breach of the regulations. How can that be?

Ms Sarah Neary: I can only speculate. The planning process is not the building control process. Post planning, when the building commencement notice is submitted, is when all the compliance pieces are submitted. That is when there would be a deep calculation, which is the way of showing compliance with Part L of the building regulations. All 12 aspects of the building regulations are confirmed at that point as to how they comply. That is a more detailed-----

Deputy Thomas Pringle: That is more shocking than I thought.

Mr. Seán Armstrong: I may be able to give some clarification. There is a perception that Part L prevents the installation of fireplaces and chimneys. If there is an underground, vent it is possible to install a stove in a building with a chimney and it has a marginal effect on the energy performance of the building which can be compensated by other elements of the building. As a result, it is possible. One often hears casually that Part L prevents the installation of chimneys and fires; that is not correct. It can still be installed as a secondary heating source in a building. The Central Statistics Office analysis of BER data for new buildings has regularly shown that 98% of new dwellings achieve an A rating, which is roughly in compliance with Part L.

The Deputy may or may not have been looking at one-off houses. In many one-off houses we are aware that heat pumps have increased in the installation. Heat pumps, obviously, do not need chimneys and can be installed as the primary heating.

Deputy Thomas Pringle: They do not need fires either.

Mr. Seán Armstrong: No, but people install stoves for different reasons. It is not always

to heat the house; there can be aesthetic reasons. From a cultural perspective, people often like to have fireplaces in their houses.

Deputy Thomas Pringle: Those with fireplaces in their houses can still comply with all the regulations. They can build a Part B-----

Mr. Seán Armstrong: Absolutely. It is installed with an underground vent supplying vented air directly to the stove. The dwelling does not have a wall vent drawing cold air in. There are two underground pipes connected to the dwelling so that cold air is not coming into the dwelling any more. It is just going into the bottom of the stove and being channelled up the chimney, providing combustion for the fire. It is possible to install a stove in-----

Deputy Thomas Pringle: Would those houses be built to that standard?

Mr. Seán Armstrong: I would think so. With self-built houses people can be more conscious of energy efficiency that may be the case in other sectors of the economy. The CSO statistics have established that 98% of dwellings are being built to an A rating.

One other fact is important. We are pushing this with our regulatory requirements. It is clear from the feedback we are getting that people are findings dwellings built to new regulations are much more comfortable. We have heard stories regarding Tipperary Energy Agency's SuperHomes of people saying that their chest problems have improved and that they no longer need to take medication.

Deputy Thomas Pringle: I agree totally with what Mr. Armstrong is saying.

Mr. Seán Armstrong: It is not all about the hard facts; there are also soft facts. On the hard side, the ESRI published a paper stating that the increase a property from a D rating to an A rating increases the value of a property by 9%. Newspaper property sections have reported that A-rated dwellings are driving a demand for new dwellings. The statistics inform us that 98% of dwellings are being built to the standards. A simple analysis of chimneys will not tell one whether it complies; one needs to have the final documentation. There are many softer benefits that are pulling the market towards A-rated dwellings.

Deputy Thomas Pringle: Does the Department check the statistics?

Mr. Seán Armstrong: The CSO analyses the BER database on a quarterly basis. The committee can be added to the email list and receive that report every three months. The members will see the improvements in dwellings in that report.

Chairman: I thank Mr. Armstrong. This has been a long meeting. Do our guests have any concluding comments?

Mr. John McCarthy: I believe we have dealt with everything.

Chairman: I thank Mr. McCarthy and his officials for attending and for their engagement with members.

The joint committee adjourned at 5.50 p.m. until 1.45 p.m. on Thursday, 18 October 2018.