

DÁIL ÉIREANN

AN COMHCHOISTE UM CHOMHSHAOL AGUS GHNÍOMHÚ AR SON NA HAERÁIDE

JOINT COMMITTEE ON ENVIRONMENT AND CLIMATE ACTION

Dé Máirt, 16 Samhain 2021

Tuesday, 16 November 2021

Tháinig an Comhchoiste le chéile ag 4.30 p.m.

The Joint Committee met at 4.30 p.m.

Comhaltaí a bhí i láthair / Members present:

Teachtaí Dála / Deputies	Seanadóirí / Senators
Richard Bruton,	Lynn Boylan,
Réada Cronin,	Alice-Mary Higgins,
Cormac Devlin,	John McGahon,
Darren O'Rourke,	Pauline O'Reilly.
Christopher O'Sullivan,	
Bríd Smith,	
Jennifer Whitmore.	

Teachta / Deputy Brian Leddin sa Chathaoir / in the Chair.

Carbon Budgets and Climate Action Plan: Engagement with Minister for the Environment, Climate and Communications

Chairman: I have received apologies from Deputy Alan Farrell. I welcome the Minister for the Environment, Climate and Communications, Deputy Eamon Ryan, and thank him for coming before us to discuss the carbon budgets and the climate action plan. I understand you need to leave this meeting by 6.30 p.m. or earlier. Is that correct?

Minister for the Environment, Climate and Communications (Deputy Eamon Ryan): I should leave a couple of minutes before that. There is a Government press conference I have to attend, unfortunately, on the Covid situation. If it is possible, that would be very good.

Chairman: We will aim to get through questions from members by about 6 p.m. if that is okay with you. Before we begin, I will read out a note on privilege. I would like to remind you of the long-standing parliamentary practice that you 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 or otherwise engage in speech that might be regarded as damaging to the good name of the person or entity. Therefore, if your statements are potentially defamatory in relation to an identifiable person or entity, you will be directed to discontinue your remarks. It is imperative that you comply with any such direction.

Members of the committee 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 also remind members that they are only allowed to participate in this meeting if they are physically located on the Leinster House complex. In this regard, I ask all members, prior to making their contributions, to confirm that they are on the grounds of the Leinster House campus.

I invite the Minister to make his opening statement.

Deputy Eamon Ryan: I thank the Chair and the committee for inviting me to the meeting to discuss carbon budgets and the climate action plan 2021. Like a number of members of the committee, I have just returned from COP26 in Glasgow. We have all been witness to the powerful testimony of many international leaders from climate-vulnerable nations, who have painted a stark picture of the impact that climate change is already having on their nations and communities.

The science is clear and definitive on the need for urgent action. The latest Intergovernmental Panel on Climate Change, IPCC, report, Climate Change 2021: the Physical Science Basis, establishes incontrovertibly that the negative effects of climate change are already being experienced globally and they will continue to increase exponentially, in magnitude and volatility, along with global temperatures.

We have made some progress towards this goal in Glasgow. Ireland had a significant presence and extensive engagement at COP26 on a number of key areas which will feed into global decarbonisation efforts. The Glasgow Climate Pact, which is the overarching agreement, keeps alive the ambition of restricting global temperature rise to 1.5°C. It struck a balance between

increasing climate ambition, delivering on calls for increased climate finance and adaptation supports and provides the way for a new dialogue on the issue of loss and damage, which is critical to supporting climate justice for those most exposed to climate change.

The Climate Action and Low Carbon Development (Amendment) Act 2021 establishes our climate objectives in law and will underpin national climate action in the medium term and long term. Further to the enactment of the Climate Act on 25 October 2021, the Climate Change Advisory Council, CCAC, submitted the first carbon budget programme under the Act, which consists of three consecutive carbon budgets bringing us up to 2035. The first two carbon budgets in the programme provide for the 51% reduction in greenhouse gas emissions from the State by 2030, relative to 2018, as set out in the Climate Act. The third carbon budget is provisional and consistent with the 2050 national climate objective. I have written to both the Ceann Comhairle and Cathaoirleach today to cause a copy of this proposed carbon budget programme to be presented to both Houses of the Oireachtas. This will be followed by Dáil Éireann considering whether to refer the carbon budget programme to this committee. Should this be the case, the committee will be tasked with considering the carbon budget programme and providing a report to both Houses of the Oireachtas. Should the committee so wish I would be happy to attend before it to assist in any such deliberations. In parallel, and in accordance with the climate Act I intend to consult with the public and with Ministers as part of considering the carbon budgets before taking a proposed carbon budget programme to Government. When the Government has approved the carbon budgets, a copy of them will be placed again before both Houses of the Oireachtas for consideration. At this point, if the carbon budget programme was referred to the committee, both Houses would be informed by the joint committee's report on the carbon budgets. Furthermore, a motion will be considered on the Government's proposed carbon budgets taking effect. Once these overall, economy-wide carbon budgets are adopted, the Government will divide the overall carbon budgets into sectoral emissions ceilings. Sectoral emissions ceilings will establish how each sector must contribute towards meeting this target, through further established sectoral decarbonisation targets.

It is crucial that while we prepare our carbon budgets and sectoral emissions ceilings, delivery of climate action in Ireland continues at pace. The climate action plan, which the Taoiseach, the Tánaiste and I launched on 4 November, provides a detailed roadmap for meeting our climate ambition under the climate Act. The plan sets out indicative ranges of emissions reductions for each sector of the economy. These ranges will be finalised in Climate Action Plan 2022 following the legal adoption of carbon budgets and sectoral emissions ceilings. The Government will support the changes through major public investment announced recently in the €165 billion national development plan, including increased funding for retrofitting of homes, building new public transport infrastructure, reskilling workers and supporting a just transition. While the climate action plan builds on the ambitious targets of the 2019 plan, it represents a significant step-up in terms of ambition and implementation.

I wish to highlight a number of the most significant measures included in the plan, which are as follows: an increase in the proportion of renewable electricity to up to 80% by 2030, including an increased target of up to 5 GW of offshore wind energy; and a significant reduction in transport emissions by 2030. Measures will include enabling 500,000 extra walking, cycling and public transport journeys per day by 2030, and supporting the take-up of electric vehicles to reach almost 1 million vehicles by 2030. It also includes the implementation of a new national retrofit plan to increase supply capacity and make retrofitting more affordable. It calls on our enterprise sector to see a faster uptake of carbon-neutral heating, increased electrification of high-temperature heating and the phasing out of high global warming potential fluorine gases.

It calls for reducing emissions associated with agriculture, which will be central to achieving our climate ambition. This plan provides a pathway to reduce emissions while supporting world-class food production, through an innovation and science-based approach. There will be a reduction in chemical nitrogen and more targeted use of fertiliser, while maintaining our position as a leading country in grass growth through multi-species swards. It will seek a reduction of emissions from land use, and a move to being an overall store of carbon, which will involve further bog rehabilitation, increased afforestation, and the rewetting of peat organic soils. A new forestry programme will be prepared for launch in 2023.

This plan places a just transition at its core. It sets out four principles that will guide our policy making and implementation over the coming years to ensure that we can effectively monitor and manage our transition and that our responses remain flexible so that we can respond to future transition challenges and target the areas in need of support. Each Minister, and the Government as a whole, will be expected to consider these principles as we develop and implement our climate policies. We have committed in the plan to establishing a just transition commission, which will make periodic recommendations to Government, building on research, engaging through the national dialogue on climate action and through the annual review from the Climate Change Advisory Council, CCAC, on how Government policy can further the just transition.

In delivering this ambitious climate action plan we must ensure we bring people with us and that the transition is fair. The recently launched national dialogue on climate action will facilitate public engagement and participation, community action, networking and capacity building activities on climate action, giving everyone in society the opportunity to play their part.

Last week, I also announced €60 million in funding from the climate action fund for community climate action projects to support and empower communities to shape and build low carbon, sustainable communities in a coherent way. The Government will shortly publish an accompanying detailed annex of actions to support the delivery of this plan. The annex sets out the detailed actions with timelines to drive delivery and enhance our emissions reductions.

