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Tuesday 20 November 2018

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Scottish Parliament

Tuesday 20 November 2018

[The Presiding Officer opened the meeting at 14:00]

Time for Reflection

The Presiding Officer (Ken Macintosh): Good afternoon. Our first item of business is time for reflection, for which our leader is Father John Morrison of St Fergus Catholic church in Paisley.

Father John Morrison (St Fergus Catholic Church, Paisley): Presiding Officer and members of the Scottish Parliament, I thank you for allowing me to lead time for reflection. It is a great honour to be here.

I have been a Catholic priest since 2001 and, since then, I have had the enormous privilege and responsibility of working with young people throughout the west of Scotland. Presently, I find myself ministering in two remarkable learning communities—St James' and St Fergus' primary schools in Paisley.

Over the years, I have been blessed to witness the generosity of spirit that is so evident in our young people. I have seen them bring comfort to the sick and the dying, bring solace to the dispossessed and bring hope to those who live on the peripheries. Young people are often selfless and dedicated in their service of their communities. They pursue excellence in many and varied fields not as an end in itself but so that its many fruits may be shared.

More than 40 years ago, the American businessman, writer and futurist Alvin Toffler lamented the fact that society secretly communicates to young people that they are not needed and that society will get by until they can—at some distant point in the future—take over the reins. He said that the fact is, however, that society is not running itself nicely. Right here and right now, the rest of us need the energy, intelligence and imagination that young people have in abundance. If we are to attempt to solve the many problems that we as a species face, the full engagement of even very young people is not simply desirable but of the utmost necessity.

Can there be any nobler and more fruitful labour than seeking to fully engage young people in the life of our country, our Parliament and our communities? I sincerely doubt it. Whether it be in the public square, in the realm of politics, in our neighbourhoods or even in our faith communities, let us always have the determination and courage to entrust our young people with the sacred tasks of solving the problems of today and grasping the possibilities of tomorrow.

Topical Question Time

14:03

Child Poverty

1. Angela Constance (Almond Valley) (SNP): To ask the Scottish Government what its response is to the report on the fact-finding visit to the United Kingdom by the United Nations special rapporteur on extreme poverty and human rights, and how this will inform its plan to tackle child poverty in Scotland. (S5T-01334)

The Cabinet Secretary for Communities and Local Government (Aileen Campbell): To anyone who reads Professor Philip Alston's interim report, its conclusions are clear. It is a devastating critique of the UK Government's economic and welfare policies, which are causing—I quote—"misery". The rapporteur has made multiple recommendations about what the UK Government could do differently, including urgently changing universal credit to make it fit for purpose, ending the benefits freeze and scrapping the two-child limit and the appalling rape clause. The Scottish Government has consistently requested UK ministers to take those actions, and we will continue to press the UK Government to change course.

I welcome the rapporteur's references to the very different approach that the Scottish Government has taken. He highlighted the establishment of a social security system that is guided by evidence and the principles of dignity, fairness and respect, recognised that we are mitigating the worst of the UK Government's welfare cuts, and described our plans for tackling child poverty as "ambitious".

We will build on the work of Angela Constance when she was Cabinet Secretary for Communities, Social Security and Equalities and deliver in full on the ambitions that she set out in the Child Poverty (Scotland) Act 2017.

Angela Constance: The United Nations special rapporteur said that, despite the UK being one of the world's richest countries, we have "staggering" and rising levels of child poverty, and he called on UK ministers to open their eyes—although Amber Rudd has confirmed the UK Government's on-going state of denial. Given that the Scottish Parliament united to pass legislation to end child poverty in the knowledge of the powers that we have and do not have, how will the cabinet secretary take forward the child poverty delivery plan and, specifically, the crucial components of affordable housing, the new income supplement and the tailored employment support programme?

Aileen Campbell: Amber Rudd's comments yesterday were disappointing. She seemed to dismiss the report and characterise Professor Alston's language as political in nature. In dismissing the report, she dismissed the consequences of the actions that the UK Government has taken, which have caused great misery to the most vulnerable. The UK Government needs to open its eyes and lift its head from the sand. Child poverty is still too high, and the finger of blame should point squarely at it and its welfare cuts.

We will work to do all that we can with the powers that we have, often with one hand tied behind our back. We will continue our work on the development of the income supplement, which is a complex undertaking. We want to ensure that that work meets our two key principles: that it reaches the greatest number of children living in poverty and that it tops up incomes sufficiently to lift those families out of poverty.

We are on track to deliver our ambitious programme of 50,000 affordable homes, including 35,000 for social rent. Since 2007, we have delivered more than 78,000 affordable homes. We have also begun work on the £12 million programme of intensive employment support.

An update on all those actions will be provided to Parliament by June next year.

Angela Constance: Professor Alston said:

"Resources were available to the Treasury at the last budget that could have transformed the situation of millions of people living in poverty, but the political choice was made to find tax cuts for the wealthy instead."

He also said:

"it is outrageous that devolved administrations need to spend resources to shield people"

from UK Government policies.

Given that the Scottish Parliament does not accept that poverty is inevitable, what choices will the Scottish Government make, by contrast, to ensure that ending child poverty is core to our forthcoming budget? Given that any mitigation needs to be affordable and sustainable, will the cabinet secretary commit to working with the Parliament to ensure that we continue to work together to end child poverty in Scotland?

Aileen Campbell: We are very clear that the UK budget could have ended the benefits freeze. The UK Government could have chosen to gift a better future for children across these isles, but it chose not to; instead, it decided to prioritise tax cuts for the better-off. That showed an utter disregard for the most vulnerable, and the Tories should be utterly ashamed of that.

However, we cannot sit back. That is why we are spending £125 million this year on mitigating and mopping up the mess from the ideologically driven cuts of the UK Government. However, as Angela Constance pointed out, mitigating everything is unsustainable. The scale of the cut—a £3.7 billion reduction—in welfare spending is the combined total of the budgets of NHS Greater Glasgow and Clyde and NHS Lothian.

I want to use our resources and our powers to create a fairer and more equal country, not just to mitigate the actions of another Government, and I certainly look forward to working with Angela Constance and other members across the Parliament to do just that.

Oliver Mundell (Dumfriesshire) (Con): The special reporter noted that the concept of universal credit, in simplifying benefits, smoothing work incentives and providing more skills training, is "in many respects admirable". Can the minister confirm that the Scottish Government's policy remains that, in principle, we should simplify benefits and ensure that there is no cliff edge in benefit levels?

Aileen Campbell: Oliver Mundell should be reminded that the special rapporteur also called the system "Universal Discredit".

We have made many representations to the UK Government to ask it to halt the roll-out of universal credit and to listen to the views of the Scottish Parliament, which has outlined and articulated the dire consequences of universal credit and the way it has been handled. As I said in reply to Angela Constance's question, the UK Government could have taken a different path in the UK budget, but it chose not to; instead, it prioritised tax cuts for the better-off. Those are not the priorities of the Scottish Government. We will continue to work hard to create a better future for children in Scotland.

Elaine Smith (Central Scotland) (Lab): Despite the previous question, many members will agree that the UN report is a damning indictment of the Tories' cruel and ideological approach to welfare and poverty. However, will the cabinet secretary recognise that cuts to local authority budgets are having an impact in Scotland as well as in England? Although I welcome the report's acknowledgement of some of the good work that is being done by this Parliament, does the cabinet secretary recognise that it has been a year since the Child Poverty (Scotland) Act 2017 was passed but the Government has still not brought forward its proposed income supplement? With one in four Scottish children still living in poverty, will she now reconsider that there is a pressing need and accept Scottish Labour's proposal for quick action by topping up child benefit by £5 a week to lift 30,000 children out of poverty?

Aileen Campbell: I agree with much of what Elaine Smith set out with regard to the report and its damning critique of the UK Government. However, as I outlined to Angela Constance, we are currently working on the development of an income supplement, because the analysis that we had of the proposed top-up proved that we could deploy that resource in a better way to lift more families out of poverty. It is a complex undertaking, and I will continue to engage with Elaine Smith on that work, as I pledged to do with her colleague Alex Rowley.

We have begun work on the £12 million programme of intensive employment support, which directly seeks to help parents who are on low incomes to move into work and to progress their careers when they are already in work. The first delivery projects will commence on that next year. We are taking robust action. We are spending £125 million on mitigation and we will continue to work with other parties to make sure that, where we need to do more, we can do so in a collaborative fashion.

Patrick Harvie (Glasgow) (Green): The UK Government's contempt for the report is emblematic of the contempt that it has shown for the lives of the people who are affected by the issues that the report covers. However, although we should be pleased that the report recognises the distinctive approach that is being taken in Scotland, I am sure that the minister agrees that we should never be complacent. Therefore, I ask how the Scottish Government responds to the section regarding the Scottish welfare fund, which says:

"It is clear to me that there is still a real accountability gap, which should be addressed. The absence of a legal remedy or more robust reference to international standards in the Social Security (Scotland) Act is significant and should be addressed."

How does the Scottish Government respond to that aspect of the report?

Aileen Campbell: We take all of the recommendations and actions that Professor Alston set out with the utmost seriousness. Of course, I agree with his critique of what the UK Government has been doing. I will take on board the issues that he raised, but nowhere is the Scottish Government's commitment to human rights more evident than in our work to create the new social security system for Scotland. Section 1 of the Social Security (Scotland) Act 2018 establishes the human right to social security as a founding ideal of the system, and it goes further than article 9 of the International Covenant on Economic, Social and Cultural Rights. There is also strong parliamentary accountability for the delivery of the social security charter that accompanies the system.

In relation to the justiciability of human rights, we require a properly thought-through Scotland-wide approach, which is why the First Minister established an advisory group on human rights leadership led by Professor Alan Miller. We look forward to considering the group's recommendations. We take Professor Alston's recommendations seriously, but we have a good platform to build on in order to evidence to him that we are taking forward the work that he says we need to make more effort on.

Kelp (Mechanical Harvesting)

2. John Finnie (Highlands and Islands) (Green): To ask the Scottish Government what its position is on the mechanical harvesting of kelp by dredging. (S5T-01337)

The Cabinet Secretary for Environment, Climate Change and Land Reform (Roseanna Cunningham): That is an issue that I would have expected to deal with at tomorrow's stage 3 of the Scottish Crown Estate Bill. Currently, the mechanical harvesting of kelp from the sea bed, by a vessel or vehicle, requires a marine licence. Through the marine licensing process, the Scottish Government is committed to protecting the environment and to the national marine plan, which sets a presumption in favour of development that is sustainable. We recognise that kelp is an important part of our marine biodiversity, and having considered amendments to the Scottish Crown Estate Bill, we intend to support Mark Ruskell's amendment, although some clarifications and qualifications require to be made.

John Finnie: The cabinet secretary will be aware that there has been much correspondence about the matter, some of which I have obtained as a result of a freedom of information request. In a letter to the company in question, which is dated July 2017, Marine Scotland talks about "Your innovative proposal", which has

"already received strong support from Scotland's economic development agencies",

which

"stand ready to provide further assistance as you take your project forward."

The letter's author goes on to say:

"I would like to assure you that Marine Scotland is keen to see this sort of initiative ... This is a priority issue for us ... I look forward to seeing it develop."

Will the cabinet secretary explain how the promoter of a policy can also be the regulator? Will she also indicate how the public can have confidence that Marine Scotland will act impartially?

Roseanna Cunningham: I think that members would probably welcome the fact that the Scottish Government and its agencies are looking at innovative industries and thinking about new technologies and what might be developed in Scotland in the future. All Governments will be doing that, and all Governments will be trying to ensure that, within the confines that they might have set in relation to environmental sustainability—which is clearly part of what we are trying to do—they assist in that regard. I imagine that almost any Government would be in the same position.

John Finnie: If environmental considerations were at the heart of Scottish Government thinking, the Government would already have banned mechanical harvesting of kelp by dredging.

The cabinet secretary's comments and the correspondence that I read out leave open the question of who is actually in charge. Will the cabinet secretary say whether it is she or the Cabinet Secretary for the Rural Economy who is pushing the dredging agenda inside Government? Some 500 businesses are opposed to dredging, including businesses and fishermen in my constituency for whom a pristine environment is a vital requirement.

Marine protection is vital. We have already seen the Scottish Government take a very casual approach to it in the context of ship-to-ship transfers. Who is in charge?

Roseanna Cunningham: No one is pushing any agenda. We are all trying to ensure that Scotland has new industries and that innovative technologies are considered carefully. That is the basis on which we are working.

As I indicated, tomorrow I will support amendments to the Scottish Crown Estate Bill that Mark Ruskell has lodged. I am grateful for Mark Ruskell's engagement with me and for his care and his thinking on aspects of the matter, which raises issues that still need to be resolved.

I am not sure that the process in which we currently find ourselves is the best way imaginable to consider any new industry.

The licensing process itself is about bottoming out the environmental issues that require to be considered.

I hope that all members support the notion that new industries should be considered carefully.

Bill Kidd (Glasgow Anniesland) (SNP): For clarification, will the cabinet secretary say which activities will and will not be covered by the proposed approach to which she referred?

Roseanna Cunningham: People need to understand the complexities of the issue in relation

to one or two things. It is our view that the phrase "for commercial use", which is used in Mark Ruskell's amendment, should not prevent power stations, commercial ports or similar public infrastructure from removing kelp species for maintenance or other public-interest reasons; nor should it prevent appropriate research and development. Removal by hand cutting should not be prevented; Scottish Natural Heritage has advised that that activity is sustainable.

I will consider the need for guidance or directions to managers on the issues. I need to keep back something to say during tomorrow's debate, but I can say that I will be announcing a review of the regulatory regime for all kelp harvesting activity, up to and including farming.

Claudia Beamish (South Scotland) (Lab): I welcome the cabinet secretary's announcement of support for Mark Ruskell's amendments, which Alex Rowley and I have supported.

Kelp forests are a priority marine feature and play a vital part in sequestering carbon, protecting our coastlines from erosion, providing feeding grounds for endangered seabirds and providing habitat for a wide and diverse range of species, including juvenile fish. That is very important; indeed, I would describe kelp forests as a cradle for existing sustainable industries. Will those important issues be taken into account in the Scottish Government's deliberations on kelp harvesting?

Roseanna Cunningham: Those issues have, indeed, been taken into account and will be so during any licensing process—there is not one at the current point. They are all areas that I will expect to look at in any review of the regime for kelp harvesting activity.

Members ought to be aware that there are five different ways of harvesting kelp; it is a complex and diverse industry. A lot commercial activity is already on-going in Scotland and we do not want to disincentivise that.

The Presiding Officer: That concludes topical questions.

Urgent Question

New School Butterstone (Closure)

14:20

Murdo Fraser (Mid Scotland and Fife) (Con):

To ask the Scottish Government what support it is providing to those affected by the announced closure of the New School Butterstone.

The Deputy First Minister and Cabinet Secretary for Education and Skills (John Swinney): The decision to close the New School Butterstone is an incredibly sad announcement. It is a very special school that I know very well and which is located in my constituency. Since its foundation by Veronica Linklater, inspired by her passion to design an educational setting that would meet the needs of vulnerable young people, the New School has made a significant contribution to the nurture and development of many young people across Scotland. The announcement is particularly sad for children and young people, the staff and the local community. The school's board of governors has not reached the decision lightly and all concerned are working fully in the interests of the children and young people at the school.

Education Scotland convened a conference call with leaders from all the relevant local authorities after yesterday's announcement. The local authorities affected have indicated that they are actively working to support the smooth transition of all children and young people who presently attend the New School into alternative provision. Her Majesty's inspector attended the school yesterday and will remain there, along with representatives of the Care Inspectorate. Partnership action for continuing employment—PACE—support is also being made available to the staff at the school. Education Scotland will continue to liaise with the local authorities and the school and will ensure that appropriate support is put in place.

Murdo Fraser: I thank the cabinet secretary for that very comprehensive response. I know that he is aware of the shock and dismay among staff, pupils and the affected families who have young people at the school. They will be very anxious about finding alternative provision in the very short time that has been made available.

There are young people at the school from a variety of local authority areas. I understand that 14 families from Perth and Kinross are affected. Given the number of local families who have children placed at the school, is any specific assistance being offered to Perth and Kinross

Council, in addition to the actions that the cabinet secretary has outlined?

John Swinney: Perth and Kinross Council obviously finds itself in a particularly intense position; the largest number of young people who are currently educated at the New School come from that local authority area and it is the host authority for the school and its wider provision. We have been in regular discussions with Perth and Kinross Council to provide the assistance that it requires. Indeed, the council has contributed significantly to the multi-agency team that has been at the New School to make sure that the support can be put in place, since it became clear that the announcement was going to be made yesterday.

The work that is under way—including a first summary conference call yesterday and another call at 6 o'clock this evening—is designed to focus very directly on the needs of every young person in order to make sure that they can be supported and educated properly, that their families are engaged with satisfactorily, and that they can have confidence in these arrangements. I accept and acknowledge the importance of that family confidence in the arrangements that are being put in place.

I assure Parliament of the intense work that is going on. That work is focused on the short-term educational requirements of the children and young people, but also on ensuring that the staff—many of whom have given many years of sustained devotion to the New School—are supported to deal with a very sad set of circumstances.

Murdo Fraser: Again, I thank the cabinet secretary for that response. He will be aware that many of the young people who were at the New School were previously in mainstream education in other state schools. Some of them were moved to the New School because of their educational needs. Is he satisfied that there are sufficient places available at specialist schools elsewhere to accommodate those young people so that they will not have to return to mainstream education, which may not be suitable for their needs?

John Swinney: The fundamental point is that no decision should be taken about the placement of a young person in an educational setting that is in any way inappropriate for their requirements. That is the test that must be passed for every young person who is affected in order to ensure that they are properly supported and that their families have confidence in the arrangements. That work is under way and different elements of provision are available. We need to go through a dialogue with individual parents to make sure that they have confidence in those arrangements. I assure Parliament that the work is actively under

way and is engaging all the local authorities that are involved in the education and care of the young people at the school.

Iain Gray (East Lothian) (Lab): Given the general reduction in the number of additional support needs specialist teachers in schools across Scotland, how will the Government ensure that any young person who moves from the New School into mainstream education will get the additional support that they need?

John Swinney: It goes without saying that educating a young person at the New School Butterstone is a more expensive educational provision than educating them in a mainstream setting. In a direct and blunt assessment of cost, the provision at the New School is more expensive than mainstream schooling, so for local authorities that are affected, resources can be reallocated to make sure that the test that I set out in my earlier answer to Murdo Fraser is passed. The decisions that will be made about the educational provision for young people will be made to address their circumstances—that must be the hard question that is asked in all those circumstances.

Mark McDonald (Aberdeen Donside) (Ind): This afternoon, I spoke to a constituent whose son has a diagnosis of attention deficit hyperactivity disorder and autistic spectrum disorder. The family visited Butterstone last month for a tour and to sample lessons. They were due to visit last Tuesday for a three-day, two-night assessment, which was called off at short notice—staff shortages were cited—and was due to be rescheduled for next week. The family are now questioning whether the gravity of the financial issues was known to the school when they were being shown round and prepared for assessment and, they hoped, placement. I recognise that the first priority will be to support the children who are currently accommodated at the school, but what support might be available for families such as my constituents who were working towards placement but who now feel that they are back to square one?

John Swinney: I would be grateful if Mr McDonald would share with me the specific circumstances of that case, because I have another case, in which a young person had been accepted at the New School Butterstone and was due to commence education there this coming Monday. The arrangements will now be very different, as a consequence. If Mr McDonald shares those details with me, I will be happy to include them in the work that will be undertaken under Education Scotland's co-ordination to make sure that the needs of every young person can be met in these circumstances.

It is no secret that the New School Butterstone was looking for new owners; the process was

under way and the school was confident that new ownership would be secured to provide the leadership and direction that was required and enable the school to provide the educational facility that Mr McDonald's constituents would want to see available. That arrangement has not been successful, which has precipitated the closure announcement. The circumstances are very regrettable, but I assure Mr McDonald that I will do all that I can to address the needs of his constituents in that respect.

Best Start Grant (Implementation)

The Presiding Officer (Ken Macintosh): The next item of business is a statement by Shirley-Anne Somerville on the implementation of the best start grant. The cabinet secretary will take questions at the end of her statement, and I encourage all members who wish to ask a question to press their request-to-speak buttons as soon as possible.

14:29

The Cabinet Secretary for Social Security and Older People (Shirley-Anne Somerville): Today, I would like to provide Parliament with an update on the introduction of the carers allowance supplement, and on progress with the next phase of delivery for social security in Scotland.

I am delighted to say that the vast majority of carers allowance supplement payments were issued during September 2018, and that all payments to carers, including the few that required special handling, were processed by mid-October. I am pleased to announce that, subject to the successful and timely transfer of data from the Department for Work and Pensions, the next payments of carers allowance supplement will be made to the majority of qualifying carers on 14 December.

Members of the Social Security Committee who visited Social Security Scotland's headquarters in Dundee saw the feedback wall that includes comments from people who called in during September. I am sure that they will have been as touched as I was by some of the comments.

I want to take the opportunity to tell Parliament about one woman who, having received her payment, took the time to send in a card. She gave up her job to care for her daughter who was suffering from a long-term illness. As she said, she does it because she loves her daughter, but she sometimes gets tired, so the payment had made her feel appreciated. We should all be proud of that. I know that I speak on behalf of Parliament when I say that we all value and welcome what carers do for society.

Today is international children's day: I am particularly delighted—on such an appropriate day—to be able to tell members more about our progress in delivery of the best start grant, which will support low-income families who have children in their early years. I gave evidence to the Social Security Committee on the draft Early Years Assistance (Best Start Grants) (Scotland) Regulations 2018 at the start of October, and I am pleased that the committee and Parliament approved the regulations. The regulations put in

place a benefit that is fully in keeping with social security principles.

The best start grant is an investment in the resilience of families and it provides support at key points in their children's early years. It respects the rights of the applicant and the rights of the child by ensuring the right to social security. The grant is deliberately designed to be accessible from the point of view of not just eligibility, but the service that will support it. We have improved access to the BSG by giving families longer to apply, both before and after their baby is born.

In addition, the BSG will foster dignity and respect. Where possible, it will minimise intrusive questioning by making the most of existing sources of information. The BSG has been built on modelling, research, collaboration with stakeholders and engagement with users to provide a sound evidence base for our decisions.

This morning, I signed the commencement regulations for the relevant sections of the Social Security (Scotland) Act 2018, which give the Scottish ministers the power to pay a form of early years assistance under the act. Today, I am proud to announce that we will use our new powers to take applications for the best start pregnancy and baby grant from 10 December. I am delighted to say that that means that payments will be made before Christmas 2018.

The best start grant will pay a £600 pregnancy and baby payment for the first child in a low-income family. That is £100 more than they would have got from the DWP sure start maternity grant, which the BSG replaces. It is important that, unlike the United Kingdom Government, the Scottish Government does not put a cap on the number of children, so payments will no longer be limited to the first child in the family. All second and subsequent children will receive a payment of £300 each.

I make it clear that that is not just for second children who will be born in the future. Our expansion of the window for application means that, from 10 December, parents who have a second or subsequent child who is not yet six months old can apply for the BSG. Under the Scottish Government, those children will be eligible to receive up to £800 in their early years. They would have received nothing from the UK Government.

Of course, in addition to the pregnancy and baby payment of £600, we are committed to the introduction of two new additional payments for every child. Those payments, which will be introduced by the summer of 2019, will be made at key transition points in the young child's life. A payment of £250 will be made around the time when a child can start nursery, in order to support

families with the costs of early learning, and a payment of £250 will be made around the time when the child can start school.

Based on 2019-20 figures, we estimate that when the early learning and school payments are included, the total number of payments that will be made each year will be in the region of 39,000, at a cost of £12.1 million. That is a substantial investment to ensure that our under-fives get the best possible start in life, and it reflects the Government's emphasis on the early years.

As outlined in our programme for government, I am delighted to be able to deliver the pregnancy and baby BSG payments six months early. That means paying to families on lower incomes more money more quickly, and giving them vital help at a time when the support that is provided through UK Government social security spending is being drastically reduced.

We are in the final stages of preparation and testing for the launch, but this has not been without its challenges. As part of the programme for government, the First Minister announced that we would, assuming that the DWP put the necessary systems in place, be accelerating delivery of the best start grant. Although I am pleased to have been able to confirm today that we will do that, the caveat about DWP activity proved to be well-founded because—unfortunately—the DWP has not kept to schedule on its implementation plans.

In the summer of 2017, the Scottish Government formally requested use of the DWP's customer information system, and a plan and schedule for doing that were agreed in spring 2018. However, the dates for accessing the system have consistently slipped and the DWP confirmed on 21 September that it could no longer meet the most-recently agreed dates. That has required us to make adjustments to our social security system in order to unpick, in effect, the computer code that had been put in place to speak to the DWP system.

Despite the challenges that have arisen from the DWP missing deadlines, Scottish Government officials have worked hard to put in place an alternative system. Because of our planning processes, the implications of the delay to accessing the DWP's customer information system were recognised at an early stage so, as a result, the impacts have been minimised. Under our contingency arrangements, it will take slightly longer to process applications, but that will not have any impact on parents or on delivery of payments. Our priority is to ensure that parents can access the best start grant. Although we could wait for the DWP to catch up, I do not want parents to be affected by the DWP delay.

Clearly, the DWP has its own challenges to grapple with right now. I have written to the new Secretary of State for Work and Pensions, Amber Rudd, to welcome her to her new role. I have also taken the opportunity to reiterate the Scottish Government's call to halt the roll-out of universal credit, which has been our eighth such letter in 18 months. I am, however, committed to collaborating with the secretary of state in order to ensure that we develop the best possible systems and processes for our shared clients. My officials have in place strong and effective relationships with their DWP counterparts. There can be a mismatch, however, in how we prioritise vital work on devolution of social security benefits. I have strongly urged—I will continue to do so—that devolution of benefits be given higher priority by the DWP in order to ensure that slippages are avoided and that we do not see such a pattern developing.

I am pleased to report the significant progress in building a new social security system for Scotland. As I have said, it is not without its challenges, but today marks another important milestone in the smooth transfer of benefits. However, our future success is guaranteed only if others—primarily the DWP—also play their full part. If they do, our programme will remain on track.

I reassure Parliament that we will never compromise on safety or security. Social Security Scotland is Scotland's first new public service in a generation. It has been established for only two and a half months, but we are already demonstrating what we can do with social security powers when they are in our hands. We are delivering a social security system that always treats people with the dignity and respect that they deserve, and we are ensuring that we support the people who are on the lowest incomes. I look forward to reporting further progress in 2019.

The Presiding Officer: The cabinet secretary will now take questions on her statement. Michelle Ballantyne is first, to be followed by Mark Griffin.

Michelle Ballantyne (South Scotland) (Con): I thank the cabinet secretary for advance sight of her statement. I am sure that the chamber and mothers across Scotland will welcome the roll-out before Christmas of the best start grant, which is the second of the devolved benefits that are coming to Social Security Scotland. Indeed, during the Social Security Committee's excellent visit to the agency's Dundee headquarters, we heard positive feedback from recipients of the carer's allowance supplement. However, some recipients were surprised, as they were unaware that the new entitlement was coming. What actions will the Scottish Government take to publicise the best start grant and ensure that new mothers do not

miss out on the grant because they are unaware of its existence?

Shirley-Anne Somerville: That raises the important issue of encouraging take-up. Frankly, I would have liked to have been able to make my announcement to Parliament earlier. However, because of the contingency challenges in Social Security Scotland, we needed to ensure that, within the agency and the Government, we were very confident about our start date. This is the earliest that we could make the announcement because we have had to do a lot of work to ensure that the contingencies were in place.

That leaves us with the important priority of ensuring that people know what is happening. The agency has held a number of roadshows across the country for people who will come into contact with potentially eligible parents. As we did with the carer's allowance supplement, we will also make sure that there will be advertisements on local radio and in local papers. A great deal of work has been done with professional bodies, including midwives, the nursing profession and local authorities, to ensure that the message has got out to stakeholders and to those who will be in contact with potentially eligible parents. We are also trying to ensure that we contact eligible parents themselves.

We will make sure that the communications and marketing process is strong, and we will learn any lessons that we need to learn to encourage further take-up as payments continue.

Mark Griffin (Central Scotland) (Lab): I thank the cabinet secretary for early sight of her statement. I am particularly grateful for the Government's willingness to use its powers to diverge from the two-child cap in Scotland and to provide support for families who have had a baby in the past six months.

My daughter Eva turned three on Sunday and, because of an in-service day yesterday, she started at nursery this afternoon. She needed new trainers, new wellies, a bag, a hat, a scarf, gloves and a change of clothes—and that is just part of the list of things that she needed. We can afford those things, but some of my daughter's new friends at nursery are in families who are facing universal credit in North Lanarkshire and who could really do with that £250 payment just now.

Will the cabinet secretary consider making payments for children who are turning three and starting nursery over the next six months? That would take pressure off struggling families on low incomes. Nursery start dates are different from the school start dates at the end of the summer, and in every week over the next six months there will be children who turn three, so families will be under real pressure.

Shirley-Anne Somerville: I begin by wishing Eva a very happy birthday. I sympathise with Mark Griffin for being here listening to me, rather than being there for her first day at nursery.

Mark Griffin: I have been there already.

Shirley-Anne Somerville: Mark Griffin's timekeeping is impressive.

Mark Griffin raises an important point about the money that families require. When I was at One Parent Families Scotland, I spoke to a parent who was taking part in the stakeholder engagement for the best start grant. They told me about a mother who could not afford to send her child to nursery because she could not afford the plimsolls that the child needed for indoor play. I am mindful of such issues and of the importance of making sure that we deliver early learning and school payments as quickly as possible. I will make further announcements to Parliament as soon as I am confident about when we can do that, but we expect to do so by summer next year.

I am also mindful of the different timeframes that are involved in early learning and school. I will look seriously at that issue—I will look seriously at all the issues—as we move forward with the second and third payments as part of the best start grant.

Fulton MacGregor (Coatbridge and Chryston) (SNP): How many families does the cabinet secretary anticipate will benefit from our ensuring that there is no cap on the number of eligible children so that second and subsequent children will be eligible for the grant, which is more generous than the draconian UK Government scheme that it replaces?

Shirley-Anne Somerville: I am pleased to say that, out of the estimated total of 3,400 BSG pregnancy and baby payments that are forecast to be made by the end of the current financial year, around 2,000 are estimated to be for second or subsequent births. For the whole of the next financial year, 2019-20, we expect around 7,400 second or subsequent births to benefit. That is a substantial number of families getting much-needed financial support from the Scottish Government that is not available under the current DWP scheme and which would not have been available had it not been for the devolution of powers.

Alison Harris (Central Scotland) (Con): I ask the cabinet secretary to please clarify the point that Mark Griffin asked about. Will children who are due to start nursery or school in 2019 be eligible for or entitled to apply for early years grants or is she looking at perhaps backdating something for them?

Shirley-Anne Somerville: I assure the member—as I tried to assure Mark Griffin—that I

am mindful of the different timetables. Parliament and its committees will be able to look at what the Government is planning in relation to the payments of the grant. If there are concerns about that aspect, I am happy to have that dialogue. I would always encourage members to have that dialogue with me.

We are keen to make sure that eligibility is as open and encouraging as possible. If there are lessons to learn and issues that we need to take on board, I am happy to do that.

Pauline McNeill (Glasgow) (Lab): I, too, welcome the Scottish Government's commitment that there will be no two-child cap on this benefit.

The former cabinet secretary, Jeane Freeman, supported the automation of certain benefits—for example, where there is a qualifying benefit that can establish who is eligible for a best start grant. Will the cabinet secretary give the same commitment to look at the provisions that we have already passed in the Social Security (Scotland) Act 2018 and the Child Poverty (Scotland) Act 2017, which promote automated benefits, to ensure that all mothers and parents who are entitled to the best start grant can get it?

Shirley-Anne Somerville: I know that Pauline McNeill and a number of other members have had a long-running interest in that area, and I am determined to ensure that the Scottish Government looks at it seriously.

Our first priority has to be implementing the best start grant and ensuring that the payments and the processes are in place. I am also mindful of the need to look not only at automation but at ways of encouraging people to apply if we believe that they may be eligible for a payment.