The transition to a carbon neutral economy will provide huge opportunities to foster innovation, create new jobs and grow businesses in areas like offshore wind, cutting-edge sustainable agriculture, and low carbon construction. While we all must act together towards our climate objectives, I realise that the costs of climate action will be more acutely felt by some than others. As a Government, we are committed to protecting those most vulnerable and to ensuring a just transition to a low carbon economy.

Chairman: I thank the Minister for his opening statement. The Minister needs to leave by 6.30 p.m. or maybe closer to 6 p.m. I propose that members have two minutes to address their questions to him to ensure all members get an opportunity. Is that agreed?

Deputy Christopher O’Sullivan: Is it two minutes for questions and answers?

Chairman: It is two minutes to pose questions. You will certainly need it. Is that agreed? Agreed. I call Senator O’Reilly.

Senator Pauline O’Reilly: I thank the Minister for coming in. There is much we could speak about but I will keep to the agenda item which is the climate action plan. The plan is so large, but there are two main areas I will concentrate on. One is offshore renewables, because the target of 5 GW by 2030 is very ambitious to say the least. It is very welcome and has been

mentioned up to this point and before the climate action plan. What confidence can the Minister give to the industry in regard to that being rolled out by 2030? The Maritime Area Planning Bill is progressing through the Houses. The concern is that by the time it takes MARA to start up we are looking at another year, so is there anything that can be done in the interim to speed things up? We also need to ensure we have marine protected areas in place before allowing development in those areas.

I come from the west of Ireland where wind is plentiful. The first ORESS auction is to take place next year. Will the west of Ireland see benefits from that? Much of the development has been concentrated around the east and south. If we delay things in the west, and do not do both in parallel, then we may see other countries take up the investment that we could very easily benefit from.

The second item relates to citizen engagement. There had been some suggestion that there was not enough engagement on this plan. I would like hear what the Minister has to say, as there is a large amount in this plan that outlines the kind of engagement we are going to have and it is important that it gets out.

Chairman: The Teams connection has dropped.

Deputy Eamon Ryan: I can hear.

The development of offshore wind power is critical. One of the significant developments even since the publication of the plan was the publication by EirGrid last week of its plan, Shaping Our Electricity Future, which is really the how, where and how much of how we meet this really ambitious 80% renewable electricity target. It was engaged for two years with very extensive public consultation in trying to answer those questions. It sees offshore wind as critical to developing this renewable, low-carbon electricity system for ten years with many of these projects. That will present the opportunity for the first phase of development. There are six on the east coast and one on the west coast. That is in reply to the question about the west benefitting off the Sceirde Rocks to the west of Connemara. The six on the east coast run from Dundalk bay down to beneath Arklow.

These will be the first auction and the consent will be issued by my Department rather than the marine area regulatory authority, MARA, because it will take a number of months, or approximately a year, for the authority to be fully established once it is legislated for. That is why it is really important we get the legislation through the Oireachtas before Christmas, as that would give the industry and all concerned real clarity that this is happening and real. In the second and third phase of options, which will take place in the coming years, MARA will be responsible for managing consents and ensuring the environmental planning behind the development of offshore wind goes hand in hand. As members have said, we must ensure the development of marine protected areas and our offshore resources are in tune with each other and we get good spatial planning development of the resource.

This will not be developer-led and the planned system will be based, as much as anything else, on the development of an offshore grid to attract power, bring it ashore and share it with other jurisdictions in a way that makes it a viable economic and balancing low-carbon system.

It is hard to know exactly what will develop where and it will depend on the options system and companies getting through the planning system. We have an independent planning system that will ultimately assess the environmental credentials and planning approach taken by each

individual project. I expect the majority of the first phase, towards to the middle of this decade, to start being built on the east coast, as six of those first projects will be based on that coast. These are also very close to where there is a very large demand and Dublin is a large demand centre. The advantages of being able to connect to the east coast is very real.

Further development this decade will then take place in both the southern and western waters. As I said earlier, that will be driven very much by EirGrid's plans, as grid access is one of the key aspects we must get right. Having that grid connection capability to the south and west will see projects in both those areas starting to succeed in the second and third phase auctions.

A huge number of developers are interested. One recently pulled out, having been initially interested in a particular project, but I am informed up to approximately 70 developers have expressed an interest to be involved in a very real way in looking to tap into this resource. This is achievable, deliverable and will bring us power in a way that would make efficient use of our grid. We will not have to build significant grid extensions across the country when we are bringing the power ashore, particularly to areas where there is a large demand load. That is what will make this a very viable, successful and realisable project.

I am conscious of time and I want to get through as many questions as possible. There was a very extensive citizens' engagement in a process developing this Climate Action Plan. It started earlier in the year with a series of climate conversations that my Department organised. There were approximately 3,800 citizens involved, as well as a large number of institutions. That consultation informed the plan and it was an appropriate approach of doing the consultation before the perceived solution or outlined plan. That came first, as was absolutely appropriate.

We now need to do this on an ongoing and more detailed and engaged basis. I met a group of younger climate activists in Glasgow and they said they wanted to be involved in a very real way. I said to them and the likes of the National Youth Council that we should do that, ensuring such people can get involved with structuring how the next phase of consultation might take place. I mentioned in my opening remarks this new community fund and programme, which is largely to fund real community projects. It also includes funds and the capability to increase input to those sorts of dialogue processes. Members of the Irish environmental network said to me they thought it was a best-in-class example of public consultation. We should take projects like that and use them for wider consultation from here.

Chairman: I apologise for cutting across the Minister. I know Senator Boylan wishes to contribute and she has another engagement very shortly. I apologise to everybody for the issues we had with the connection. I hope everything is okay and those attending can hear me well enough.

Senator Lynn Boylan: I appreciate the Chairman bringing me in as well. I am having Internet issues as well so if I go, it is the likely cause.

On the back of the Conference of Parties, COP, I welcome the Minister signing Ireland to the Beyond Oil and Gas Alliance, as it is a really important step for the country to take. There is the question of how that follows through in implementation at home and the move towards effectively banning liquefied natural gas terminals. We have the statement from the Government on policy but it is really important to send a message we are banning it. We know the EU has said there is no legal impediment to us doing that.

My second point relates to the Climate Action Plan, where chapter 19 deals with interna-

tional climate policy. I wonder why Ireland has not made any public statements around the Energy Charter Treaty. I know there is an ongoing modernisation process at an EU level but other countries, such as France and Spain, have said this is beyond reform. Members of the public are left on the hook for stranded assets for oil and gas. Given the EU, in its modernisation process, is looking at excluding the EU and intra-EU disputes from the terms of the treaty, how does it play into our international climate justice obligations if we then allow EU companies to go into the oil and gas-rich global south and have the protections of the Energy Charter Treaty, investor-state dispute settlement and all of that? I note the EU modernisation process has not removed article 16, which is the supremacy clause, so the Paris Agreement is not at the same standing as the terms of the Energy Charter Treaty in the legal sense.

Will we now move to join France and Spain in leaving the Energy Charter Treaty? With our commitment to the Beyond Oil and Gas Alliance, will we follow through with the implementation of a full LNG ban?

Deputy Eamon Ryan: There were 12 countries initially signed up to the Beyond Oil and Gas Alliance. Looking at each of them and where they are in what I call the divestment movement, we are probably the most advanced. We introduced an end to oil and gas exploration before the Danish Government and many of the other countries on the platform were aiming to do things we are already doing, such as the ban on fracking and having no investment in fossil fuels for the State investment fund. All of these were agreed on a cross-party basis, which strengthens our joining the movement.

We will still use imported gas in the next two decades and those offshore renewables will need backup. Part of that will be the need for about 2 GW of flexible, open and combined cycle gas plant. We will use very little gas in them but they are essential to provide cover at those times such as those we saw this summer, early last year or early this year. We need those as well as to shut off coal plant and old oil plant, so we will use gas for this interim period. In my mind, LNG imports will not be needed to give us that security. We can and will be able to use what I see as one of the strategic options, which is using some of the distillate stored that we hold as part of our provisions under the National Oil Reserves Agency, NORA, levy to provide back-up fuel for some of those combined cycle gas plants that they can use in the event of an emergency.