On ensuring that we look seriously at automation, I know that there are a number of different schemes in different parts of the country—Glasgow, for example—that we can learn lessons from. We also need to ensure that we use the information that the agency has to encourage people to apply for payments where we believe that they may be eligible. I am keen for the Scottish Government to take forward those two different strands as stringently as possible.

George Adam (Paisley) (SNP): I listened to the cabinet secretary's statement with interest. I was shocked to hear of the delays and slippage from the DWP, which impacted on the work plans and the delivery of devolved benefits.

With a new Secretary of State for Work and Pensions now in post, does the cabinet secretary expect any change, with the UK Government managing to keep to its agreed timetables?

Shirley-Anne Somerville: I hope that the new secretary of state takes the opportunity to ensure

that we have a shared understanding of the priorities for devolved benefits within the DWP's wider work.

As the member highlights, the delay to the BSG has not been a one-off. I should put on record, however, that my officials have a strong working relationship with officials in the DWP. I stress again that this is about prioritisation within the DWP. It is about ensuring that we have a shared understanding of the importance of our approach and the fact that it is a shared project, and a shared responsibility to deliver it on time and effectively.

Patrick Harvie (Glasgow) (Green): I am grateful for advance sight of the statement, and I am pleased that the Scottish Government is placing emphasis on the goal of increasing uptake and setting some targets for that. However, even if we reach those higher targets for uptake, a great many families who could benefit from the best start grant will still not benefit. I am keen to know what research the Government relies on to understand the reasons for the low uptake.

Awareness is obviously a critical factor, but it is probably not the only factor that inhibits people in accessing the benefits to which they are entitled. Can the minister tell us what role income maximisation programmes such as the healthier, wealthier children programme may have to play in helping to drive uptake even higher than the Government's targets?

Shirley-Anne Somerville: It is important that we encourage uptake. I am mindful that we have to work with groups that perhaps would not normally be encouraged to apply for payments or that may not know that those payments exist. I reassure Patrick Harvie that we are looking at not just take-up in the round but the specific challenges that certain communities face in ensuring that they know what is available to them.

Patrick Harvie mentioned the healthier, wealthier children programme, which is important because it tries to embed knowledge of the best start grant into existing pathways, of which it is one. Work is also being done through financial health checks for those on low incomes, and we are building information on the best start grant into the "Ready Steady Baby!" booklet, which is another way to move that forward.

The Government's forecasting looks seriously at the issue and at the types of challenge that different communities will face. We will, of course, update the Parliament on our continued work on the take-up strategy in due course.

Alex Cole-Hamilton (Edinburgh Western) (LD): I am grateful to the cabinet secretary for providing early sight of her statement, and I associate the Liberal Democrats with what her

Government is doing. We particularly welcome the provision that is being made for young parents, whereby those who are under 18 will not need a qualifying benefit to apply for the best start grant. Will the cabinet secretary consider extending that provision to people with care experience up to the age of 25, given that such people often do not have the parental support that most other new families have?

Shirley-Anne Somerville: Alex Cole-Hamilton will be aware of the importance that the Government places on delivering for care-experienced young people. Following our analysis of the information as part of the best start grant regulation process, I am confident that the vast majority of care-experienced young people will be included in the eligibility framework that has already been put in place through the regulations.

To tie that into the point that Patrick Harvie made, it is important that we link in to the agencies that care-experienced young people trust to ensure that they have information about the best start grant and can get that information out directly. I am confident that, through that two-pronged approach, we are delivering for young parents and, in particular, for those who are care experienced.

Bob Doris (Glasgow Maryhill and Springburn) (SNP): I welcome the Government's commitment to extending the eligibility for the best start grant in various ways, the additional payments that will be made and the length of time that will be given to apply for the grant. How many more children is it estimated will benefit from the best start grant compared to the number who benefit under the UK system that it replaces? Can the cabinet secretary provide any additional information regarding those welcome extensions?

Shirley-Anne Somerville: The member is correct in saying that the Government has extended eligibility and the application window. The focus of that is to make it easier for people to access and apply for the best start grant. We estimate that around 400 additional pregnancy and baby payments could be made in 2019-20.

For example, on eligibility, we have extended the qualifying benefits so that anyone who is on a tax credit or housing benefit qualifies. We have removed the requirement to have a qualifying benefit for young mothers who are under 18, as Alex Cole-Hamilton said, and we have extended the responsibility test to kinship carers who receive a DWP benefit for the child whom they care for. The application window has been extended so that BSG can be claimed from the 24th week of pregnancy rather than from the 29th week, which is when the DWP scheme starts, and we have increased the period to six months after birth, which gives parents longer to apply.

Annie Wells (Glasgow) (Con): I, too, welcome the announcements that have been made in today's statement. Will the cabinet secretary consider using the BSG application process as an opportunity to reach out to expectant and new mothers and provide information on wider issues such as perinatal mental health?

Shirley-Anne Somerville: As I mentioned in my previous answers, we will embed the BSG process into the pathways that are already there for expectant parents. We will speak to and encourage midwives, for example, and those who are in contact with potentially eligible parents to encourage take-up of the grant.

We will also integrate the system for delivering the BSG with the system for delivering best start foods. Both systems will be administered by Social Security Scotland so that clients will be required to complete only one application form. That is yet another attempt to make the process easier for parents at what is a very busy time in their lives.

Jenny Gilruth (Mid Fife and Glenrothes) (SNP): Given that the DWP's sure start maternity grant has one of the lowest rates of take-up of any benefit, will the Scottish Government commit to ensuring that the BSG is straightforward for claimants to access?

Shirley-Anne Somerville: Indeed, I can testify to the fact that there is a very easy application process, having gone through the online application process recently with officials as part of our go-live testing.

Unlike the payments that it is replacing, this benefit can be applied for online with a simple form. The application can also be undertaken by phone or in paper format. We are encouraging greater choice, depending on the needs of the client. I hope that, together with the points I have discussed in previous answers, that gives Jenny Gilruth reassurance that we are taking seriously the challenge of the sure start maternity grant having one of the lowest rates of take-up of any benefit. We do not in the slightest want to replicate that with the BSG.

Elaine Smith (Central Scotland) (Lab): I welcome today's statement. In particular, I welcome the fact that the grant clearly opposes the despicable Tory child-cap policy approach to social security.

Given the cross-cutting nature of poverty, however, will the cabinet secretary encourage her Government colleague the Cabinet Secretary for Education and Skills to consider changing the criteria for post-P3 free school meals to those for the BSG, so that it applies to more families with children and not just to those on the lowest incomes?

Shirley-Anne Somerville: We started by ensuring, as a basis for the BSG, that those who are eligible for the sure start maternity grant are eligible for the BSG, and we then looked to see whether further changes were needed.

I appreciate where Elaine Smith is coming from. There are different eligibility criteria for the different benefit payments that are available to those with young children. I am also mindful of the fact that it is not necessarily a bad thing that there are different eligibilities. I do not want to see a cliff edge whereby people are either able to apply for everything or reach the point at which they can apply for nothing.

I take Elaine Smith's point that there are two distinct sets of eligibility criteria, and I will look closely at the eligibility criteria for the BSG, as I am sure the Cabinet Secretary for Education and Skills looks at the eligibility criteria for free school meals.

David Torrance (Kirkcaldy) (SNP): Will the cabinet secretary confirm what plans the Government has in place for multiple-birth families who face additional expense from having twins or triplets?

Shirley-Anne Somerville: We specifically wanted to address the costs of a multiple birth, and we have introduced the multiple birth supplement of £300 in recognition of the additional costs. For a twin birth, which the majority of multiple births are, the payment would be £600 for the first birth and £300 for the second, with a payment of £300 for the multiple pregnancy supplement, giving a total of £1,200 in financial support. I stress that, within the payment, we will always recognise children who are born subsequently—there will never be a cap on the number of children under Social Security Scotland.

Digital Industries

The Presiding Officer (Ken Macintosh): The next item of business is a debate on motion S5M-14807, in the name of Kate Forbes, on developing Scotland's digital industries for our economic future.

15:00

The Minister for Public Finance and Digital Economy (Kate Forbes): It is great to be back in the chamber to talk about the digital economy so soon after our recent debate on digital participation.

November 20 is not usually a date that springs to the forefront of people's minds when reflecting on the history of the digital economy. However, on this day in 1985, Microsoft changed human interaction with machine learning, because it was on that day that the first mass-produced personal computer graphic package, Windows 1.0, was released. It is from that moment that digital technology truly began to enter the workplace and our lives and, of course, that the lives of people worldwide began to be transformed.

Stewart Stevenson (Banffshire and Buchan Coast) (SNP): Will the member take an intervention?

The Deputy Presiding Officer (Christine Grahame): I feel a history lesson coming on.

Stewart Stevenson: Unfortunately, the minister has been badly advised, as Digital Research produced Graphics Environment Manager—GEM—some 10 years earlier.

Kate Forbes: I am grateful that Stewart Stevenson was in the chamber to give us an update on that history lesson. I am sure that he can tell me more later.

Back in 2018, where I prefer to exist, more than 102,000 people are employed in digital occupations in Scotland. The digital and information technology sector is currently worth £5.2 billion in gross value added to the economy and is forecast to be the fastest-growing sector in Scotland by 2024. However, despite that, the sector struggles to keep up with the pace and demands of change, and it requires an extra 12,800 new employees each year just to stand still.

The interesting thing is that it is a sector that not only is dominated by multinational companies but is being shaped by small and medium-sized enterprises that require more support to meet the demands. For example, in Edinburgh, jobs in digital technology increased by more than three times the United Kingdom average between 2014

and 2017, and there are now an estimated 10,000 people in the city who work in the sector across 213 businesses, creating £1.4 billion of turnover. Those figures are, of course, replicated in Glasgow and, to a degree, in Dundee, Aberdeen and Inverness.

The latest Tech Nation survey found that digital tech workers are more productive than others by, on average, £10,000 per worker, and that jobs requiring digital tech skills command higher salaries than those that do not, with the average salaries being £42,578 and £32,477 respectively.

Those figures illustrate that we have a growing and innovative sector that holds a distinct opportunity for Scotland's economy and our future ambitions. However, it is important to remember that a business does not have to be a tech business or start-up to be able to take advantage of the digital opportunities and the emerging technologies.

Since taking over this ministerial role in June, I have travelled the length and breadth of Scotland to meet many small businesses that are taking up digital as a way of improving their business processes, capabilities and productivity.

Patrick Harvie (Glasgow) (Green): The minister is enthusiastic, as we all should be, about the positive opportunities that she mentions. However, is there not also a danger that, if we frame this debate only in terms of the positive opportunities, we might miss a trick? There are downsides and risks involved in this agenda, too, and, without wishing to pour any cold water on the debate, I point out that we will maximise the opportunities only if we identify and take action to mitigate any downsides and risks in terms of worker protection and a host of other issues. Will the minister reflect on that?

Kate Forbes: I thank Patrick Harvie for that comment, which he also made during the digital participation debate. It is an issue that I take very seriously, and I have three main concerns.

The first is that we must ensure that ethics are right at the heart of our strategies on data.

The second is that we must protect our people—particularly, perhaps, young people who are coming through school at the moment, who only know about engaging with others online. In conjunction with Young Scot, we are supporting the five rights campaign, which I am sure that Patrick Harvie has come across. The campaign is about young people's rights: to remove information; to know what their rights are; to safety and support online; to informed and conscious use of online; and to digital literacy.

The third is to ensure that, as Patrick Harvie says, when it comes to automation, workers' rights are at the heart of the debate.

The Deputy Presiding Officer: Do not worry about taking interventions, minister. There is time in hand.

Kate Forbes: Great. To conclude on Patrick Harvie's question, those issues are shaping our strategy, both for economic growth because of digital and for supporting workers and people who are using digital.

I mentioned small businesses that are taking up digital. Many of those businesses, including Swansons Fruit Company in Inverness, WoodBlocX in Dingwall and Prater Contracts in Lanarkshire, are not necessarily tech companies and were initially far removed from the digital technology that they are now using. Thanks to Government-backed programmes such as digital boost and the recently launched digital development loan, they are now finding new ways to get digital and enhance their digital presence. It is companies such as those, which are the life-blood of the local Scottish economy, that we have to encourage to become more digitally aware.

On my travels, not least as a Highland MSP, I often hear that connectivity, especially in rural areas, is a barrier to small businesses getting online. While that may be true in many hard-to-reach areas in this vast country of ours, even those that are connected are still not making the most of the infrastructure that they have. A recent Scotland's Rural College report about unlocking the digital potential of rural areas in Scotland and across the UK stated that

“even when such concerns about network connectivity are put aside, more than half (52%) the rural businesses surveyed identified some other constraint which has reduced their ability to go digital.”

There are clearly barriers other than connectivity that we need to address, and I hope that this debate will be constructive in doing so. Some of those barriers are structural, but others are personal and about aspiration and ambition. It is that ambition that we want to see unlocked, which is why digital represents a huge opportunity for Scotland. If we ensure that our support is right, it will also afford the most excluded from the job market—be they mothers of young children, disabled people or young people with fresh ideas—the same chances to participate as anyone else.

The other advantage of the digital economy is that it enables businesses to become more productive, to streamline processes and to become more efficient. A recent CBI Scotland report said that Scotland's productivity falls short of that of overseas countries and differs across

Scotland, with a variation between local authorities of up to 50 per cent. The report stated that one of the contributing factors to productivity was a skilled and diverse workforce. It quoted research that suggests that firms with a high level of gender diversity outperform rivals by as much as 15 per cent and firms with high levels of ethnic diversity outperform rivals by as much as 35 per cent.

Dean Lockhart (Mid Scotland and Fife) (Con):

On the subject of skills, does the minister share my concern about the significant decline in teachers teaching maths and computer science and the negative impact that that might have on the future workforce and the digital economy?

Kate Forbes: That is why the Deputy First Minister's commitment to ensure that there are more teachers in science, technology, engineering and mathematics in particular is so welcome, and the career-changing bursaries of £20,000 to those who want to move into teaching STEM subjects are so vital. If the next generation, in particular, has the digital skills to enable them not just to leave school as future software engineers but to become teachers, doctors, nurses and carers with the digital skills that they need, we will see transformation right across the public and private sectors.

There are great examples of Scottish tech companies that are striving to address the need for partnership between business and Government in order to spread good working practices and change workplace culture. In partnership with the Scottish Government, many companies have signed up to the 50:50 by 2020 initiative, which aims for gender-balanced boards in order to ensure that higher level of productivity.

Some businesses identify the challenge of engaging with the public sector as one of the hurdles that they need to overcome. Imagine if we could harness the power of digital so that a business does not need to provide the public sector with the same information multiple times, and if the time that is taken to make a decision could be reduced from 28 days to one day. Imagine if there was a single place where a business or a citizen could access information on the progress of an application on a device and at a time of their choice. The Scottish Environment Protection Agency anticipates such a time reduction following introduction of its common licensing platform. All that is possible because SEPA has automated repetitive clerical tasks and joined them up, allowing staff to focus where they can truly add value. That is what we want to see right across the public sector, through our supporting businesses, citizens and entrepreneurs as much as possible to achieve their ambitions.

Of course, we need to do that in a way that ensures that we operate safely and securely

online. That is why we are putting cyber resilience at the core of everything that we do in the digital world. Our public sector action plan was published last November and is now well advanced, with non-departmental public bodies, health boards, local authorities, universities and colleges all working hard to ensure a common baseline of cyber resilience. Earlier this year, the Deputy First Minister published our private and third sector action plans on cyber resilience, which set out how the Scottish Government will work in partnership with leading businesses and charities, and with the national cyber security centre, to help make Scotland a world-leading nation in cyber resilience.

Everybody will be well aware of the strength of Scotland's financial sector. The depth of talent and expertise that we have in Scotland, particularly in Glasgow and Edinburgh, is one reason why companies continue to choose to invest in Scotland. For example, Barclays recently announced its commitment to a new facility in Glasgow and, just this morning, I visited Clydesdale Bank to see the ways in which it is supporting businesses and customers with better online platforms.

Advances in technology, particularly in the field of data, mean that the world of financial services is changing. Scotland is particularly well placed, with its strong financial sector and its world-renowned data and analytical expertise, to exploit those opportunities. The value of data-driven innovation to the economy is forecast to be up to £20 billion over the next five years, and there are aspirations for Scotland to become a global centre of excellence in the field, with positive developments beginning to happen in oil and healthcare, as well as in financial technology. We cannot allow unwanted and unneeded barriers to jeopardise those aspirations.

Much of what I have spoken about this afternoon looks at the positives that we possess as a country and at the opportunities that we have in adopting digital. Our refreshed digital strategy in 2017 has a vision of digital for everybody at its heart. Of course, work needs to be done to realise our ambitions, but we are starting from a solid base.

I encourage every member in the chamber to champion the message of digital to their constituents and businesses. They should consider some of the challenges that Patrick Harvie set out in relation to the ethics that are required, the rights of our people and the way in which we protect users and businesses. However, over the course of the debate, I hope that we can look at the ways in which the digital economy provides for businesses and citizens in every local area throughout Scotland.

I move,

That the Parliament recognises the benefits of the digital economy to every business, region and citizen in Scotland; acknowledges the strong evidence of the importance of technology to growing Scotland's business base and productivity levels, and recognises that a combined focus by government, the wider public sector and private sector is the most effective way of improving the digital capabilities and processes of Scotland's businesses and workforce, which in turn will increase productivity, profitability and, as a consequence, result in higher paid jobs, building Scotland's reputation as an innovative nation.

The Deputy Presiding Officer: I ask all members who wish to speak to press their request-to-speak buttons; some have not done that.

I call Finlay Carson to speak to and move amendment S5M-14807.1. Again, I can be generous if the member takes interventions.

15:14

Finlay Carson (Galloway and West Dumfries) (Con): I am pleased to open for the Scottish Conservatives as my party's spokesman on the digital economy. It is only a few weeks since I closed for my party in the debate on digital inclusion, which raised many pertinent issues about people's digital access as technology continues to develop rapidly.

We are in the rapidly developing and enveloping fourth industrial revolution, which Scotland should be leading, as with the previous three revolutions. No cabinet secretary, minister, shadow minister or back bencher would be fulfilling their parliamentary duties if they did not recognise the pivotal role that digital technology will play in all our futures. It is therefore fitting that the minister has introduced another debate on the digital industries.

There is much in the Scottish Government's motion and the Labour amendment that the Conservatives agree with. Ms Forbes should—and, I have no doubt, will—be a regular contributor to debates in her role as the digital economy minister, because there is not one aspect of our future that will not be shaped by decisions that are taken about the fourth industrial revolution.

I welcome recent research that suggests that digital devices have been taken up faster in Scotland than in any other part of the UK. However, much more can be done to go further in ensuring that Scotland has a bright digital future, as my amendment says.

As I am an MSP for a rural constituency, not a day passes when I am not contacted by an individual or an organisation that is pushing for greater urgency in delivering better connectivity in homes and premises. It is clear that far too many businesses are still not properly equipped with

digital technology, which negatively affects productivity and innovation.

I genuinely hope that the reaching 100 per cent programme will deliver for rural Scotland, despite the stark warnings from Audit Scotland. When it comes to the digital revolution, we cannot afford to leave anybody behind.

We hear the term “digital divide”, which often refers simply to internet connectivity. The divide used to be between those who had broadband and those who had dial-up, and then it was between those who had broadband and those who had superfast broadband, but there is still a divide between those who have connectivity and those who do not.

As the pace of change is ever increasing, the digital divide could get wider and create divides not only in economic opportunity but even more so in the social, health and wellbeing dimensions. We cannot allow that to happen. After the previous digital debate, a constituent contacted me to ensure that we do not forget that people who suffer from digital autism could also be excluded.

We know from the digital economy business survey that was carried out last year how important developing our industries for a digital future is to them. It is concerning that only one in four businesses said that their employees were fully equipped with the skills to meet their digital needs, which was down from 37 per cent in 2014. When we combine that statistic with the fact that more than three quarters of businesses said in the survey that digital technologies are essential or important for the current operation of their business, it is clearer than ever that action needs to be taken to address the imbalances in our businesses when it comes to new technologies.

Stuart McMillan (Greenock and Inverclyde) (SNP): Finlay Carson talks about business, and the Conservatives' amendment refers to city deals. Is he content that his Government at Westminster is underfunding the city deals by more than £400 million?

Finlay Carson: I disagree with that claim. I am involved with the borderlands deal and I look forward to an announcement in the spring about addressing the digital technology improvements that we need in rural Dumfries and Galloway and in the Borders.

We have seen advances in health and social care, and Scotland is leading the UK in developing new applications. Scotland's universities also have a global reputation for the development of artificial intelligence—we see an expansion of the expertise at the Edinburgh centre for robotics and the University of Edinburgh's artificial intelligence applications institute.

That all links very positively to the UK Government's industrial strategy, which aims to put UK industries at the forefront of the industries of the future. At the heart of that is making the UK a global centre for innovation. As my amendment states, the Scottish Government and the UK Government can work together with stakeholders to ensure that the UK is not left behind in the fourth industrial revolution.

The city and region deals, which have been brought together by the two Governments working together, are a perfect opportunity for ensuring that our industries have the investment to develop new technologies and to open up new opportunities for communities, particularly communities in rural parts of Scotland, in which it is harder to bring new technologies into action. That is why I hope that the Scottish Government takes seriously the Scottish Council for Development and Industry's recommendations. Most pressingly, it says that Scotland currently lacks the strategic leadership for the fourth industrial revolution.

Kate Forbes: I assume that Finlay Carson therefore welcomes the appointment of the first minister for the digital economy in the Scottish Government.

The Deputy Presiding Officer: Mr Carson, be gallant.

Finlay Carson: Absolutely. I would have preferred it if Kate Forbes had become a cabinet secretary because, as her shadow, that might have put me in the shadow cabinet, and I would have helped to hold her to account.

As the SCDI has pointed out, the lack of leadership is not exclusively down to the Government. Again, that highlights the importance of everyone working closely on the future strategy.

We must have a national focus on what Scotland can do to harness the opportunities that come in order to boost the economy. As the minister will remember, we had a very fruitful discussion about data soon after she was appointed to her new role. I am heartened by the SCDI's belief that data are fundamental to the latest industrial revolution and that it believes that data are a current strength of a lot of technical companies in Scotland. If we can develop a strong data strategy that can alleviate the risks that some associate with personal data, Scotland can truly unlock its potential.

I urge the Scottish National Party Government into quicker action in respect of the digital growth fund. The First Minister launched that fund, which is worth £36 million, in March 2017, but the first payments from it were not made available until June 2018. That is simply not good enough, as we

always need to keep up with advances in technology.

As "Automatic ... For The People—How Scotland can harness the technologies of the Fourth Industrial Revolution to increase economic and social prosperity" points out, there have always been winners and losers from any industrial revolution and, with the

"accelerated growth in Scotland's cities",

the productivity gap has widened in comparison with the productivity in our rural areas. Any future digital industry strategy must address that geographical imbalance. Many of our vital sectors, such as the food and drink and tourism sectors and, indeed, our education and health services, are at risk of being left behind if their demands are not met in the latest digital strategies.

We are at a critical point in how our economy will develop for the next generation, and who will be able to access the opportunities in new technologies is all-important.

The "Industrial Strategy: Building a Britain fit for the future" white paper is a hugely important piece of work that outlines just what can be achieved through working together and addressing the current imbalances.

It has been a pleasure to bring forward suggestions and to highlight more of the same in my amendment.

I move amendment S5M-14807.1, to insert at end:

" , and calls on the Scottish Government to work with the UK Government, industry, workers, academics and citizens to capitalise on opportunities available to Scottish businesses under the UK-wide industrial strategy, including through city and region deals, sector deals as well as the Industrial Strategy Challenge Fund and Innovate UK, which helps businesses develop new ideas and grow research and innovation strategies."

15:23

James Kelly (Glasgow) (Lab): This is our third debate on digital issues in several months. The minister was right to highlight the important contribution that the digital economy can make in Scotland and that we have to get that crucial area of the economy absolutely right, as it will continue to grow. That will be a test of whether we properly have an economy that is fit for the 21st century.

I want to bring two issues to the fore: getting more people access to the technology and ensuring that we address the skills that are required in order to ensure that we make the most of the potential of our digital economy.

From reflecting on the previous couple of debates, there is a slight feeling that a bubble debate is going on at Holyrood in that people are

getting concerned about connectivity speeds and what particular types of technology are available in different parts of the country. There is a lack of recognition that, sadly, too many people in too many areas of the country do not have access to the internet at all, never mind information technology devices.

That is because there are areas in which there is a lot of child poverty. In Scotland, 230,000 kids are still living in child poverty and 487,000 people are not being paid the living wage. In Rutherglen Central and North—one of the wards in the Glasgow region that I represent—just short of 28 per cent of children are living in child poverty. For people who are bringing up kids in a house like that, it is difficult to make ends meet, to pay the bills and to put proper, nourishing meals on the table. They do not have the money that people in other areas have to enable access to information technology. If people do not have access to the appropriate digital devices, that is detrimental not only to those individuals but to the economy, because if people do not have access to information technology, companies' economic access to them through digital connectivity is restricted.

With regard to the budget, there is a bigger debate to be had about how we lift people out of poverty and increase household income. Ultimately, we need to address those issues if we are going to ensure that there is greater digital connectivity coverage in the country. That has a direct input into business; it is not just about the individuals.

We need to look at making the most of the area. Only 3 per cent of companies in Scotland are in the top rating for their digital capability, which means that we have a lot further to go. Another issue is getting the right people into those companies. I acknowledge that the Government has made some progress on that, but when I speak to businesses, one of the shortcomings that they see is that college and university graduates are not quite skilled enough in the technologies that are required for the jobs that the businesses are creating.

This is a fast-moving area, and we need to ensure that we have people coming in not just with the appropriate skills, but with the appropriate capability to pick up and develop the technologies quickly.

Kate Forbes: I agree with a lot of the member's points. Does he have any thoughts on supporting the current workforce with reskilling and upskilling, so that people have the digital skills no matter what job they have?

James Kelly: Kate Forbes makes an important point, because one of the issues is automation. As

we automate more, that will have tremendous advantages for business and for individuals, but, unfortunately, there are people who do not yet have those IT skills. As individual businesses change their focus, they should try to make sure that they take their employee base with them and give the employees the opportunities to upskill. There is a link into the Government strategy and into the higher and further education sector, to make sure that people have proper training opportunities. It is absolutely key that automation does not mean that people are left behind, ultimately disenfranchised and potentially left out of a job. That is very important.

We need to address how to get more women into STEM positions. Sadly, women make up only 19 per cent of the tech workforce, so we are not making the most of bringing women forward for those positions. That goes all the way back to school level. In 2012, only 32 per cent of qualifications in computer-related subjects were achieved by women. The position deteriorated recently and the proportion has reduced by nearly half, to 18 per cent, which demonstrates the issue that we have in bringing girls and young women into positions in the sector. We are failing to make the most of our potential in that regard.

This is a massive issue for the Government and the Parliament, as we look to build a successful Scottish economy. It requires an overall strategy, which ensures that we give as many people as possible access to technology, so that they can contribute to the economy. We must have a joined-up strategy, which runs through from school and university to employers, to ensure that people are properly skilled to be able to make the most of the advantages of the 21st century.

This is an important debate, which gives us big issues to discuss. There are opportunities; there are also challenges that we need to address.

I move amendment S5M-14807.2, to insert at end:

“; further recognises that Scotland's digital skills gap and the digital divide, which affects far too many people in rural communities, those on the lowest incomes, people with physical or mental health conditions, and older people and women, who are often digitally excluded, poses a threat to Scotland's ability to maximise the benefits of digitisation; agrees that strategic leadership and a comprehensive strategy is needed, which includes ensuring that digital skills development is embedded in schools, from primary to further and higher education, that employers are supported to embrace retraining and upskilling, that existing infrastructure constraints, and other barriers to digital inclusion, are addressed and that the challenges of cybersecurity and securing digital democracy are recognised, and agrees that the development of a comprehensive strategy must have the principles of fair work at its heart and include the involvement of the trade unions to ensure that the benefits of digitisation can be realised for all.”

15:30

Patrick Harvie (Glasgow) (Green): There is a savage irony for me as I start to speak in this debate, in that today, much against my better judgment, I was foolish enough to trust my device with my notes, and now the screen has frozen and the device is unusable, so I am going to have to wing it. [*Laughter.*]

I remember that the first thing that I was supposed to do was to draw attention to my membership of the Open Rights Group, just as I did at the start of the debate three weeks ago. I will expand on themes that we touched on in that, because there is a great deal of overlap between the two debates.

My experience with the device that is in front of me reminds me of one of the first feelings of frustration that I had on being elected to this Parliament, when I found that I would be locked into a Microsoft environment—not one that I would have chosen. Members of this Parliament are not given the option of spending a fixed budget on IT to meet their needs; we are told that we have to live within a walled garden. That is clearly still a frustration for me; I do not know whether other members have the same experience.

Finlay Carson: Will the member give way?

Patrick Harvie: I will.

The Deputy Presiding Officer: Are you offering to unfreeze something, Mr Carson?

Finlay Carson: The member should try rebooting his device.

Does the member agree that the feeling that he is experiencing now is shared by many rural constituents, including two who are sitting in the gallery, who are from a farming company and experience the same frustration daily when their internet connection goes down? We need to accelerate roll-out.

Patrick Harvie: I certainly recognise that frustration.

One of the arguments that I made in the previous debate, which I make again, is that although we should be concerned to ensure that everyone has adequate access, I think that there is an obsession with the idea that absolutely everyone in the country must have superfast speeds. I am not sure that I would prioritise someone in my street in Partick getting superfast speeds over people in other parts of the country getting speeds that are good enough. We need some discussion about what access to networks and broadband is good enough, rather than thinking that if people do not have 30Mbps connections they are somehow digitally deprived.

Roll-out, uptake and ability to access are not the only things that we should be debating. I want to talk about three broad themes: impact on the workplace, the framework of laws that protect things like copyrights and patents, and the digital rights agenda.

James Kelly mentioned the impact of automation on people who in the future might not have jobs—or certainly jobs that pay them a liveable, secure, reliable income. We have debated that on a number of occasions. In particular, we have debated the impact of the gig economy and its employment standards. We have talked about the vulnerability that people live with when their income is temperamental or unpredictable, or when the companies that operate the platforms through which they get access to work do not regard themselves as having employers' responsibilities towards their workers.

People might not be doing tech work or working in a tech industry, but if they are working across a platform that is provided by a tech business they are affected by it, and a great many people are working for significantly less than the minimum wage, let alone the living wage, with no security around holiday entitlement, sick leave and so on. There are a host of workplace protection issues in that regard.

Even for the big tech businesses, there are issues. I mention our neighbours Rockstar North in this context, only because it has had negative attention in the press recently in relation to workplace issues. Among that press attention, some individuals have been quoted as saying that things are getting better; they have been conscious about the need to improve. However, that consciousness reminds us that big tech industries can often be, and have often been, very exploitative in expecting huge amounts of overtime, including unpaid overtime, particularly in what is referred to in the games industry as the crunch period—the final frantic phase of the development of a new game or product—when people are expected to work above and beyond their contracted hours.

We want a fair economy, and we recognise that the Scottish Government has a fair work agenda. We need to think about the new aspects of that agenda that have to develop in relation to the tech industries and the digital economy.

The second theme that I want to talk about is loosely called “intellectual property”. I have used that phrase in the past, but I have been persuaded that it is a confusing term. We should be talking in different ways about copyright, patent and other forms of trade protection such as trade secret protection or trademark protection. They have different purposes. In particular, we see copyright

and patent used in different ways in relation to software. We should be asking whether those are the right forms of protection. Are they stimulating genuine innovation or are they merely protecting those who own a walled garden such as the device that I am holding—whether they serve us well or poorly on any one day? Is the copyright and patent framework the right way to achieve the maximum social benefit? It should not just be about maximising the profit of intellectual property owners, but about maximising the social benefit and the social utility that comes from creativity.