We are starting to see the development of alternative hydrogen supplies in the replacement of gas. This is still some years away but it seems to be becoming an ever-increasing certainty. Given we have such large offshore wind resources, to be able to convert some of those through electrolysis into hydrogen to provide some of the back-up security seems to make real sense. I will be looking at the energy security review we commissioned and arrangements we have with the UK and the rest of Europe regarding providing gas security. We need that security and I believe that will give us the best security. In the current ongoing energy crisis, it has been shown that LNG does not give us security because the LNG terminals in north west Europe, which were expecting gas to arrive, found overnight that the ships were turning in mid-ocean and heading to Asia, where the price was dramatically higher and, therefore, you could not count on it. A variety of those arguments will double down and make the case why relying on LNG as a secure system does not work. I will have to make that case and will do so once we have that energy security review but I expect those sort of strategic issues will be centre points.

Regarding the energy charter, I understand fully-----

Senator Lynn Boylan: Is the Minister saying that he has to make a case at Cabinet to convince his colleagues it does not increase security?

Deputy Eamon Ryan: I am not an expert on European law. I would have to look to see what the provisions are. The main reason I believe we will not proceed with those terminals is because of the very same energy security reasons I mentioned. Relying on alternative mechanisms would give us greater security. While we need significant open cycle and combined cycle gas plants as back up for our energy system, if we are to meet our climate targets, we do not want to see a dramatic increase in the use of gas. We could not afford to within our carbon budgets. It is those arguments rather than legal arguments that will be the key mechanism to implement what we were very pleased to see in the programme for Government.

Regarding the energy charter, once again we get into very complex international legal issues. My understanding is that the exit mechanism from the energy charter is a 20-year process that is fraught with all sorts of complications and difficulties. As the Senator noted, there are different views in Europe but a large number of colleagues are saying that we should work with it as a mechanism of reform and a way of using some of the provisions it has to support the low-carbon transition. Spain was mentioned as a country that wanted to leave. Spain was brought to court by many of renewable companies because it amended its terms of support for solar power, which was seen by certain players as being deeply unfair, so they used the provisions in that instance to protect the renewable power investment. It is not black and white in terms of how the provisions of the charter are used. The key element is how that can be reformed. It was set up to protect the interests of fossil fuel producers going into and opening up eastern bloc countries and Russia in the early 1990s. The current environment is completely different. Coming out of Glasgow, we are going to see a significant switch away from fossil fuel investment towards investment in renewables.

It has never been intimated to me that any of the decisions we made in recent years such as ending oil and gas exploration, stopping fracking or saying “No” to immediate planning application on an LNG terminal could not have been made for fear of them being challenged in the investor court dispute resolution mechanism within the energy charter. I will continue to watch the way international developments evolve. We will be pushing for it to support the decarbonisation strategy and use it as a tool in that regard. This is where we should go.

Deputy Christopher O’Sullivan: While I think we all feel that to say that the outcome of COP26 in terms of global ambition could have been better is an understatement, I genuinely feel Ireland can be proud in terms of the commitment we went there with in terms of the Climate Action Bill, budgets being brought to us by the Climate Change Advisory Council, the climate action plan and sectoral targets. If other nations had the same commitment, the outcome of COP26 could have been a lot better.

Many of the items in the climate action plan regarding how we will reach that 51% target are quite long term and we may not see the benefits for quite a number of years. I am thinking of offshore wind and light rail in some of our cities that do not have it. None of those things is going to happen overnight. For people to really buy into the belief we can achieve these targets, we are going to have to start making gains on those really short-term elements - the low-hanging fruit. Things like the red tape and bureaucracy schools have to go through to put solar panels on their buildings are things we can change within a short period of time. Regarding the small-scale generator scheme for farmers, at the moment, farmers can get solar panels installed under the TAMS grant but because it is done under the TAMS grant, they cannot avail of the benefits of micro-generation. Regarding things like anaerobic digestion, we have models out there where anaerobic digestion is working but we are not putting the proper mechanisms in place to allow co-ops to be set up where anaerobic digesters can be rolled out. I was delighted

to see the Connecting Ireland 25% increase in rural bus routes. In my own area of west Cork, with which the Minister is very familiar, some of the proposed bus routes will be game changing but we need to see a faster roll out of that. Regarding the low-hanging fruit, the short-term measures, where can we make those easy wins?

Deputy Eamon Ryan: The outcome of COP is complicated. Michael Mann, that very eminent and brilliant climate scientist and campaigner, spoke at the EPA last night. One of the things he said was that we should be careful about talking down the international completely. This is in the interests of the fossil fuel companies. It is what they do so that people give up and despair. Yes, the last-minute change in the wording regarding the phasing out of coal was deeply gutting but that was a political cover decision. Beneath that in the real dense legal text were significant developments such as the signing off on the Paris rule book, agreeing carbon trading arrangements and in particular, commitments to double climate adaptation finance. In that, we were able to take a very particular active role and could do so because our Taoiseach arrived on the first day and we committed to what was already a very successful adaptation programme we do involving all direct grants - about €100 million per year in climate finance. We committed to more than double our climate finance support - to a 140% increase over the next five years. That is an important element. A key issue coming out of Glasgow is that we start to see climate justice being taken seriously by the developed world as we start to accelerate and do the emissions reduction. It is the same here at home, Deputy O'Sullivan is correct. We need to be seen to be active. Some of the projects will not be as far away as people think. The metropolitan rail project in Cork is real. It is starting now and it is fully funded under the European recovery fund. There will be a twin track from Midleton to Kent Station with new stations and new regular services. That is being worked on this year, next year and the year after. That is very real and there are numerous examples like it. The Deputy is also correct, though, it needs to be brought back home and down local. I will refer back to the EirGrid study, Shaping our Electricity Futures, published last week. The company set up its consultation. Most politicians will understand this. A key issue to emerge that informed its plan was the need for microgeneration. For too long, that has been put back, delayed and difficult to deliver, but we are on the cusp of delivering it within months. It is three phases. First will be the ability to sell power back to the grid and export unwanted electricity at the wholesale market rate. The second phase is to allow for some of the funding I mentioned for community energy or on-farm development, school buildings or businesses to be invested in larger microgeneration projects and to get a steady price for that that makes the economics work. That is central to what is known in our targets as diversification, particularly for farming communities. Diversification of incomes in farming will be key. That second phase, coming in months, will be critical. It will take slightly longer for the third phase, which will be up to 1 MW of power; that is larger projects. That also has a role in this real distributed, citizens-engaged revolution that needs to be in our energy generation. That is now agreed policy, going through the final legal checking system, with all the regulations to be ready to go in early January, and it will start in early January.

Anaerobic digestion is very similar. It has great potential for alternative incomes for Irish farming. It has to fit into the national land use plan because everything that we do in climate has to be biodiversity-proofed and water pollution-proofed as well. We do not want to end up with massive volumes of anaerobic digestion and the knock-on consequences of managing water pollution and ammonia pollution that comes with it. I can envisage a farm where half the grass would go to feed an anaerobic digester and the other half to feed a herd of cattle, the slurry from which would also feed into the anaerobic digester. It is the sort of example where there would be a smaller number of cattle, leading to a reductions in emissions but a significant increase in income to the farmer. Now, it is not cheap. We would have to provide a guaranteed

price to make the economics work, but it is an example of the sort of diversification measures in the agriculture industry that we need to do to make everything work.

Finally, the new rural public bus system is critical. We provided the funding next year to roll out the first phase. There is a €57 million plan over five years to be comprehensive about how we do this across the country. However, that is only the start. We need to start looking at innovative ways in rural and urban Ireland where we have new public transport systems that connect to other State uses and needs, be it the health or education systems, that use technology in innovative ways. Therefore, this is only the start. In truth, in the plan the hardest area to change is transport because we have such a stitched-in development model. We need innovation in our public transport system. I encourage people to get involved in that consultation on the right moves that are connected to other public transport services such as health and education and to use innovation to deliver for rural public transport users as well as urban.