The arguments on copyright ought not to be playing out in relation to a piece of code in the same way that they do for the latest Hollywood blockbuster. However, at the moment we seem to be using a legal framework that protects the profitability of the biggest businesses and the owners of the most profitable bits of IP while not protecting those who want to earn an ordinary living doing creative work, whether in the digital industries or elsewhere, and we are not necessarily stimulating the greatest production or dissemination of creative goods. We need a fundamental debate—and it has to be on an international basis—about the reform of intellectual property laws.

Finally, on digital rights, which I have spoken of in the past, I am pleased that the Labour amendment uses the phrase “digital democracy”, because there are fundamental questions in the wake of the deliberate hacking of the democratic process here, in the US and in other countries. Even analogue democracy can be hacked digitally and we need to be looking at a whole host of digital rights in relation to privacy, surveillance and the operation of the basic democratic system. These are unanswered questions, as yet, and I do not expect the Government to have all of the answers, but those questions need to be on the agenda, rather than the agenda being one of only growth, growth, growth.

The Deputy Presiding Officer: I need a footnote for “analogue democracy”.

Patrick Harvie: It is voting slips and ballot boxes.

Daniel Johnson: Bits of paper with Xs on them.

The Deputy Presiding Officer: Thank you.

“Bits of paper with Xs on them.”

That is my language.

15:38

Mike Rumbles (North East Scotland) (LD): The Scottish Government’s motion makes it clear that Parliament should recognise

“the benefits of the digital economy to every business, region and citizen in Scotland”.

I would be surprised if there is anyone in the chamber who does not see the huge benefits to be gained from promoting our digital economy. By connecting businesses and individuals, developing new technologies, innovation and education, and creating new skills and highly paid jobs, we can and should take advantage of changing global markets.

However, none of that matters one jot if it is not backed up by world-class digital infrastructure. For many people living in rural and remote communities, the feeling is that they have been simply left behind. The minister knows that in Aberdeenshire and her own constituency in the Highlands and Islands region, communities have not had anywhere near the same level of access to the technological revolution that some other areas have. In fact, the number of people without access to broadband in Aberdeenshire is second only to the number in the minister’s Highlands and Islands region. Citizens Advice Scotland reports that about four in 10 rural consumers have had problems with their broadband service in the past year. I want to know from the minister what the Scottish Government is doing to deliver on its commitment to connect the thousands of homes and businesses that have been left behind.

Kate Forbes: I will answer with two points. First, Mike Rumbles will know about our commitment, which is backed up with £600 million, to connect 100 per cent of properties to superfast broadband. If he knows well the frustration and the need in his constituency to see that commitment delivered, I know those things even better in my constituency.

Secondly, I will throw back to Mr Rumbles a question that I asked him in our digital participation debate. In the light of the quote that I gave earlier, we know that even where there is connectivity, we need to do more to support the skills of businesses and citizens to make the most of digital. How does he propose that we do that where there is infrastructure for more than 95 per cent of the country?

Mike Rumbles: We must make sure that we do not put the cart before the horse. It is useful to have the infrastructure before we talk about all the other things that we need to make progress. If the infrastructure is not there in the first place, how can we possibly address what needs to be done?

With regard to the R100 programme, we are now halfway through this parliamentary session and the minister must know that progress to get everybody connected has been glacial. We are now at the 11th hour of the Scottish Government’s election promise—I hear a murmur from the SNP back benches—to achieve 100 per cent coverage

by May 2021, which Fergus Ewing has often spoken about in the chamber. Amazingly, that target date has moved to December 2021.

Finlay Carson: Does Mike Rumbles agree that it is ridiculous that the SNP Government has gone back on a commitment to deliver a road map in July next year to give businesses a level of security that superfast broadband will come to them?

Mike Rumbles: Finlay Carson has made a good point. BT has said:

“100% coverage is achievable but will require”

what it calls

“unparalleled partnership and collaboration between the contracted supplier, the Scottish Government and Scottish public sector, communities, businesses and citizens.”

It says “unparalleled”, not “glacial”, but that is not the level of effort that we are seeing from the Scottish Government on the matter.

As technology develops and digital connectivity becomes an ever-important if not essential part of modern life, it is vital that connectivity is reliable and that digital infrastructure keeps up with the rest of the country. I believe that rural areas have the most to gain from digital inclusion, both economically and socially, and that good connectivity is the answer to some of the challenges of rural living. The Scottish Government’s research shows that four fifths of Scottish businesses say that digital technology is essential or important to the future growth or competitiveness of their business. Improving Scotland’s digital infrastructure was identified by the Federation of Small Businesses as the second top priority for small businesses. Why would that be any different for rural areas? Fast and reliable access to the internet and a dependable mobile phone signal is no longer a luxury. Good connectivity is now an essential service.

Of course, there are other things that the Scottish Government can do to improve the situation for those who already have reasonable access—how fortunate they are. They include upskilling workers—which the minister asked about—as job markets change and businesses embrace new technologies, automation and even artificial intelligence. It could also help by supporting UK and international efforts to strengthen the domestic and international regulation of big tech companies in the interests of consumers.

However, for rural communities at the back of the queue, none of that will have a meaningful impact until the infrastructure is in place. At the moment, the only answer is to wait for public investment and commercial operators to fill the gap—and wait and wait we do—by which time the

rest of the country will have moved forward again. That is marvellous for cities such as Glasgow and Edinburgh.

Although I support the motion that is before us, it is not the motion that I would have lodged. I am disappointed that our amendment was not selected, but we cannot challenge why amendments are not selected and I understand the reasons for that. As well as being disappointed with the motion, I think that the amendments could have had a stronger focus. In the motion and the amendments before us, we see warm words about our digital economy. I urge the Scottish Government to demonstrate real progress for our rural communities by completing the 100 per cent coverage by the date by which it said that it would in its manifesto for the most recent election.

15:45

Stewart Stevenson (Banffshire and Buchan Coast) (SNP): I will start by declaring that I am a member of the Institution of Engineering and Technology, a fellow of the Royal Society for the Encouragement of Arts, Manufactures and Commerce and a professional member of the Association for Computing Machinery. As far as history is concerned, the Association for Computing Machinery is perhaps the most important of those organisations, because at a meeting of the ACM on 9 December 1968, Douglas Engelbart demonstrated a system that, as well as having windows, hypertext, graphics and videoconferencing, showed the first mouse in action. There is a video of that demonstration that can be viewed on the internet.

The Government’s motion talks about the need to harness the public sector and the private sector, so it is worth revisiting the history of how we got here. The public sector played a very important part in the digital developments that we benefit from today. Tommy Flowers, who was an engineer at the Post Office’s Dollis Hill laboratory during the second world war, used his own money to develop the first electronic computer. He scrounged a huge number of electronic valves and produced a computer for use at Bletchley Park, against the recommendation of the person who was running the place. In doing so, he contributed enormously to the war effort. The commercial company that was J Lyons and Co tea shops produced the first commercial computer, which ran its first transactions in 1951. The history that is encompassed by the motion has involved the public and the private sectors working together on a long-standing basis.

Digital ways of expressing data have been around for a very long time. It was Leibniz who, in 1679, came up with the binary system, and it was George Boole who, in 1847, introduced Boolean

algebra, which underlies much of the work in this area. The first digital electronic circuit was installed in Edinburgh in 1868—it was a telegraph circuit that connected the Bank of Scotland's head office in Edinburgh to its office in London. Incidentally, the bank installed its first telephone in 1881; the board said that that could be done only on the strict understanding that it would not be used to conduct business.

Mike Rumbles: I wonder when Mr Stevenson will get to the substance of the debate.

The Deputy Presiding Officer: I was just mulling that over. I am looking for the reference to the history of the subject in the Government's motion.

Stewart Stevenson: I hope that the line of the Government's motion that says that

“a combined focus by government, the wider public sector and private sector is the most effective way of improving the digital capabilities”

is relevant to some of the remarks that I have made so far.

However, let us move on to today and the important things that we must do to deliver the modern world in which everyone can benefit from the adoption of digital technologies.

We know that about 2 per cent of our workforce are employed in the digital economy. We heard from James Kelly about the gender discrepancy that exists in the industry. Although he was right to say that, it is interesting that when I started in it in 1969, the balance was more or less 50:50. What seems to have happened is that, when the BBC Micro computer was launched in 1981, parents gave it to the sons in the family. We can see from the graph that, a couple of years after that, the gender bias moved dramatically towards men. Sometimes there are cultural issues at play, as well as Government policies. However, women will be very welcome in the industry, and I hope that they will join the more than 60,000 people who are working in computing in Scotland today.

The important thing is to get the infrastructure in place. However, Mike Rumbles wants us to cut the Government's implementation period for the R100 programme from 549 days to 334 days—the delivery schedule that Mike Rumbles wants. That would be quite a substantial dropdown. We cannot simply squeeze projects into smaller spaces, without taking risks. The non-commutativity of time and effort applies to the project.

Edward Mountain (Highlands and Islands) (Con): Will the member take an intervention?

Stewart Stevenson: I will just finish this wee bit, then I will take an intervention.

If it takes six hours for a gravedigger to dig a grave, that does not mean that six gravediggers can do it in one hour.

Edward Mountain: I am somewhat confused. It was quite clear in the Government's programme that R100 would be delivered by the next election. That is what the Scottish National Party stood on at the most recent election. In fact, that is what the First Minister was saying until January this year. It was not until Fergus Ewing changed his position, which happened in about March, that the First Minister changed her position, which was in about July, if I remember rightly. I think that people in Scotland are expecting R100 to be rolled out by May 2021, as we were originally promised. I do not understand what the obfuscation is about. Perhaps Stewart Stevenson can explain it to me.

The Deputy Presiding Officer: I will give you your time back, Mr Stevenson.

Stewart Stevenson: Edward Mountain should consider that it is better to set a realistic timescale in the light—

Mike Rumbles: You were elected based on it.

Stewart Stevenson: I hope that colleagues will forgive me: I am not rebutting a single word that Edward Mountain said about previous intentions. I am making the substantial point that rolling out to the last 5 per cent is a huge programme to undertake and we need the right amount of time to get it right. Any Government that fails to deliver on a project that it has set out will quite properly find itself in a difficult position.

Presiding Officer, you have generously given me a little time back, but I will not overegg the pudding. There are 120,000 or so homes in Scotland to which we must deliver R100, but it has correctly been said that the infrastructure of communication is merely the scaffolding upon which we can build the propositions that deliver value. Getting people who are not digitally capable up to a different place in society through libraries, public spaces and the education system, and converting private and Government business to digital delivery are also part of what we must do.

I look forward to my superfast broadband being delivered by fibre. If the last 5 per cent is by fibre—as, I guess, it will be—we will be ahead of the cities for the first time. Fingers crossed.

15:53

Gordon Lindhurst (Lothian) (Con): Following that speech, I will try to remain in the modern world in which we are all forced to live.

We heard evidence during the Economy, Energy and Fair Work Committee's inquiry into Scotland's economic performance—we will hear

more about that on Thursday—that no sectors are exempt from digital disruption, and that many face an “Innovate or die” scenario. Again, that is not a reference to, or an attempt to echo, one of Stewart Stevenson’s comments in his speech.

We heard that manufacturing companies that are embracing new technology are thriving, and that those that are not doing so are finding it more challenging to grow. It is clear that Scotland needs to harness the opportunities that are brought about by technological developments in order that we are not left behind by our competitors.

However, in too many areas in this country, we are not equipped to take full advantage of new technologies. It is particularly disappointing to note the “Digital Economy Business Survey 2017: Office of the Chief Economic Adviser” report, which shows that only one in four businesses thinks that its employees have the necessary digital skills to meet business needs. That figure is down on the figure of 37 per cent from the same survey in 2014. To make the most of the digital revolution, it is not good enough simply to have the infrastructure without the skills. Some members have touched on that, already.

Greater use being made of such skills and use of online data have been linked to an 8 per cent rise in productivity. We badly need productivity in this country.

Witnesses to the committee’s inquiry were frustrated by what they saw as continued skills shortages for technological firms in Scotland. BT said that it hoped that the national shortage in computer science teachers in Scottish schools could be addressed so that we can produce a workforce for the digital future.

The Scottish Conservative amendment today highlights the need for the Scottish Government to work together with the UK Government to make the most of the opportunities that are provided by the UK industrial strategy and other initiatives. That industrial strategy is ambitious about teaching of computing in schools in other parts of the UK, and it commits £84 million over five years to a comprehensive programme to improve teaching of computing and to drive up participation in computer science. The Scottish Government must take action in that regard, and halt the 25 per cent decline in computing teaching numbers that has been seen during the past decade and a bit.

Likewise, as the need for digital skills increases, it is important not to leave people behind. We often look ahead to the future with trepidation as the new technology that we enjoy replaces the need for lower-skilled work. As downturns happen in sectors—oil and gas, for example—people find that the lack of a dynamic approach to skills

provision renders them stuck in a particular field, competing for shrinking numbers of jobs.

There is also an acknowledgement that most skills interventions focus more on younger generations and less on reskilling people to contribute to the modern digital economy as they might have done to a past economy. The industrial strategy acknowledges the new economy and the changes that will be required to support it. It commits to a national retraining scheme, which the Chancellor of the Exchequer recently announced he would fund with £100 million, including for digital skills courses using artificial intelligence.

The Scottish Government is playing catch-up in this area, but it has announced a national retraining partnership in its latest programme for government. That is to be welcomed, but it needs to be pursued without any further delay, given the pace of technological change. This is about embracing the future in Scotland, giving people the skills that they need to thrive in a new environment, and supporting employers to adapt.

As we move into that future, Edinburgh and the wider Lothian region will play a key role. As a Lothian MSP, I welcome the Edinburgh and south-east Scotland city region deal, which is an example of what can be achieved in the digital age if the two Governments and others work together. The £1.3 billion that is being invested aims, among other things, to turn the region into the data capital of Europe—data being a commodity that is fundamental to the digital economy.

The University of Edinburgh hub at Easter Bush will be just one of the beneficiaries of the deal, and will work towards meeting a challenge that is global in nature but which affects us directly here in Scotland. Using digital agriculture—agritech, as it is called—it will seek to boost efficiency in the sector by collating a wide range of data that will be able to determine the right food species and the right products, in the right field at the right time, to maximise agricultural productivity. That will help to increase global food supply at a time when it is estimated that agricultural production needs to increase by 50 per cent by 2050.

Easter Bush and other projects that make up the Edinburgh city region deal build on the tech expertise that we already have in the region. There were 363 tech start-ups incorporated in Edinburgh in 2017 alone. There is therefore reason to be excited that the region and Scotland will be productive and innovative digital economies in the future, but more needs to be done to ensure that we have the required skills to achieve that.

15:59

Willie Coffey (Kilmarnock and Irvine Valley) (SNP): The two main issues that Scotland faces in

pressing forward with our digital ambitions are getting the computer science software development skills that we need and finding a way to continue to participate in the digital single market in Europe post-Brexit.

We know that the digital economy is the fastest-growing sector worldwide and that its growth will not stop any time soon. We think that it is worth about £5 billion to the economy, as the minister mentioned, and there are around 100,000 technical professionals working in the industry just now.

The cabinet secretary's vision to take that number to 150,000 over the next four or five years is to be welcomed, and his aim of reaching out to schools and encouraging more females to choose science and computing is absolutely essential if we are even to keep pace with the demand for software skills.

The figures coming from industry in Scotland show that more than half of the demand is for technology skills and that about 70 per cent of that demand is for software development skills. It is therefore good to see a number of initiatives to support those skills. The digital skills programme, the digital development fund, CodeClan and the Digital Xtra Fund are all examples of interventions that are making a difference.

The other key area, which I have mentioned, is the digital single market in Europe and what our participation in or association with that will look like post-Brexit. The European digital single market is one of the biggest trade markets for online digital services. It is estimated that spending online in Europe is worth about €500 billion a year. Incredibly, that figure is expected to double by 2020.

It is also crucial to think about how the UK and Scotland can continue to share in or work alongside that digital market sector, which is worth about €400 billion per year to the European economy and supports hundreds of thousands of jobs. Worryingly, there is not even a mention of that in the UK Government's proposal, which was issued last week; nor is there a mention of it in the industrial strategy that was mentioned earlier.

The digital single market has three main pillars or aims: access to online products and services; setting the right conditions for digital services and networks to thrive in; and growing the digital economy. It will allow consumers to access all their digital content right across Europe at no extra cost—if we are still in the single market. There will be no geographic blocking of our data and applications any more—if we are still in the single market. It will also continue to allow consumers to use their mobile phones across Europe with no roaming charges applied—if we are still in the

single market. The question is: what is Scotland's role and what is the UK's role in all of this?

The consumer experience is crucial. If the situation is not resolved, people from Scotland and the UK will get none of the benefits but all the costs and restrictions as soon as they set foot in Europe. For businesses, the situation will be much worse—it will mean that Scottish and UK businesses will be unable to compete for and offer digital services within that market. Such an exclusion will be a huge disadvantage to them.

It is time that we heard from industry about the matter so that some sensible arrangement can be put in place before it is too late. Any politician who claims that it is a good thing to leave such a market or not to have any relationship at all with it really needs to think again about the damage that they are about to do.

I do not want to take members back in time to the late 1970s, when I studied and graduated in computer science, but some of the key issues then are still with us now, such as how we can get more young women to take up careers in this amazing industry. That issue was touched on by James Kelly.

I mentioned the cabinet secretary's welcome intention of reaching out and encouraging youngsters at school—particularly girls—to take up careers in software. It is a well-paid profession—it is more highly paid than most other sectors—that usually involves full-time jobs and allows those with the right skills to work anywhere in the world in some of the most exciting areas of development, from film, animation and games technology to systems to help our national health service or to manage data and services in a huge range of ways across the public and private sectors. No area of business or industry can succeed without good software development, and we need good software developers to build all the systems of the future.

The journey has to start early, at primary school, and there must be an almost continual focus on it to give us a realistic chance of success. When I meet youngsters who come to the Parliament from the many schools in my constituency, I usually ask, "Who wants to work in software development?" The number of pupils who say yes is still worryingly low, and there lies the challenge. If we want youngsters to join this wonderful industry, we have to excite those young minds about their potential and what they can achieve.

The challenges in front of us are formidable. On the one hand, the commitments that the Scottish Government is making are clear and we can see the road ahead. Keeping pace with technological change and demands will be challenge enough, but our aim is to push ahead and make Scotland a

leader in the digital economy, although that is not entirely within our gift. On the other hand, the sooner that level heads and individuals in the UK Government with some technical knowledge about digital technology have their say and can effect a change of approach in relation to the digital single market in Europe, the better for us all.

16:05

Daniel Johnson (Edinburgh Southern) (Lab):

The timing of the debate is apt because, at a point when the whole of UK politics seems to be focused on and obsessed with whether the Prime Minister's deal will get through Parliament, we are having a debate on a topic that we need to talk about: technology change. That is the problem with Brexit. At a time when we have to face up to the realities of how technology will change the world of work, we are focused on issues that are only a distraction and that will prevent our doing that.

In December 2016, Mark Carney gave a speech about the importance of the changes and the need to face up to them from a policy perspective. He said:

"The fundamental challenge is that alongside the great benefits ... every technological revolution mercilessly destroys jobs and livelihoods".

He went on to point out that, especially with the latest wave of technology change, that includes service jobs that many professional people until now thought were preserved and not subject to the sorts of change that we have seen in other industries.

The debate is sometimes caught between those who say that we all need to fear the rise of the robots or learn to love our new robot masters and those who say that nothing has changed, that this is just another technological wave and that we have always coped with those in the past. The reality is somewhere in between, but some things are different this time round and, fundamentally, from a policy perspective, we have to face up to them.

One of those issues is pace. Following recent technology changes, we have seen that industries can find themselves irrelevant within a matter of years. The record industry is a good example of that. In a matter of years, its whole business model became completely irrelevant.

There is also the manner of the technology change. We now have technologies that have cognitive functions and that can make assessments and decisions. Coupled with robotics, we have technology change that has the very real prospect of displacing jobs in entire supply chains, which will no longer need human input. From the point at which an item is produced

through to its delivery to the consumer, everything will be carried out by robots and artificial intelligence. That is the reality of the challenge that is in front of us.

However, the good news is that, as members have said, we have some of the ingredients that we need to take advantage of the change—particularly in Edinburgh, which, in the past few years, has become a major technology hub without anyone really noticing. I do not need to repeat all the numbers that others have mentioned; the key figure is the one that the minister gave when he said that the number of jobs in technology in Edinburgh has increased at three times the UK average rate. As other members have pointed out, recognition must be given to the university. The informatics department at the University of Edinburgh is the largest such department in Europe. It is a major international hub and, what is more, it has been at the heart of technology start-ups that now employ thousands of people in the city. That is a success story, but we need to learn from it so that the whole country can benefit from the same things.

At its heart, the issue is about having talented people with the right skills and knowledge. It is also about investment, but there has not been enough discussion of that in the debate so far. In countries and systems that have dealt with the issue successfully, Government-backed investment has been at the heart of that. Whether we look at the Defense Advanced Research Projects Agency in the United States, Tekes in Finland or the National Taiwan University of Science and Technology, behind them all is the fact that the Government sometimes needs to step in and take the risks that the private sector cannot take. That applies even in a country such as America.

The other issue is scale and form. Those start-ups are often not in the form that we are used to. They often involve people working from coffee shops with laptops. That is all that is needed for a technology-based industry of the future. Big factories and offices are not necessarily needed. Robots costing \$20,000 mean that things can be produced in a garage with the same cost-efficiencies as by a multinational corporation in a factory. Those are the realities and changes that technology means. We must make sure that our infrastructure and public policy allow us to take advantage of those things instead of being left behind, and I think we can do so.

There is a real challenge here. I come from an industry that has already seen many of the consequences of automation. Prior to coming to Parliament, I worked in retail, and we all know the issues that are faced on the high street. Although we might not call those issues the product of

automation, the same factors lie behind them. The lessons are there and we need to learn them now.

Every business needs to become a tech business. Every worker and every person working in every company needs to understand the application of technology to their job. I worry when people talk about 2 per cent of people working in technology. The reality is that 100 per cent of the workforce needs to be able to understand and apply technologies. According to McKinsey & Company, 36 per cent of jobs in the workplace could be replaced. In transport and distribution, the figure goes up to 77 per cent, and that industry employs 5 per cent of the workforce.

We should learn the lessons from our recent past. There are cities and areas in Scotland that have yet to recover from previous technology changes, whether the change was in the steel industry, in shipbuilding, or in jute manufacture. In the areas that were reliant on those industries in the past, there are still higher levels of underutilisation of the working-age population. We need to learn those lessons lest we suffer again in the future.

We also need to address the skills agenda. Our skills regime needs to be as much about reskilling people as it is about giving people skills at the start of their working lives—if not more so. The emphasis for colleges, universities and apprenticeships is too much on young people who are leaving school; it needs to be as much on older people.

The solutions are about education, teachers, investment, support for innovation and, above all, making sure that our city economies are at the heart of our national economy. That needs to go far beyond city deals; it needs to be about making our cities work together. The big missed opportunity of city deals is that there are separate ones for our Scottish cities rather than one cohesive strategy for them all.

16:12

Stuart McMillan (Greenock and Inverclyde) (SNP): I want to touch on a couple of points that Daniel Johnson spoke about. His final comment was about the city deals. I remind Mr Johnson that city deals are not solely about the cities. In my area in the west of Scotland, it is about the Glasgow regional deal, which includes Inverclyde, West Dunbartonshire, East Dunbartonshire and other areas. I appreciate that Mr Johnson represents a city, but I do not.

The second point is about Government investment. Mr Johnson will be aware of the total contribution of £280 million from across the public sector in Scotland for the Digital Scotland superfast broadband scheme and the £600 million

investment by the Scottish Government in the R100 programme, which seeks to provide access to superfast broadband to all homes and businesses.

Daniel Johnson: Will the member give way?

Stuart McMillan: I have one wee point to make. Clearly, the Scottish Government has been putting in investment. I agree with him, however, that business does need to do more.

I will take the intervention.

The Deputy Presiding Officer (Linda Fabiani): Excuse me. I call Mr Johnson.

Daniel Johnson: I agree with the member's points, but I sometimes worry that the debate focuses on connection to the internet, rather than looking beyond that. It is about growing businesses within the technology space. I believe that that is where there is a bigger role for Government.

Stuart McMillan: That is a valid point. At the same time, if people are not connected, there is a deficit for them and their businesses to make up in progressing their interests—particularly for smaller businesses, which I will touch on in a moment.

Prior to the SNP Government's intervention, superfast broadband coverage in my constituency was below 80 per cent; by the end of 2017, it was up to 96.2 per cent; and by 2021, every home and business in Scotland will have access to superfast broadband, thanks to the Scottish Government's £600 million of investment, which is the biggest public investment ever made in a UK broadband project.

Finlay Carson: Can the member remind the chamber whether the investment in broadband in the Scottish Government's current budget went up or down? If he cannot remember, I can help him with that—it went down.

Stuart McMillan: I will come to that point in a moment, and Mr Carson will need to listen to the points that I make.

The figures indicate that things are looking good and have improved for Inverclyde, but there are still pockets of my constituency that are not included in the roll-out. Consequently, I have been contacted by a local business that is considering closing due to the poor broadband speeds that it receives. Outdoor Spares Ltd, based in Lynedoch industrial estate in Greenock—not a rural part of my constituency, but a town—has tried numerous ways to improve its broadband speed over the past few years. That is because, of the two BT Openreach cabinets that service businesses and homes in the area, only one is fibre-enabled and can provide ultra-fast broadband now. The other,

cabinet 64, which Outdoor Spares Ltd is serviced by, was not enabled during the last roll-out.

Ian Homer, who owns Outdoor Spares Ltd, waited to see whether cabinet 64 would be one of the first to be upgraded in the current, final phase of R100. It is now almost 2019, and Ian's business is still struggling to operate due to the abysmal broadband speeds. In September of this year, Ian said that he has started to work from home more frequently as the broadband speeds in the industrial estate are not suitable for running his business, which is an online shop supplying a range of spare parts and accessories for Mountfield, Stihl, Partner, Makita, Honda and Flymo retailers. Although his business has been growing, the fact that he does not know whether the roll-out will reach him next month or in two years' time means that Ian is finding it difficult to plan for his business, unless those plans involve locating elsewhere, which would result in local jobs being lost, all because of poor broadband speeds.

A quick survey of other tenants in Lynedoch industrial estate shows that some are getting download speeds of around 15MB and upload speeds of around 1MB to 3MB, which is what Ian gets on a good day. That means that he does not qualify for the UK Government's better broadband subsidy scheme, so he is saddled with broadband speeds that are not conducive to a growing, web-based business.

The last thing that Inverclyde needs is for people to think that we are not able to support technology-based businesses. We can, we have done and we will do so even more in the future.

Digital technology benefits not only tech companies, but all kinds of businesses, enabling them to engage with customers directly, to develop new processes and products and to sell those products to a global market, 24 hours a day, at a relatively low cost. It is therefore crucial that industrial estates that house dozens of businesses are not left until last in the roll-out. If they are, constituencies such as mine will suffer.

Another local business that approached me about its poor broadband speeds is the Ardgowan Fishery. Why is it important in terms of this discussion? It is an important business for the local tourism market as it brings people into Inverclyde to spend money.

I recognise that other parts of Scotland have more challenges than my constituency, but, as well as the issues in particular parts of Greenock that I have mentioned, we have some rural areas. What does the issue that we are discussing mean for constituencies such as mine, which have rural and agriculture businesses that cannot enjoy efficient broadband speeds and cannot simply

relocate? I know that the Scottish Government is committed to making Scotland a world-class digital nation. We are already ahead of our European peers on superfast broadband coverage, take-up and average speeds. However, I am concerned for local businesses in my constituency that are part of the 3.8 per cent that do not have superfast broadband.

To answer Mr Carson's question, the SNP Government is picking up the slack after a lack of investment by previous Scottish Administrations. The UK Conservative Government has been no better, as its contribution to the R100 programme stands at a miserly 3 per cent of the total investment. I therefore have a wee message for Mr Carson: he should talk to his colleagues in Westminster and get them to up their game and put in more money so that not only his constituency but mine can have a better result in terms of the economy.

16:20

Jamie Halcro Johnston (Highlands and Islands) (Con): I welcome the debate, which allows us to focus on an area of crucial importance to Scotland's economic future. We have heard from other members about some of the prospects for the growth of the digital economy in Scotland. That potential is significant, which is why it is right that we are giving the tech sector our attention today.

In its existing position, the growth value added by head for Scotland's tech sector is some 60 per cent higher than that for the economy as a whole. The tech sector is already making a disproportionate and effective contribution. Digital industries employ highly skilled professionals, with the added benefit of a market that has a global reach. We only need look at some of the Scottish success stories to see what can be achieved.

However, there are undoubtedly still opportunities to build on our existing strengths and create a digital economy for the future. The enterprise and skills agencies have highlighted a number of areas of potential expansion, but a common thread is that each of those will require investment—and not simply financial investment—to lay the groundwork for future success. I am speaking not just about small-scale interventions, however welcome they may be individually, but about all levels of government taking a serious look at how we create the foundations for growth and expansion in the years and decades to come. I implore the Scottish Government and its agencies to work closely with industry and other Governments at local and UK level to support the change that we need to see.

Later this week, the Parliament will discuss the report on Scotland's economic performance from the Economy, Energy and Fair Work Committee—a committee that I sit on. I raise that because a number of the report's conclusions are relevant to how we look at support for particular sectors and businesses.

Stuart McMillan: Does Mr Halcro Johnston agree that the UK Government should increase its investment in the R100 broadband scheme to help Scotland's economy?

Jamie Halcro Johnston: Investment is key to this. The member seems to suggest that the Scottish Government is about to deliver on commitments that it has made and repeated again and again. As somebody who represents the Highlands and Islands, I can say that the picture created by members on the benches over there is very different from the picture in my area.

I particularly highlight the committee's work around regional growth. The jobs that technology can support are often not geographically tied in the way that the industries of the past were. Where the conditions are right, the tech sector can be an engine of growth, providing and supporting local economic hubs in regions such as mine. The next silicon glen could be based in the Highlands or in one of our island communities. We could have a connectivity coast in Moray. I have not trademarked that, so the minister is welcome to suggest it to Highlands and Islands Enterprise—or not, as the case may be. That is achievable if Government is willing to work collaboratively with existing local organisations such as colleges and universities.

However, other key elements need to be in place. I have spoken at some length about the connectivity problems that my region faces, which, unfortunately, are stark. The Highlands and Islands region contains the majority of the worst-performing areas for broadband download speeds in the entire UK. In our previous debate about digital inclusion, I pointed to a number of those cases and the problems that have presented themselves in my region for some time. It is unfortunately a blunt fact that, for much of the rural Highlands and Islands, digital exclusion rather than inclusion is the norm. If the technology sector is to be the driver of regional growth rather than of deepening regional inequality, those barriers will have to be broken down and those many years of exclusion reversed.

A skilled workforce is also essential. I will be generous to ministers and say that a number of positive examples and projects have been demonstrated in recent years, many of them led or supported by the private sector. A problem, however, is in learning the lessons from those

projects and scaling them up to expand their reach.

We are also, disappointingly, in a position where more than half of our population is at a distance from the tech sector. We have spoken previously about the gender pay gap in the sector, which remains stubborn. Others have highlighted that although women comprise just under half of the general workforce, they only account for under a fifth of employees in tech roles. Not only are opportunities being lost, so too are the skills and abilities of many of Scotland's people.

I welcome the additional routes into STEM learning that have been offered by foundation and graduate-level apprenticeships. With foundation apprenticeships, in particular, there is a real chance to provide the proper job-based introduction into such sectors that can serve a young person well throughout their career.

Again, there is work to be done. On several occasions, I have raised with the minister's colleague the priority that must be given to ensuring that the range of foundation apprenticeship frameworks are accessible throughout Scotland's council areas and regions. I sincerely hope that those steps are being taken, and taken quickly.

Another element is the continuing gender gap in STEM subject choices and training. The detail does not need repeating, but it is clear that the gap at the very least necessitates our taking a better approach to careers guidance and having greater connections between schools, employers, colleges and universities at an early stage.