Deputy Jennifer Whitmore: I thank the Minister for coming before the committee. I will speak to the climate action plan. I agree that it is ambitious and it is positive to hear all the different plans and proposals included in it that the Government intends to roll out. However, there is an issue around the urgent implementation of these actions. To date, the Government has consistently found it difficult to meet the target in the 2019 action plan. Take transport where there is an intention for a 42% to 50% reduction in emissions. Most of that is based on the move to 1 million electric vehicles, of which 7,000 are being purchased annually. On public transport, even the Connecting Ireland plan has only €5 million going into that next year. The Government is seeking a 50% emissions reduction in buildings and key to that is retrofitting. There is no specific retrofitting apprenticeship now. Three out of four retrofitting centres of excellence that were promised earlier this year have not materialised. The Department of Housing, Local Government and Heritage has failed. It has only retrofitted 199 of 2,500 social homes that it was supposed to have done this year. Unfortunately, under each of the specified measures, the Government has failed to meet the targets. While I welcome the climate action plan, I cannot see how there has been a change in the business-as-usual approach and how that implementation will happen. The investment needed is not there. The majority of the €125 billion mentioned is private money. Individuals will not be in a position to put that money in to meet the implementation of this.

Deputy Eamon Ryan: Of course, the Deputy is correct. We have not seen the emissions reductions that were planned. An advantage is that there has not been a stop-start approach since the 2019 plan. At the time, I recognised that was the right approach and I commended the Minister on the aims and broad means. With the new updated plan, we have increased the ambition. There is a certain advantage in that there is no change in signals to, say, the public service, the business community or householders. It is a big capital transition and the last thing that is needed is uncertainty. The cross-party approach to these plans and the consistency as we iterate from one plan to the other is an important part of getting it right. However, the Deputy is right. Transport, as I think I said, is the hardest. Electric vehicles will be only one part of it. The second major part is the modal shift to active travel and to public transport. That will require difficult decisions on the allocation of road space and the allocation of the national capital plan at the budget. That is starting in the national development plan. More than anything, it is about the political difficulty in making it safe to walk and cycle on our roads and giving the time priority and traffic light priority to buses so that they get through the cities, towns and, indeed, rural Ireland, quicker. That is down to thousands of individual decisions among councils right across the country. Critical to this delivery on transport is that the local authority climate action plans marry what we are doing in the national plans.

A third area, which is probably getting more complex, is demand reduction. Since forever, success in transport planning was when more and more transport was being generated. Now, however, we have an opportunity, particularly with remote working owing to Covid and the 15-minute city or town concept that we are starting to see work well in other cities, to reverse what has been a 50-year pattern of ever-lengthening commutes. Availing of the opportunity would improve our quality of life and, in the end, our economy. There would be a stronger local economy. It is a question of demand reduction. The most difficult parts are the freight, maritime and aviation aspects. In this regard, we will require international effort. If members attended any of the presentations or side events in Glasgow, they, like me, will have heard about Volvo and Scania trucks going green. I heard about plans to switch to new fuels in the maritime and aviation sectors.

On the building sector, Deputy Whitmore is right about the availability of skills. We need about 27,000 skilled workers, including craftspeople, carpenters, electricians, plumbers and energy experts. That is why the action plan connected to the climate action plan, the action plan for apprenticeships up to 2025, involves a five-year strategy to double the number of apprenticeships. This is probably one of the top priorities of the Minister for Further and Higher Education, Research, Innovation and Science, Deputy Harris. We have to double the overall number of apprenticeship registrations to 10,000. Critical in this regard was the recent integration of much of the apprenticeship system into the CAO. Much of the problem is a cultural one in that younger people are getting a variety of signals in from society in different ways indicating careers based on apprenticeships are not high status or high earning. Nothing could be further from the truth: the careers are the most secure, the most urgently needed and, in many ways, the most rewarding possible. They involve fixing people's homes and making them much more comfortable to live in. People in this area are the front-line heroes in the climate crisis. We need to depict it that way to get our younger people to switch over.

We need to be careful about this year's numbers because Covid killed retrofitting this year. For the first five months of the year, one could not go into someone's home. The budget in local authorities for next year is significant, however, and will allow a rapid scaling up. Similarly, the national retrofitting plan, which will be launched shortly and will contain a range of measures including one-stop shops, low-cost lending, grants, and financing at a huge scale. Financing is not going to be the difficulty on the grant side; it will be a question of cultural status and making it easier to do the right thing through really good advice and financial support. We may surprise ourselves such that when we have year-round contracting without stoppages associated with Covid, it will take off. We have the key measures in place. Probably the most important is getting the apprentices trained and working. While this may have been slow to start because of Covid, it will ramp up now. I believe we will deliver on it.

Deputy Bríd Smith: I thank the Minister for his presentation. On the last point on apprentices and trying to train young people in the areas that we need them, to the best of my knowledge apprentices still pay college fees. These should really be cancelled. If the Minister does only one thing, he should have a word with the Minister for Further and Higher Education, Research, Innovation and Science, Deputy Harris, about this because there are many young working-class men and women who cannot afford the fees. The fees are very offputting if one is trying to get into some kind of training.

I do not wish to be rude to the Minister but I believe an awful lot of what he said here today is in his mind, not in the plan. That is a problem. The plan is vague and not specific about so many things. I want to concentrate on public transport and the national herd. Only yesterday

the Minister welcomed an increase in fares for public transport in Dublin. That sends a completely wrong message to people. We want people to move from their cars so we can help to achieve Ireland's carbon-emissions reduction targets. The last thing we should do, if we are to achieve these, is increase the cost of public transport.

In the plan, the Minister has a target of 500,000 sustainable journeys. Could he tell us — he need not answer immediately — how many of these will be by public transport? Will most of them be by cycling and walking? The National Transport Authority plan for the greater Dublin area, released last week, estimates an increase of under 4% in the use of public transport by the end of 2042. That is astounding. It is so unambitious. It is kind of frightening to think, in respect of the climate action plan, that these are the low-ambition targets of the National Transport Authority. Will the Minister comment on the view that the ambition to have 1 million electric cars on the road is out of kilter with the idea of meeting targets in this area?

I would like the Minister to say something about the national herd. There is nothing in the plan that says we need to reduce it. Last year we increased it by 1.5% to 7.3 million cattle, be they dairy or beef. The elephant in the room is that we are not prepared to reduce the size of the national herd. A commitment that has been pointed out time and again involves the global reduction of methane emissions by 30%, yet here at home the reduction will be by only 10%. The Minister listed a number of ways of achieving the reduction but does not dare touch the herd. That is pretty shameful. I would like him to comment on it.

Deputy Eamon Ryan: I thank Deputy Bríd Smith. The announcement yesterday was to reduce the cost of public transport. For the first time, it allowed for a 90-minute ticket. The one ticket allows a passenger to go from the DART to a bus to the Luas and back to a bus, for example. It was all about increasing usage and reducing the cost. It is about achieving good connectivity and encouraging people onto public transport. I believe the new arrangement will encourage them. This initiative, combined, in particular, with the 50% reduction we will introduce next year for people under 24, is an example of how we need public transport that is affordable in addition to being reliable and frequent.

I do not have the exact breakdown for the modelling, but the key point is that it is a matter of switching fuels, shifting modal split and reduction. Modelling for ten years into the future is an inexact science. In my mind, I expect we will over-deliver in that regard. To give my personal view, sometimes in our modelling of what happens when good-quality infrastructure, particularly active travel infrastructure, is provided, we do not quite know how to measure. I will give an example. When the cycle route along the Grand Canal, which was of better quality than anything built previously, was introduced, there was an almost immediate 50% jump in cycling journeys on the route. I will give another example. When we recently introduced regular bus services around the Dingle peninsula and something similar in Leitrim, using these areas as testers for the new rural public transport system, there was an immediate response, or an almost immediate doubling in passenger numbers. The Irish public has shown consistently that when high-quality public transport and a safe environment for walking and cycling are provided, they switch. Who wants to be stuck in traffic?

Considering that transport is the hardest aspect to address because of the difficulties with freight and haulage, we may be able to make gains in respect of the shift to active and public transport. People like it. They like being able to be online on a bus. They like the exercise they get and the speed and reliability of cycling and walking. If we can make this form of transport safe and move away from a system that has been dominated for decades by supporting private vehicle transport, we may be surprised about the upside.

I have a thought on electric vehicles. Last week I met the New Zealand Minister. The country is the same size as us with between 5 million and 5.5 million people. New Zealand has 4.5 million cars. While we have a large car fleet at over 2 million, we are not as bad as some other countries. I am not sure whether any members were in Glasgow but the city is so road-dominated it would make you weep if you were interested in creating a safe and good local environment. We are not starting from an impossible base. The figure of 1 million EVs is just a very ambitious target effectively to switch the fleet. I think it is possible. It is possible because they are better cars. Within two or three years they will be cheaper in the life-cycle assessment and the maintenance cost especially is only a fraction of that of standard vehicles. I see that coming but do not see it as the be-all and end-all of our decarbonisation of transport. The shift and the reduction are equally important.

The last point was on the national herd. This is a narrative that, as I said, both environmentalists and farmers would be better off moving away from as the only narrative people ever talk about when it comes to decarbonisation of agriculture. We must focus on emissions reductions as a key metric. We must focus on incomes in Irish farming as a key metric. I think that is possible. Going back to what I said earlier, the diversification will come when we pay farmers for rewetting land and restoring peatlands, introducing agroforestry, developing microgeneration and anaerobic digestion and switching to horticulture and to organic farming where you have fewer animals but also less costs because you are not spending so much on incredibly expensive fertiliser. Again, this is the moment for us to strike because the cost of oil and gas being so high has seen the cost of nitrogen fossil-fuel based fertilisers go through the roof. They are incredibly expensive now. This is a moment where we can make that switch. The key thing is to both reduce emissions and increase income.

(Interruptions).

Deputy Eamon Ryan: The age-old narrative of farmers at war with environmentalists has to stop. Going back to what I said earlier about the craftspeople working on retrofitting being the frontline heroes, farmers will be the same because they will have to help us adapt to climate change as well as store some of the carbon in our soil. That is absolutely doable. We must pay them for it. I will make a final point on this that I think the Deputy, given her political perspective, will agree on. The large companies, namely, the large multinational food companies and retailers, are going to have to account for their scope 3 emissions in an evolving climate change accounting world. They will have to be responsible for their suppliers' emissions. That gives us an opportunity for them to pay the primary producers, like small Irish family farms, better for the really high quality products they produce. This is an instance where corporate interests are going to have to acknowledge they have a climate responsibility and help their farmers and their suppliers make this switch. It is something we could and should have broad political agreement on.

Chairman: I thank the Minister and the Deputy.

Deputy Bríd Smith: In line with that, what did the Minister think of the €70-odd million that was given to the beef processing industry-----

Chairman: We will have a second round if we get through the questions from the first round. We will go again and the Deputy will be welcome to come in again. I call Senator McGahon.

Senator John McGahon: I have two major points. When we look at the carbon budgets that are going to be required for different sectors, there are clearer pathways in some sectors. We talk of the modal shift and I would love to hear the Minister's views on that shift in rural Ireland. It is so much easier to get people out of cars in not just big cities but big towns like Dundalk, where I am from. It is easy to do that, but how do we move that into more rural areas around the country? How do we do that modal shift? Is it basically just through trying to get people into electric vehicles and providing better bus routes or are there other multifaceted approaches we need to take to getting the modal shift across the line in rural Ireland? Everyone uses cars, whether it is going five minutes down the road to the shop, to a GAA match or whatever. I would be really interested in hearing how we improve the modal shift in rural Ireland.

The other point relates to something the Minister mentioned earlier, namely, the national retrofit shops and the concept of these one-stop shops. I know from speaking to the Chairman about this recently that they are pretty much ready to go in the new year. I would like some outline from the Minister on these one-stop shops where a member of the public who wants to do the right thing can walk in and get good advice from somebody-----

(Interruptions).

Chairman: We have lost the connection to Senator McGahon. We cannot hear him in the committee room. If members hold for a moment we will try to re-establish the connection.

Deputy Eamon Ryan: I think I heard the questions. I might answer them.

Chairman: Go ahead.

Deputy Eamon Ryan: The first was on rural transport. The first principle is every place matters and every person matters. This has to be inclusive. In rural areas, electric vehicles will play a much more significant role for a variety of reasons. First, they will be cheaper. If someone is doing long-distance commuting, there will be a significant advantage and benefit in being able to make the switch. EVs will also be easier to charge. In certain urban areas, where there might be a terraced row of houses or apartments, there is a difficulty in getting a plug-in home charger whereas houses in rural areas will have less difficulty in that regard. There will not be a problem with parking on the street, for example. That will play a significant role. The critical thing, as I said, is we must have alternatives in rural Ireland as well. That is why we have the connecting Ireland rural bus service reform. Further reforms in the school bus system and other rural innovations around providing shared public transport are going to be key. Furthermore, every single schoolchild and citizen should have a safe environment to allow them to walk or cycle to school. I know that is not as easy in rural Ireland as there are often roads where speeds are relatively high and footpaths are not as available or as good. However, we should not abandon rural Ireland and say children there should not have a safe route to school. That might include a review of speed limits and looking at road networks to create safe routes to schools. I do not see why we in Ireland should accept that children are not free to be able to cycle to school. We should be radical in looking at mechanisms to make it safer on our roads.

On the SEAI and the national retrofit scheme, it is, as the Senator said, ready to go. We expect to launch early in the new year. The SEAI has been given significantly increased resources. It has got an additional 70 staff, I think, this year and another 50 planned for next year. Central to making the scheme take off will be the one-stop-shop approach and the new loan facilities. The Strategic Banking Corporation of Ireland will provide a guarantee for the

first quarter of a loan for retrofitting. The work that these loans cover is not cheap, going from €20,000 to €60,000 in some cases. We have to bring the costs down to make the numbers add up. One way to do that is to guarantee the first quarter of the loan, which effectively lowers the risk of a default on that loan or on a portfolio of loans. That allows other banks to come in and lend some of the remaining loans that are needed at a much lower interest rate. We think that we can almost halve the market interest rates while still involving participants. There is a figure of €125 million for investment in the climate action plan, the vast majority of which is private investment, which we need. The scale of change will require the €35 billion in transport investment and €12.9 billion in the national development plan for climate, which is mostly retrofitting-related. Even with that, we will need further private financing for private houses and commercial businesses.

I met the vice president of the European Central Bank the week before last. The ECB is interested in providing loans that will allow schools, hospitals and local community health centres to retrofit their buildings. The savings that will come from the energy efficiency measures will pay for the loans. They are attractive because-----

(Interruptions).

Deputy Eamon Ryan: I can go to the Minister for Finance and say that a public service, our local schools, can be improved, and that we can pay for it over the period of the loan, which might be ten to 15 years, and that the cost of the loan is covered by the energy savings. The loan does not add to the national debt. That will be a key element in the retrofitting required to meet our decarbonisation targets. The tools are starting to come into place. We have to use them at scale.

Chairman: I apologise to Deputy O'Rourke. I misread my list and he was actually next on it.

Deputy Darren O'Rourke: I thank the Chair. I suspect a conspiracy. That is all right. The Minister will attend a meeting of the Joint Committee on Transport and Communications tomorrow, where I will surely raise the matter of broadband. I thank him for his time.

Much has been covered. I have some comments on the process here, the carbon budgets as they relate to sectoral ceilings, and the committee's role in that. I am conscious that if we take the low end of the carbon budget ranges in the climate action plan, we do not meet the 51% target. Will the Minister comment on that?

I went to the launch of the national dialogue. I hope he will agree that this is an iterative approach. We are in a rush. My understanding is that these documents are nearly always in draft form and changing. Engagement needs to be the cornerstone of this. I hope he will test it with regard to not just how many we have engaged with but also who we have not heard from. That question needs to be asked constantly. The bar is high. Maybe it is unattainable but we should strive towards it.

Regarding offshore wind, there is concern in certain quarters that there is not sufficient ambition and that there is opportunity to do more over the period, especially for floating offshore wind. I would be interested in the Minister's perspective. One of the national newspapers published an article last week. Britain is using that technology. Should we use the same?