Even today, the skills gap diminishes our ability to grow the sector. Figures that were acquired by Skills Development Scotland demonstrate that 82 per cent of employers in digital industries struggle to recruit people with the technical skills and expertise that are needed by their businesses. About two thirds of employers have also reported the difficulty of finding skilled staff as a barrier to expansion. That strikes me as one of our most significant obstacles to success. The glint of light is that we are having the debate today, in Government time, and that the research and analysis is available through the work of the enterprise and skills agencies, in particular. Appreciating problems might be the first step towards addressing them, but, as with connectivity, the response can often still be slow.

As we look with a keener focus on innovation and productivity in our economy, we must surely recognise that the sector can be a key component in delivering in those areas. However, there needs to be real and sustained ambition if we are to create the conditions for our digital industries to thrive, particularly outside the central belt.

16:26

Alex Neil (Airdrie and Shotts) (SNP): A lot of good points have been made in the debate. In particular, Daniel Johnson's points were well made.

One of the things that we should be careful of is that, although there are major challenges in terms of the number of jobs that will be lost, the McKinsey report, which Daniel Johnson referred to, indicated that the net impact, if we seize the opportunities, could be more jobs, better jobs and better-paid jobs. The real challenge for all members across the chamber, the Scottish Government, the private sector and the training and enterprise agencies lies in how we ensure that we not only participate in the digital revolution but exploit the opportunities to the maximum.

One of the mistakes that we could make is to look at the digital sector as one industry. It is not one industry; it is made up of a number of industries. I want to pinpoint three particular industries in which there are huge opportunities for us in Scotland. One of those three, which has already been mentioned, is the games industry. It is headquartered, in effect, in Dundee—when I say headquartered in Dundee, I mean that, in many respects, the global headquarters of the games industry, not just the Scottish headquarters, are in Dundee.

The leading entrepreneur in the games industry, in Scotland and internationally, is Chris van der Kuyl, who made an interesting observation earlier this year. He said that, if we exploit the opportunities in the games industry, and if we invest enough in the games industry in Scotland, we could end up employing as many people as worked in the North Sea oil and gas industry at its peak—that would be more than 100,000 jobs in the games industry alone. The Government should sit down with Chris van der Kuyl and put together a plan to make that ambition happen, because such jobs are exciting and well paid, the number of them is growing and the sector is growing globally. There are huge career opportunities and huge payments through the spin-out to the rest of the economy.

The second sector within the digital framework is health and social care. Last week, we had the first-class announcement, jointly from the health service and the Scottish Government health directorate, along with the University of Glasgow, about using artificial intelligence in the health service. Scotland is again ahead of the game, but we need to stay ahead of the game. The industry has shown the amount of money that we could save in the health service by investing heavily in artificial intelligence.

In principle, if we develop the artificial intelligence tools that are available, we can have personalised digital medicine such that, in a few years' time, the health service will be able to predict what diseases individuals are likely to develop before the symptoms show up. The saving for the health service and, more important, the impact on patients could be revolutionary. I therefore ask the minister and Jeane Freeman to get together to develop a hugely ambitious strategy that focuses not just on healthcare but on social care.

The third area in which we have a presence and could do a lot more is in the industry to tackle cybercrime. Cybercrime is a major challenge for businesses and Governments around the world. Fighting cybercrime commands huge budgets in the States, Canada, the UK, Australia and round the world. There is an opportunity to develop the talents that are required to effectively fight cybercrime worldwide. The people who sit in Glasgow in established companies that fight cybercrime work in a global industry. The services that they provide remotely from Glasgow are counted in our export figures. The opportunities are huge.

We can learn a lesson from the high-tech hotspots in America and the triple helix in Norway, which bring together in each growth sector the public sector—the Government and councils—with private sector firms that are already operating and with academia. Scotland already brings together those three sectors in the life sciences and, in effect, we do it in parts of the renewable energy sector. We now need to do it in games technology, in health and social care, in tackling cybercrime and in each digital sector that has massive global opportunities.

Finlay Carson: Will the member take an intervention?

The Deputy Presiding Officer: I am sorry—Alex Neil is closing.

Alex Neil: I am not allowed to take an intervention; that is an opportunity that we will need to miss.

Of all the industries that are growing in Scotland, the digital industries have the greatest global opportunity. Let us forget the petty party politics about what month next year R100 will be finished, and let us think big, act big and do that together.

The Deputy Presiding Officer: I am sure that I missed something profound from Finlay Carson, but perhaps we can hear it some other time.

16:33

Richard Lyle (Uddingston and Bellshill) (SNP): That is called, "Let's do it"—it is always a pleasure to follow my esteemed colleague Mr Neil.

I welcome the opportunity to contribute to this debate on developing Scotland's digital industries for our economic future. I thank my colleague the minister for bringing forward a debate that provides us with the opportunity to talk about the investment that the Government has delivered in digital infrastructure and the role that it will surely play in our economic policy.

I will begin with that investment, because some of the numbers and actions that are involved are truly impressive. The Scottish Government launched the first Scotland-wide internet of things network last month, as part of a £6 million project. The new network will provide a wireless sensor network for applications and services to collect data from devices and send that data without the need for 3G, 4G or wi-fi. That will support businesses to develop new and innovative applications and change the way in which they work.

The network will also give all businesses the ability to monitor the efficiency and productivity of their assets and equipment, to enable the scheduling of maintenance and improve production. As an example of innovative practice, IOT Scotland could support the wider use of smart bins that wirelessly inform local authorities when they require to be emptied. Would not that be a good thing? That would ensure the best use of bin lorries and help to reduce carbon emissions. Similarly, the network could monitor office environments to lower costs by saving energy while reducing the carbon footprints of buildings.

Such technological investment delivers more than just intelligent working; it can and does have the potential to change the way that we work, especially, as I have outlined, in respect of local authority functions and working smarter. That extends far beyond local authorities, of course. The SNP group in the Parliament wants as many people and businesses as possible to benefit from the transformative potential that the internet of things offers. That is complemented by our most recent programme for government. In the year ahead, we will develop and deliver a range of activities across Scotland to inspire and enthuse enterprises of all sizes along with public bodies and our communities about what that technology can achieve. That is a welcome priority as we move forward with our digital industries and developing for our economic future.

This is, of course, absolutely about our economic future, as the digital economy is set to be the fastest-growing sector in Scotland by 2024.

That means that we must all recognise that the impact of the digital revolution is no longer confined to technology companies but affects all sectors, as increasing types of business are harnessing the benefits of technology to drive innovation and increase competitiveness. I want to repeat that: increasing types of business are harnessing the benefits of technology to drive innovation and increase competitiveness.

Finlay Carson: Will the member take an intervention?

Richard Lyle: Yes—so long as it is a good one.

Finlay Carson: Given the Scottish Government's less-than-brilliant reputation in delivering IT projects—for agricultural payments and the police system, for example—does Richard Lyle have any confidence that it can deliver an innovative social security system?

Richard Lyle: Finlay Carson's Government—I do not call it the UK Government; I call it the English Government—has wasted so much money and caused so much misery to people over the years, but he has the cheek to stand up and talk about the Scottish Government. The Scottish Government is doing far better than his Government has ever done in its puff.

As members will note from a previous contribution on the digital economy, I have been assisting a local company that wishes to see wi-fi installed on lamp posts and to have the lamp posts powered by renewable energy. Such innovative thinking and technology are essential as our industries develop for the future and contribute to the economy. I am delighted to note that various agencies in the SNP Government now support that company to pursue its ideas and make them a reality for communities in Scotland. I hope that that is particularly the case for the remote and rural areas that I often hear about in the Rural Economy and Connectivity Committee.

There can be no doubt that our digital and technology sector is on the up, and its contribution cannot be overstated. To put the scale of that sector in perspective, in 2015 it contributed billions of pounds to the Scottish economy and thousands of people were employed as tech professionals across all sectors. That is a significant and welcome investment, as Mr Neil said, and thousands more jobs could be created. The news that that investment is only set to grow even higher is testament to the support that the sector enjoys from business, the public and the Government.

With the growth in the sector, of course, the digital revolution continues to pick up pace and creates unprecedented demand for skills by employers across all sectors. Indeed, the Government's economic action plan sets out a

number of new and existing actions that will work together to build a strong, vibrant and diverse economy.

I see that my time has run out. Thank you very much, Presiding Officer.

The Deputy Presiding Officer: We move to the closing speeches. We are back on target, so I ask for speeches of no more than six minutes, please.

16:40

Colin Smyth (South Scotland) (Lab): As the debate has highlighted, the automation and digitisation of the workplace is not some distant, faraway prospect. Technology is transforming almost every aspect of our lives, and it is doing so now. As Daniel Johnson stressed, the impact of that digital revolution is not consigned simply to technology companies; every field and sector is increasingly seeking to harness the benefits of technology. Businesses are making use of digital innovation to expand, to improve efficiency and competitiveness and to drive innovation. Our schools and other educational institutions are utilising technology to improve learning and access to education. As Alex Neil said, the NHS is using new technology more and more to improve services, with predictive healthcare analytics facilitating a more preventative approach. It is impossible to overstate the impact that digitisation has had and will have on our jobs, our economy, our services and our lives. However, with the opportunities of what some describe as the fourth industrial revolution come risks and threats if we do not ensure that the benefits of digitisation are realised for all.

A few weeks ago in the Parliament we discussed digital inclusion, and we highlighted the importance of ensuring that groups throughout society have equal digital access. At present, rural communities, those on the lowest incomes, people with physical or mental health conditions, older people and women all suffer because of digital exclusion that mirrors the wider social and economic inequalities that James Kelly spoke about. If we do not make digital inclusion a priority, digitisation will not only continue but will entrench those inequalities.

Investing in our digital capabilities is not only essential to our long-term economic prosperity. Done properly, it is an opportunity to address injustice and inequalities; to create good, well-paid jobs with targeted investment in rural and deprived areas; to help to close the gender pay gap by encouraging more women into STEM jobs; and to give young people who do not want to go to university better career options—for example, by developing foundation and modern apprenticeship schemes.

If we take a business-as-usual approach, those who are left behind will increasingly be unable to access essential services. They will not only be unable to access the job opportunities that changing technology can bring; they will be impacted negatively by that change. Job losses that are caused by automation disproportionately affect those in lower-paid jobs. As James Kelly highlighted, those who are affected, or who are likely to be affected, must have alternative opportunities. We can provide those opportunities by properly investing in adult learning and by supporting employers and those in the labour market to embrace retraining and upskilling. Tackling that growing digital skills gap will also mean truly embedding digital skills development in our schools, right through to further and higher education.

If we are serious about inclusive growth, we need to address the fundamental regional and social inequalities that exist with regard to digital infrastructure. How can we expect businesses in Orkney to take full advantage of the opportunities created by digitisation when superfast broadband coverage is as low as 65 per cent in that area? As we go forward, lessons must be learned from the roll-out of the previous Scottish Government fibre broadband programme.

Instead of rural Scotland always having to play catch-up, how about giving those communities a competitive advantage for once? I will give the minister one example of how we could achieve that in South Scotland. Sitting on the desks of the UK and Scottish Governments is a borderlands growth deal proposal from Dumfries and Galloway Council, Scottish Borders Council and the three furthest north English local authorities. At present, fewer than a third of the people who live and do business in the borderlands area have access to superfast broadband connectivity, and they can access average download speeds of just 8 to 10Mbps.

A key component of the borderlands growth deal is the aim of breaking down that digital divide through the digital borderlands plan. That plan seeks investment to complete the roll-out of superfast broadband to the properties that do not yet have it, to extend 4G coverage further into remote areas and, crucially, to develop transformational hyperfast digital infrastructure in key settlements and employment sites, enabling speeds of 1Gbps. In addition, the plan includes proposals to pilot emergent 5G technology and develop digital skills in the borderlands—an area that suffers a chronic shortage of such skills.

Government funding for that type of outside-in approach, which prioritises rural areas for future investment, would give communities that are currently disadvantaged, such as those of the

borderlands, a technological and economic advantage that they have previously been denied. Support for the borderlands growth deal would represent digital inclusion in action. It would help to deliver the inclusive growth that the Government talks about but that is far out of reach for too many of our rural communities.

Delivering the benefits of the digital economy for all will require a comprehensive approach, from schools to the workplace. It will also take strategic leadership. The authors of the report, "Automatic ... For the people? How Scotland can harness the technologies of the Fourth Industrial Revolution to increase economic and social prosperity", recommended:

"A Scottish Commission on the Fourth Industrial Revolution, including policymakers, industry, workers, academics, citizens and young people, should be established to recommend a strategy and actions for government".

I support that recommendation. It is crucial that key stakeholders are brought together and, more important, that a strategy is developed that delivers for everyone and leaves no one behind. That is why the Labour amendment unashamedly highlights digital democracy as well as the principle of fair work and the role of trade unions in developing the strategy.

Technology enables more efficient and effective methods of producing and delivering existing and new products and services. It enables work in our society to become less about time and more about output, which should release workers to enjoy and participate more in family and community life.

The challenge for us all is not only to deliver growth in the digital economy but to tackle digital exclusion, break down barriers to access and opportunity and ensure that working people benefit from growth. To coin a phrase, we need a fourth industrial revolution for the many, not the few.

16:46

Dean Lockhart (Mid Scotland and Fife) (Con):

We will vote for the Scottish Government's motion at decision time. We also lodged an amendment to highlight the significant opportunities for Scotland's digital economy that are available through the UK industrial strategy. I will come back to that.

The minister opened the debate by emphasising—rightly—the importance of the digital economy and by providing an update on initiatives in that regard, including the digital growth fund and digital boost. We welcome those initiatives.

However, Scotland still faces challenges that must be addressed if we are to achieve the objectives of increasing productivity and building Scotland's reputation as an innovative nation. I will

consider how we might best address those challenges by approaching them through the framework of the Scottish Government's economic policy of inclusive growth, internationalisation, investment and innovation.

On inclusive growth, the Scottish Government needs to do much more to ensure that the benefits and opportunities of digital are available to all. Ofcom has reported that the level of internet use is significantly lower in Scotland than it is in the rest of the UK. Some 23 per cent of Scottish households do not have access to the internet and 21 per cent of the population do not have basic digital skills.

Finlay Carson, Jamie Halcro Johnston and Colin Smyth said that limited digital access is of particular concern in rural areas. According to Audit Scotland, 370,000 households in Scotland still lack superfast internet speeds, and the issue is expected to be resolved for fewer than half of those households by the Scottish Government's original 2021 deadline. As Mike Rumbles said, that is glacial progress, indeed. It is clear from the data that the Scottish Government needs to do much more if it is to meet its original targets and prevent hundreds of thousands of people across Scotland from being digitally excluded.

On investment, the recent report "Automatic ... For the people? How Scotland can harness the technologies of the Fourth Industrial Revolution to increase economic and social prosperity" highlighted concern about the increasing digital skills gap that is emerging in schools, colleges, apprenticeships and universities. James Kelly, Patrick Harvie, Daniel Johnson and other members mentioned that.

The issue reflects the position after 11 years of SNP Government. Since 2008, the number of maths teachers has declined by 15 per cent, the number of science teachers has declined by 12 per cent and the number of computer science teachers is down by nearly a quarter. There has also been a decline in the number of college places and apprenticeships that are dedicated to science and digital subjects. If we are to equip Scotland's workforce for a digital future, we need to address that underinvestment or the workforce of the future will not be prepared to capitalise on the digital opportunities.

On internationalisation, we face a critical shortage of digital support in the business environment. Nora Senior, the chair of the Strategic Board for Enterprise and Skills, told the Economy, Jobs and Fair Work Committee that only 9 per cent of businesses in Scotland have embedded digital in their business operations compared with 43 per cent of businesses in competitor countries. The digital gap presents a massive challenge if we are to increase

productivity, and it presents a massive challenge for companies that are looking to increase their global trade and exports.

The global export market and international trade are increasingly dominated by online commerce and digital platforms. I saw that at first hand earlier this year during a trade mission to Hong Kong and China. I met a number of trading companies whose business models for import and export are now predominantly online. That means that they trade largely with other businesses that will use only e-commerce and digital platforms. Scottish businesses will lose out on massive trading opportunities that are available in the global market if we do not address that digital gap.

Willie Coffey: Could the member say something about the European digital single market, please? Does he think we should be in or out of that?