There is a need to front-load ambition to connect rural Ireland. I have a final question about

overall funding. I hear what the Minister has to say about retrofitting. There is a spectacular challenge. The private sector might get us some of the way. We need to generate a demand that is not there yet. Coming out of COP26, are green bonds or other international instruments being considered?

Deputy Eamon Ryan: The Deputy is correct that the sectoral targets will have to add up to 51% within the legislation. We have committed to that. Deputy Bríd Smith said that it is just in our minds. The reality is that this legislation was developed with the Ministers for Agriculture, Food and the Marine and Enterprise, Trade and Employment. It will be done by the Ministers in the next Government too. It is not a light legislative tool but a straitjacket. It is an iterative process. We do not know exactly what technological innovations there will be. Some things will work better than others and we have to accelerate those and switch. There will be a role in both setting the sectoral targets, listening to the Oireachtas and Government colleagues, and, on an ongoing basis, with the CCAC and the Ministers having to adapt and adopt different strategies, depending on whether they have been successful or not. That straitjacket is tight because we are looking to implement an incredibly ambitious change.

One thing coming out of COP26 in Glasgow at the weekend is that we will not be alone in doing this. If we do not do it, we will be behind. Those countries that succeed in doing this will be the new leading, future-oriented economies. This will be good for our country. It is inevitable that it is coming. Not a single country at COP26 said that it did not want to help with the 1.5° C target. That means halving emissions this decade and reaching net zero by 2050, straight down the middle. This is incredibly ambitious and has never been done before, but it is the right thing to do economically. The budgets and the sectoral targets will steer us in that direction.

A question for the committee to consider is whether the balance is right between the first half and the second half; I think it is. There is some flexibility in the 4 million tonnes that we have put in as being unallocated on page 14. Those will accrue in the second half of the decade, since it is then that land use rules will change to allow us to use some of that. This is complicated. My initial and ongoing assessment is that the broad budget approach is correct. We will have to agree that, then agree the sectoral targets, which will be a challenge.

Regarding the scale of ambition for offshore wind, there is no doubt that the UK is ahead of us and most other countries. It is interesting to see that similar countries, including the Netherlands, Belgium and Denmark, are probably four or five years ahead of us, but we developed and delivered an onshore renewable system that is world leading. Our integration of renewable energy is probably the most advanced. EirGrid manages a large part of our onshore wind energy and it is truly groundbreaking. We are ahead of the game and other countries with that. We had to do land-based generation first because offshore generation was expensive. The price has decreased in the past four or five years. We can now expect it to be truly economic and to have it at scale. We needed to do land-based wind first because offshore wind was very expensive. It has come down in price in the past four to five years. Now we can expect it to be truly economic and we have it at scale.

I would not limit ourselves to 5 GW of offshore wind. If we can find that flowing offshore develops quicker than people think - it could well do that - and we find ourselves delivering the first phase and the second phase, I see no reason in the third phase that we should not scale up. The overall target is for 35 GW of offshore wind. That is a huge amount. That is six or seven times our current demand. There is no shortage of ambition. There is no restriction on the development, other than environmental ones and also sharing and using it. There is no point in generating wind if we are just spilling it all the time.

We must build the North-South interconnector. The committee knows that will come soon. More critically, we will build the interconnector with the UK - the Greenlink project - by 2023, I understand, coming into Wexford. It looks as though, going well, the French interconnector will be coming in in 2025 or 2026. We are engaging in talks with a number of European countries and the UK about further grid interconnection with a view to us being able to balance our system to share some of this very significant power resource we have. There is no shortage of ambition. It will scale up as fast as we can do so but we have to get the first steps right. We need to get the projects on the east coast built, and that will not be easy. There will be real planning issues. I am quite certain on that but we will have to approach that and trust in the independence of the planning system to make the calls. Then, as I said, within this decade, it will be moving into southern waters and western waters. There is no shortage.

With regard to finance flows, in answer to the third question, the other significant thing coming out of Glasgow is that the financial industry has given a clear signal that it will be switching out of fossil fuels and all financial flows now will be measured for their carbon performance. There was significant development in the proposed reform of the multilateral development banks - the World Bank and the IMF - and also the use of assets such as special drawing rights which will be significant, particularly for developing countries. In our own environment, it is more likely to be the issuing of green bonds because that is where we would be able to get the lowest cost finance. The scale of the investment by EirGrid to fund offshore wind and offshore grid will be very large. It is an extra €1 billion to meet the 2023 plan, according to their estimate, but there will also be significant investment from the ESB on the distribution grid. A large part of that will be funded effectively by green bonds because they are regulated assets and because EirGrid and the ESB are seen as professional highly-skilled delivery companies. That is a significant part of that €165 billion national development plan. “Yes” is the answer. We will be using green bonds in a variety of different ways.

Chairman: I thank the Minister.

Deputy Eamon Ryan: I would mention the European Investment Bank, EIB, also. Not only were we talking about lending for public buildings, but they were also very interested in lending for areas such as forestry and biodiversity services. That is one of the developments coming out of COP26. In the technical details around Article 6 which were approved, the ability to trade and finance such investments will be significant and some of those provisions in the agreement in Glasgow will help the EIB to lend to us for things such as forestry and nature-based services.

Chairman: I thank the Minister and Deputy O’Rourke. I am mindful of the Minister’s time and there are a few members who still wish to speak. I have a short question as well, but first I will call Deputy Cronin and Senator Higgins. Senator Pauline O’Reilly wants to come in for a second round, as does Deputy Bríd Smith. Has the Minister ten or 15 minutes to stay with us? Hopefully, we will reconnect.

Deputy Réada Cronin: Can you hear me?

Chairman: Deputy Cronin, we can hear you now. Go ahead.

Deputy Réada Cronin: I thank the Minister. I watched COP26 with interest. I have to say I was surprised when the leaders of government and the chair himself, indeed, were able to be shocked. The large delegation of posh fossil fuel lobbyists was reportedly the largest delegation and when the leaders of governments asked them to pay nicely, they, basically, just said “No.”

I wonder at the surprise there. These people will not go quietly, not while trillions of euro for a very small elite group of people is at stake. That is worth pointing out.

We all know the time to move on climate is now. My concern is about the just transition. I do not see it in the heart and soul of the plan. I do not see a genuine heartfelt concern about poor citizens in Ireland. How long is a carer meant to save his or her carer's allowance before he or she can afford an electric vehicle, EV, when the cheapest, after the grant, is €27,000?

I reiterate what Senator Boylan was saying about liquefied natural gas, LNG. There is so much talk about sequestering carbon in the plan when we already have nature's own carbon sequestered in coal, LNG, oil and gas. We should be keeping whatever we can keep there until we build up our-----

(Interruptions).

Deputy Réada Cronin: We have to keep that in. My connection is going again. Sorry, I will try to speak as quickly as I can. Around electric vehicles, there is a large swathe of people who think that they can buy their electric vehicle and that will be their bit done. There is no recognition-----

(Interruptions).

Chairman: We have lost the connection.

Deputy Réada Cronin: I hope I have pronounced his name properly. He was talking about the blood copper, the blood lithium and the cobalt. He is absolutely right. There is too much greenwashing. There is too much razzle-dazzle and appeasement and not enough hard facts. It is up to the Government to speak about that when they are at the COP. It is up to the governments to do that, not the lobbyists. I was very disappointed with that.

I have stated previously that we cannot have a two-speed recovery. We have to make sure. It is a danger to social cohesion. It is a danger to democracy itself. It is up to the governments to make sure that this is said. People are saying that we will exceed the 1.5°C. You cannot argue with mother nature.

Chairman: I thank Deputy Cronin. Apologies that the connection has not been so good.

Deputy Réada Cronin: We have to be prepared to oppose the Comprehensive Economic and Trade Agreement, CETA, as well. We have to oppose CETA.

Deputy Eamon Ryan: I agree with Deputy Cronin. The former President, Mrs. Mary Robinson, said something similarly where she said, "You can't negotiate with science." That last-minute change in the wording about shutting down coal was politically gut-wrenching, as I said at the time.

I would make two or three points. First, every single country in the earlier session had said that we had to go for 1.5°C. For those countries, India and China, we had something of a ring-side seat for what was a fairly eventful three hours of haggling because our seat was right beside China's. We saw the president of the COP, Mr. Sharma MP, and the Americans and everyone coming backwards and forwards. China and India are at risk more than any other countries from climate change. Years ago, I went to the Potsdam Institute to see the 4°C world, which

was an assessment by the institute which was brilliant on climate meteorology. You could see that the centre of India was not habitable in a 4°C world. They will have to switch from using coal. The only question is when. While it was deeply disappointing and took much of the shine off the final agreement, it should not take from what has been a step change in the recognition across the world that we need to do this. Saudi Arabia and Russia said nothing. There may have been 500 fossil fuel campaigners at the conference, but everyone agrees increasingly that fossil fuels will have to be history. It is just a matter of how quickly we can make the switch. It is just to give people some hope. That wording was in the political part of the text, not in the legal structures the Paris Agreement has to deliver.

The Chinese and Indian approach is because they are under a similar perspective in that they have to, as they see it, protect and provide for their populations. They are not doing it the right way by continuing with coal, but we have to be careful about depicting other countries in some ways. We need to look at our own switch-off from coal and deliver that first and foremost.

With regard to the just transition here, the Deputy is right that the vast majority of people on low incomes cannot afford to buy electric vehicles. We cannot be pushing people or making them feel guilty if they are driving fossil fuel cars in the interim. We will not win this by shaming people. We have to make sure that the cost comes down in a way that makes these vehicles affordable and makes it easy for people-----

Deputy Réada Cronin: Can governments play more of a part in respect of the destruction happening in other countries? I am talking about the mining of cobalt, lithium and copper that we need for batteries that can be used for renewable energy purposes. Can they make sure human rights are not being abused in other countries? Governments have to be to the fore on this.

Deputy Eamon Ryan: I agree. In the context of our foreign affairs, we would work with many countries in Africa that might be producers of those minerals. We do not look at our development aid through a climate lens alone; we have to look at the bigger picture. I will be honest. We have to look at the volume of cobalt and copper that will be needed. One of the ways of bringing down the cost of cars would be to push innovative and new car-sharing arrangements. Most cars are parked 95% of the time. One of the ways of bringing down the cost of cars is to promote car-sharing systems where everyone can get access to a car and where the copper and cobalt in those vehicles is efficiently used all the time, rather than just 5% of the time. The scale of the change and transition we make will evolve; it will not just replicate the current system. That is one very good way of bringing down the cost.

My original role was in transport campaigning. The basic and obvious thing I learned was that in Dublin city, my city, half of the households did not own cars. It was as if the entire transport system was all about the other half who did have cars. The switch to public transport investment and active travel by walking and cycling is a social justice issue as much as a transport and climate issue. It is recognising that many families cannot afford a car. If we invest 2:1 in buses and the public transport system, versus roads, it is not just good for climate, it is good for social policy. That is not to say that someone who is driving a car is bad. It is just recognising the reality. Large numbers, approximately 45%, of Dublin city householders do not own a car. They were forgotten about for decades in terms of where the priorities and investment should be. That is part of the social justice agenda, as we deliver a just transition.

Senator Alice-Mary Higgins: The Minister opened by mentioning the question of the carbon budgets. We should be front-loading more action into the first carbon budget. We do not have the balance right. For any of us in politics, the moment we are there in a room and able to

act is the moment to do so. On page 23 of the action plan, there is a reference to the sequestration potential of trees. The latter will only come to fruition after 2030. I am concerned because the language seems to suggest they may be counted earlier. There is a reference that double-counting or counting them later will be avoided. The key thing is that our carbon budgets need to be real and they need to be real to the period to which they apply. There is also reference to future technology. The Minister will recall that it is a specific recommendation of this committee that future potential removal technologies in respect of emissions would not be counted within a period. If they deliver dividends for the 2030-35 budget, so be it, but let us deal with it then. I am concerned that there is a blurring of the lines, especially in the context of how land-use and land-change emissions and the technology are being approached. I would like to have clarity on that in the plan. That will be important.

Another reason we should be front-loading action is because right now we have access to extremely low-cost, 0% loans at EU level. We have also been given funding from the recovery and resilience fund. That is one part of it. There are very low-cost loans available at present and the fiscal rules have been suspended. That is why I am really concerned that the narrative of putting things off-balance sheet and so forth is still in the mix. Those are the old rules. We need to be very clear that a financialised approach whereby we add private profit into what we do on climate change will be a problem. That does seem to be the approach. We should not be trying to mobilise private finance. It needs to be mobilised, but we have sticks to do that, as well as carrots.

Will Ireland actively advocate for a loss-and-damage facility and press the EU to support it at COP27? How do we plan to deliver on the methane commitment we have made? Will it be through farming? Will it be through championing internationally the LNG infrastructure ban? Will the Minister also comment on nitrates?

Deputy Eamon Ryan: Can Senator Higgins repeat her question on loss and damage. I did not quite hear it.

Senator Alice-Mary Higgins: Will Ireland champion and promote a loss-and-damage facility, as was called for by 136 countries and blocked by the EU and a number of others in Glasgow? Will we be using this year to ensure that the EU and others support such a facility at the next COP?

Deputy Eamon Ryan: The forestry proposal came from the Climate Change Advisory Council; it did not come from my Department or me. However, the recommendation is the right thing to do in the context of recognising that forestry is very complicated in terms of the sequestration of carbon. There is often a decade delay between planting and seeing carbon being sequestered. To manage and increase the early flows of funding into that, the recommendation was that it would be measured over a three-decade period, including in this first decade. We will make sure that it is not a double-counting, but the Climate Change Advisory Council felt the timing of the counting in that way would see a significant increase in the level of forestation. We need to go from 2,500 ha to the sort of figures of up to 20,000 ha we were doing in the 1990s. We need a different form of forestry. It needs to be switched away from a clearfell monoculture-type system, which does not have as good of storage characteristics and other biodiversity consequences, to massively scale up new agroforestry, such as close to nature, continuous cover and other forestry systems. The Climate Change Advisory Council advice on this is good and we will look to follow it.

With regard to financialisation, I do not intend that at all, but we need private as well as

public finance. Such is the scale of the transition. However, no one in Government or elsewhere is being cautious, hawkish or whatever word one wants to put on it, about the scale of investment. Going back to our earlier conversations, the biggest restriction is whether we have the workers to be able to deliver. We could pump a huge amount of money into retrofitting or capital construction projects, but in the absence of having the capacity to deliver them, it would be a waste of money. There is a massive expansion planned in the budgets, with €35 billion in public money for transport, €12.5 billion in public money-----

Senator Alice-Mary Higgins: It is for schools and hospitals, rather than directly funding retrofitting. Some €49 million is going to banks to give loans, rather than, for example, routing that into direct retrofitting of schools and hospitals. Why should they be taking loans with the profit share that gets added to that? That is not economically efficient for us.

Deputy Eamon Ryan: We also have to build new hospitals and schools. It is not just me sitting in front of the Minister for Public Expenditure and Reform every year. We have to provide social, education and health infrastructures. If I could get the entire budget, that would be fine, but the other Ministers also have requirements. There is broad agreement in Government that housing is the key issue that we need to address in the next four years.

Senator Alice-Mary Higgins: That is not my question. My question is why are the environmental aspects being done through private loan systems and off-balance sheet loans, rather than through direct public investment in retrofitting our infrastructure, which will, as the Minister said, pay dividends in the long term for the State, when we currently have access to 0% finance directly?

Deputy Eamon Ryan: We are doing both.

Chairman: We have lost the connection with the Minister.

Deputy Eamon Ryan: Some of the State borrowing is off-balance sheet. Some will be green bonds. We need to throw the kitchen sink at this. I think every source of funding should be used and will be very welcome. The key is to keep the cost of the loans down by reducing the risk, by getting planning certainty-----

Senator Alice-Mary Higgins: But we are paying for that risk reduction.

Chairman: Senator Higgins.

Senator Alice-Mary Higgins: Apologies. The key is that we are paying for de-risking. Why are we paying €49 million?

Deputy Eamon Ryan: We will pay less if we can de-risk it. The more we can give certainty around the policy approach, the lower the risk and the lower the cost of capital. The key objective is bringing that down.

I want to move on, because the one part of the Senator's question that I particularly want to address is the loss and damage issue. It was central to the negotiations in Glasgow. Going back to what I said earlier, I believe we have a good story to tell, because firstly, we are already meeting the target which was agreed in Glasgow that half of our climate finance should be spent on adaptation. Also, the real strength we have is that our climate finance is not tied. It is grant-based, not loan-based, so we have a really good story to tell. We committed to increase it by 140% over the next five years.

On the issue of loss and damage, coming out of Glasgow, it was agreed that a dialogue would have to start. One of the proposals I made, within the negotiations, is that Ireland would be willing to support and help developing countries in hosting such a dialogue to enable us to address the issue in a real and meaningful way. It was critical that the wording around that was clarified. We started off with wording around whether we would have a workshop. The developing countries rightly said that was not good enough. What I and the Minister for Foreign Affairs, Deputy Coveney, who was also in Glasgow, said was that we would step up and use our resources to help such a dialogue to deliver a programme of loss and damage supports.

Beyond that, there is also the Santiago Network, which came out of a previous COP, to start delivering on some of the loss and damage issues. In Glasgow, we committed an additional €5 million, along with Germany, Denmark and Luxembourg, to allow the operation of that network to deliver on loss and damage commitments. It is not easy. Other countries that were party to the negotiations that I was privileged to be involved in are very reluctant and feel that the commitments breach their political red lines. However, in respect of the role of Ireland in this, I think the nature and quality of our aid programme, our development aid work and our connections to developing countries places us well to try to advance the understanding of what the needs are and how to deliver support for loss and damage and adaptation. They are very much connected in the developing world. We agreed that we will come back to the COP in Egypt next year with a very real programme of work done. I offered Ireland's support in delivering on that work for the next COP presidency and for the overall UN process. That is not insignificant in getting global agreement on where we need to go.

Chairman: Before the Minister leaves, I wish to ask him a question on transport. In one of his earlier responses, he mentioned that transport is the hardest sector in which to achieve the emissions cuts that we need to achieve by 2030. In another answer, the Minister mentioned the modelling around the various strategies that are underway at the moment. The transport strategy for the greater Dublin area was published by the NTA in the last week. The Minister mentioned that the modelling is perhaps not sophisticated enough. I am taking from that that the Minister agrees with me that it is a blunt instrument. He expressed the belief that we can go further than the percentage modal shift that is set out in the greater Dublin area strategy. Certainly, I would like to see a much greater modal shift outlined in the Limerick-Shannon metropolitan area transport strategy. When we see the figures of 4% mode share for cycling by 2040, never mind 2030, it does impact of the confidence of people in the cities. The Minister rightly pointed out that it is just modelling, but should our transport strategies not have strategic targets separate to the modelling? I think that would be important to drive more sophisticated modelling and ambition. Currently, when we look at the transport strategies, it does not seem that they are aligned with the climate ambition that we have or the vision that we have set out in transport.

Deputy Eamon Ryan: First, that modelling is very sophisticated. Some of our best people are working on it, and really good computing power and detailed data are going into it. It is not lacking sophistication. The point I was making earlier is that the assumptions around modal shift, in my mind, sometimes underestimate what is actually possible and what people will do when safe conditions are created. When the safety impediment of the current environment is removed or when the quality of the service of public transport is improved, in my experience, I have never seen the public response err on the lower side. That is the point I was making.

The other point I wish to make is that while we can always focus on the modellers or the plan, and so on, the reality is that this will be decided at a local political level. Last week, the

Oireachtas debated, on Second Stage, the Road Traffic and Roads Bill 2021. I believe Second Stage is concluding this Thursday. I will make my own contribution in the closing comments. To a certain extent, it is up to the local authorities and councillors to make some of the decisions. The national policy will be framed in the new sustainable mobility plan that we are developing. To make it work, to deliver BusConnects for Limerick, Cork, Galway, Waterford and Dublin, to connect rural Ireland to bus services and give the bus primacy through our towns, requires a political commitment at a local level and that is very hard to model. It is based on how much public support we have for the scale of the transition we need to make. It is difficult to model how much vision we have, collectively, to make the change. My sense is that across all parties, that is changing and there is increased understanding that the towns that can create a beautiful public realm and a safe space around schools and can support new bus services are the towns that people are going to want to live in. They are the places that are really attractive and will attract jobs. They are the places that will get us into a virtuous cycle. I do not think we are far away from that in towns and cities right across this country. That is what I am saying. It is very hard to model how the virtuous circle works, but when it does work, it can deliver more significant changes than people expect.

The Danes and the Dutch are not different from the Irish. Copenhagen and Amsterdam are actually wetter, colder and darker than Dublin. They were not always cycling; they changed because of political decisions in the 1970s, 1980s and 1990s. Those cities are aiming for a 50% split in terms of active travel. I do not see why we should be any different. We are just starting a bit later. That is why I was saying the modelling might not quite pick it up, but first and foremost we need the political commitment to make it happen. That is something no one can model. That is in our hands.

Senator Alice-Mary Higgins: The Minister will be aware of the concern about the ranges and the fact that the upper end of the ranges only barely add up to the 51%. I hope he will consider revising that because we need to leave space for more ambition. I am concerned about that. Should the achievement of 51% not be the middle of the range we are providing for each sector?

Deputy Cormac Devlin: I am conscious of the Minister's time. I apologise; I had problems with the broadband here in the office, but I am on the campus. I ask the Minister about his comments about microgeneration and selling back to the grid. When does he hope that individual properties will be able to avail of that type of scheme?

The Minister touched on energy security earlier. I ask him to elaborate further on the two interconnectors which are due on stream by 2027 if I am not mistaken.

Deputy Brid Smith: When the Minister was answering my questions about the national herd, I think he said we need to lower the animal numbers. Does that not amount to the same thing as reducing the herd? I also asked him for his thoughts on the €70 million that was given last week to the beef and dairy processors, including Dairygold, Dawn Meats and Kepak, all of which have enormous profit margins. How does he think the farmers, particularly the poorer farmers, feel about that? I know they are very bitter about it. I ask him to give an explanation for it. I know that was done by the Department of Agriculture, Food and Marine and the Tánaiste and Minister for Enterprise, Trade and Employment, Deputy Varadkar, launched it, but perhaps the Minister has some thoughts on it.

Chairman: There are a range of questions there for the Minister. I am aware that he may be in a rush, but I ask him to address those.

Deputy Eamon Ryan: In response to Deputy Devlin, I said on the “Six One News” two weeks ago that I expected that to be introduced in January. I ask him to hold me to account if that is not delivered in the month after next. What was the Deputy’s second question?

Deputy Cormac Devlin: It was on the interconnectors.

Deputy Eamon Ryan: Both interconnectors are on track to be delivered in 2023 and 2026, as I understand. People are confident they will be delivered.

I will finally respond to Deputy Bríd Smith after which I will need to run as I have just received a note to say the press conference is starting in a minute. Farmer income is key and protecting the Irish family farm is key. My input in supporting loans for that industry was to ensure we apply conditionality on all such loans and supports. Those companies need to play their part in the decarbonisation including: scope 1, what the consumption of the product involves; scope 2, what their production system involves; and scope 3, what their suppliers are engaged in. Going on memory, the conditionality on loans relates to their own production process and the requirement for any such grant support to be based on their investing in their heat systems and environmental performance indicators. They have a role to play. They need to go green. If they are trading on an origin green brand, they need to be origin green in everything they do. Regarding that lending, my recollection is that our central involvement was in ensuring that those environmental criteria were stitched into any supports.

Chairman: There was a question from Senator Higgins on the ranges adding up to 51%.

Deputy Eamon Ryan: That is the sort of detail I would love to get from the committee in getting recommendations for the carbon budgets. A detailed analysis from the committee at this stage would be very welcome and helpful.

Chairman: We would certainly be very interested in getting into that in detail. I thank the Minister for his time and for taking so many questions. It has been a very worthwhile engagement.

The joint committee adjourned at 6.26 p.m. until noon on Wednesday, 3 November 2021.