Dean Lockhart: That is obviously going to be subject to the negotiation, but the precursor is to have business in Scotland digital ready. That is my point—there is no specialist public agency in Scotland that is dedicated to the establishment of e-commerce and digital platforms for business and international trade.

Mike Rumbles: Will the member take an intervention?

Dean Lockhart: I might in a second. I need to make some progress.

In order to address that digital gap, we are calling for the establishment of a dedicated institute of e-commerce and specialist support agency for Scotland that would help to move large and small businesses online in order to take advantage of global opportunities in e-commerce. The policy has gained significant support in the business community and I look forward to hearing the minister's response to that initiative.

In the crucial area of innovation, the Scottish Council for Development and Industry has called for Scotland to actively participate in the UK industrial strategy. That is reflected in our amendment, which calls on the Scottish Government to work more closely with the UK Government to deliver the real benefits of the industrial strategy to Scotland. In recent years, Innovate UK has invested £2.5 billion in innovative businesses across the UK and the British Business Bank has helped to unlock £10 billion of new finance for business across the country. By actively participating in the UK industrial strategy, Scottish business can tap into innovative digital markets across the UK and into UK-wide research and development and financing opportunities.

In this area, as in many others, Scotland's business will be significantly better off if we fully

capitalise on the benefits of being part of the fifth largest economy in the world. I support the amendment in Finlay Carson's name.

The Deputy Presiding Officer: I call on Kate Forbes to wind up the debate.

Kate Forbes: I thank members for their contributions to this interesting and valuable debate. It is fair to say that the digital economy is of paramount importance to Scotland and its people. That view is shared by the majority of members in the chamber.

There were some highlights in the speeches. The common theme running through them was that members actually engaged with the motion. I take on board the comments that were made by Opposition members, and stress, once again, that I believe that the digital strategy that we have set out is the correct one. However, we are open to ideas and, as the first minister with explicit responsibility for the digital economy, I am open to the ideas of Opposition members when it comes to dealing with the thorny issues that are before us. I would like to talk about those issues.

The first issue that was raised by James Kelly, which was reiterated by Colin Smyth, concerned the importance of digital inclusion and digital participation. It is critically important to acknowledge that, during debates, this chamber can often feel like an echo chamber when it comes to recognising the challenges that are faced by people, particularly those who are disadvantaged by poverty or other aspects regarding digital engagement.

We know that digital has the potential to be inclusive. We have to be intentional about that. We have invested £1.5 million in the digital participation charter fund, which has supported 169 local projects across Scotland to enable more than 20,000 people to gain or improve essential digital skills. The digital participation charter has secured commitment from nearly 600 public, private and third sector organisations to build on those digital skills. I am also working with social housing providers to ensure that there are affordable internet solutions for older people, for people with disabilities and for hard-to-reach single people.

Mike Rumbles: Will the minister give way? I am trying to help.

Kate Forbes: Mike Rumbles wants to help.

Mike Rumbles: This is a practical point. For the people who are not connected—the last 5 per cent—it would be immensely helpful if the minister could tell them the date when they might be connected.

Kate Forbes: I will pass on that question to the Cabinet Secretary for Transport, Infrastructure and

Connectivity, who is responsible for the roll-out. Today's debate is about the digital economy; although connectivity is a critical aspect of that, there are complex issues that it would serve us all well to engage with.

Gordon Lindhurst made the good point that infrastructure without skills would not get us the progress that we need. He started to quote from the DEB survey, and I will quote some of the stats: 34 per cent of businesses are now doing something to address the skills issue, which is up from 26 per cent in 2014, and 48 per cent of businesses stated that they were well equipped with the skills but that they recognised that there were gaps. We recognise that, with regard to the pace of change that Daniel Johnson outlined, there is a role to support businesses to meet that skills gap.

Patrick Harvie and others spoke about the need for rights, the need to ensure that we have the ethics in place, and the need for us to develop, with Governments across the world, the legal framework that we require as technology continues to emerge. At the beginning of the debate, I referred to the five rights campaign that we support with Young Scot to ensure that young people in particular know their online rights: to remove; to know who, what, why and for what purposes they are sharing their data; to safety and support; to informed and conscious use of online technology; and to digital literacy.

Patrick Harvie: With regard to the right to know how a person's data is being used, does the minister acknowledge that the general data protection regulation's attempt to address that, although well meaning, has resulted in the vast majority of us simply clicking "yes", "yes", "yes", "accept", "accept", "accept", in response to a blizzard of requests? That is not meaningful consent to anything that is provided in that way.

Kate Forbes: I agree with Patrick Harvie that we want all citizens to feel confident that their personal data is being shared responsibly to create better and more responsive services. However, in order to do that, they need to understand what their data is being used for and to feel empowered to engage and agree or disagree.

Daniel Johnson's speech was one of the most perceptive about the challenges and opportunities that we face. He spoke about the perception that automation has the potential to destroy jobs. We need to be intentional that digital includes more of the population. I said at the beginning of the debate that we need about 12,800 new entrants to the tech sector just to stand still. That is an opportunity to train, reskill and upskill our current workforce and an opportunity to ensure that we have skills that will never be replaced by

machinery—particularly the emotional and soft skills that will continue to be needed. Daniel Johnson spoke about an ecosystem with the universities, whether it is driven by city deals or by local authorities working in partnership with Government, to ensure that universities know what skills are required and put in place the training that is needed. That ecosystem is particularly obvious in a city such as Edinburgh.

Lastly, Daniel Johnson spoke about the investment that is needed in SMEs, which Alex Neil touched on with regard to training. The Scottish Government has funded CodeClan, which is the first industry-led digital skills academy, with just over £3 million of investment to date. It offers students an intensive four-month training programme with direct access to employers, so that businesses—wherever they are, whether in the Highlands or one of our cities—get the skills that they need.

Dean Lockhart: Will the minister give way?

Kate Forbes: I have less than 60 seconds left.

Industry outlines the skills that they need and we ensure that they have them in an intensive way.

There are other ways in which we are supporting businesses, particularly around cyberresilience. My colleague Derek Mackay launched the cyberresilience economic opportunity action plan, which provides voucher schemes to SMEs to ensure that they have the cyberresilience that they need. In addition, the digital boost programme and the digital voucher scheme help us to target our investment in SMEs to ensure that they have the skills that they need, that we in Scotland lead on the digital revolution and that countries around the world look to Scotland to see what is being done on the partnership between the public, private and third sectors to take advantage of the new opportunities that come with the digital economy.

Business Motion

17:00

The Presiding Officer (Ken Macintosh): The next item of business is consideration of business motion S5M-14834, in the name of Graeme Dey, on behalf of the Parliamentary Bureau, setting out a revision of tomorrow's business. I invite Mr Dey to move the motion.

Motion moved,

That the Parliament agrees to the following revision to the programme of business for Wednesday 21 November 2018—

delete

5.00 pm Decision Time

insert

6.00 pm Decision Time—[*Graeme Dey.*]

Motion agreed to.

Committee Announcement

The Presiding Officer (Ken Macintosh): As members might recall, we now have a procedure that allows some time to be set aside at the end of the day for committees to raise business of importance to them, such as committee reports or urgent inquiries. In that context, I call Bill Kidd, the convener of the Standards, Procedures and Public Appointments Committee, to make an announcement on the report, "Confidentiality of reports from the Commissioner for Ethical Standards for Public Life in Scotland".

17:01

Bill Kidd (Glasgow Anniesland) (SNP): On behalf of the Standards, Procedures and Public Appointments Committee, I would like to draw the Parliament's attention to our report, which was published last week, on the committee's handling of reports about MSPs' conduct from the Commissioner for Ethical Standards in Public Life in Scotland.

The committee considers such reports in private before reporting to the Parliament, stating whether it agrees with the commissioner and what sanctions, if any, it recommends that the Parliament should impose. If details of a complaint or the contents of the subsequent commissioner's report appear in the public domain before the committee has considered and reported on the matter, the committee may have to carry out its responsibilities against a backdrop of external comment, speculation and judgment. Publicity and media coverage that result from breaches of confidentiality may act as a disincentive to making a formal complaint, particularly if it is of a sensitive nature.

I would like to take the opportunity, on behalf of the committee, to remind all members of the requirement under the code of conduct that they

"must not disclose, communicate or discuss any complaint or intention to make a complaint to or with members of the press or other media prior to the lodging of the complaint"

or during the committee's consideration of the complaint. Members are also reminded of their obligation under section 7 of the code to keep certain committee material confidential. The committee intends to take action in response to future breaches of those code of conduct provisions, and it will not view ignorance of the rules as a mitigating factor in deciding what sanction to recommend against a member.

I thank members on behalf of the committee.

Decision Time

17:03

The Presiding Officer (Ken Macintosh): The first question is, that amendment S5M-14807.1, in the name of Finlay Carson, which seeks to amend motion S5M-14807, in the name of Kate Forbes, on developing Scotland's digital industries for our economic future, be agreed to.

Amendment agreed to.

The Presiding Officer: The next question is, that amendment S5M-14807.2, in the name of James Kelly, which seeks to amend the motion in the name of Kate Forbes, be agreed to.

Amendment agreed to.

The Presiding Officer: The final question is, that motion S5M-14807, in the name of Kate Forbes, on developing Scotland's digital industries for our economic future, as amended, be agreed to.

Motion, as amended, agreed to,

That the Parliament recognises the benefits of the digital economy to every business, region and citizen in Scotland; acknowledges the strong evidence of the importance of technology to growing Scotland's business base and productivity levels; recognises that a combined focus by government, the wider public sector and private sector is the most effective way of improving the digital capabilities and processes of Scotland's businesses and workforce, which in turn will increase productivity, profitability and, as a consequence, result in higher paid jobs, building Scotland's reputation as an innovative nation; calls on the Scottish Government to work with the UK Government, industry, workers, academics and citizens to capitalise on opportunities available to Scottish businesses under the UK-wide industrial strategy, including through city and region deals, sector deals as well as the Industrial Strategy Challenge Fund and Innovate UK, which helps businesses develop new ideas and grow research and innovation strategies; further recognises that Scotland's digital skills gap and the digital divide, which affects far too many people in rural communities, those on the lowest incomes, people with physical or mental health conditions, and older people and women, who are often digitally excluded, poses a threat to Scotland's ability to maximise the benefits of digitisation; agrees that strategic leadership and a comprehensive strategy is needed, which includes ensuring that digital skills development is embedded in schools, from primary to further and higher education, that employers are supported to embrace retraining and upskilling, that existing infrastructure constraints, and other barriers to digital inclusion, are addressed and that the challenges of cybersecurity and securing digital democracy are recognised, and agrees that the development of a comprehensive strategy must have the principles of fair work at its heart and include the involvement of the trade unions to ensure that the benefits of digitisation can be realised for all.

Offshore Wind Week 2018

The Deputy Presiding Officer (Christine Grahame): The final item of business is a members' business debate on motion S5M-14466, in the name of Lewis Macdonald, on offshore wind week 2018. The debate will be concluded without any question being put.

Motion debated,

That the Parliament recognises the contribution that Scotland has made to offshore wind since planning permission was granted in 2003 for the development of Scotland's first offshore wind farm, Robin Rigg, in the Solway Firth; considers that Scotland has benefited from many other offshore wind projects in recent years, including Vattenfall's European Offshore Wind Deployment Centre in Aberdeen Bay, which has been built with the support of EU funding to create and test new offshore wind technologies, Hywind Scotland, a floating wind farm developed by Equinor off Peterhead, which started power generation in October 2017, and the Kincardine Offshore Floating Wind Farm off the coast of Stonehaven, which is expected to be the largest floating wind farm in the world when it is completed in 2020; understands that the contributions made by these and other projects will be recognised and celebrated during Offshore Wind Week 2018, which runs from 19 to 23 November and is an annual event supported by Scottish Renewables; notes the hope that a pipeline of successful projects can be secured in future leasing rounds by ensuring an adequate provision of shallow and deep water sites; further notes the view that government at all levels needs to support the offshore wind sector to ensure that its success continues, particularly beyond 2030, and looks forward to more offshore wind farms being developed in the coming years, contributing to Scotland's energy mix.

17:05

Lewis Macdonald (North East Scotland) (Lab): Like any designated week, offshore wind week offers an opportunity to recognise what has been achieved so far, to celebrate the vision of the pioneers and to set out ambitious targets for the future. I have been able to see at close hand the growth of the sector over the past 15 years. Scotland's oldest offshore wind farm is a cross-border project at Robin Rigg in the Solway Firth, and I was the minister who consented in 2003 the Scottish part of that project—one that is well known to my colleague, Colin Smyth.

At much the same time, Aberdeen Renewable Energy Group launched the first blueprint for an offshore wind farm in Aberdeen Bay—a scheme that came to fruition this year with the installation, within sight of Aberdeen beach, of the world's largest wind turbines.

We should celebrate the vision and drive of all the early pioneers around our coasts, from the Solway Firth to the Moray Firth, but I want to pay particular tribute to both the vision of AREG's early leaders and the support that they have continued to receive over the past 16 years from Aberdeen City Council and other local partners.

Five founder members of AREG got together to celebrate recently, and Iain Todd, David Roger, Jeremy Cresswell, John Black and Morag McCorkindale told *The Press and Journal* that their eventual success was down to dogged perseverance and “sheer bloody-mindedness”. That is sometimes what it takes, and AREG’s vision of offshore wind as part of Aberdeen’s long-term transition from North Sea oil to a low-carbon economy was and is something that is worth fighting for.

We need to have the same vision and ambition today. Scotland now has committed offshore wind capacity of 4.2GW either up and running, under construction or consented and awaiting development. A further 1.2GW capacity is in the consenting process. That is good, but it is only scratching the surface of Scotland’s offshore wind potential. With a United Kingdom target of 30GW and a European Union target of 74GW by 2030, we should be looking to deliver a higher proportion of both than 5GW or 6GW by the mid-2020s. Our targets for offshore wind should reflect our share of the potential resource relative to the rest of Britain and the rest of Europe, rather than settling for just a bit more than is already in the pipeline. I say to the Minister for Energy, Connectivity and the Islands that 10GW of offshore wind in Scottish waters by 2030 would be a stretching but achievable target.

Of course, it cannot be all about wind. Intermittency is a real issue, so new technologies for energy storage and demand management, and new interconnectors must also be part of the future picture. However, offshore wind is a renewable technology that works at scale, is innovating right now in Scottish waters and is steadily falling in price. It is already contributing to carbon reduction, and it can, over time, also help to reduce fuel poverty.

Vattenfall’s largest wind turbines in Aberdeen Bay are the most productive in the world, and their having suction bucket jacket foundations has meant that they were installed quickly and quietly this summer in a matter of only hours.

Also in the north-east, Equinor’s Hywind Scotland development off Peterhead is pioneering floating wind power. That is a technology that is capturing energy in places where other renewables technologies cannot go—or, at least, cannot yet go. The Kincardine Offshore Windfarm Ltd, which is a floating wind farm off Stonehaven, is already following suit and is planned to be the largest of its kind in the world.

With innovative technologies and increasing scale come falling costs. The strike price for offshore wind in 2017 was half what it was in 2015. The sector is moving towards a subsidy-free market, but Scotland will retain and increase its

market share only if it continues to foster innovation, and if further growth continues to enjoy support from government at every level.

Crown Estate Scotland and Marine Scotland have been consulting on which areas of the sea bed to lease for future offshore wind farms. The Scottish consultation has focused on deeper water that is suitable for floating wind turbines. In England, by contrast, the Crown Estate is promoting development in both deep and shallow waters. Although it is right to seek to promote the newest technologies, we must not lose out on those that are already well established, or closer to the market. I hope that the minister will urge Crown Estate Scotland to broaden its area of search and to support innovation in fixed-foundation offshore wind as well as in floating wind, and so enable Scotland to reach for more ambitious targets in the short to medium terms.

Elaine Smith (Central Scotland) (Lab): As Lewis Macdonald will know, I am the convener of the National Union of Rail, Maritime and Transport Workers parliamentary group. We celebrate offshore wind week, and I agree with the comments that the member has made, but does he agree with this quote from the RMT, which said:

“It is scandalous that the development of this sustainable energy source is based on deeply regressive and exploitative immigration and employment practices”?

Will the member comment on those practices?

Lewis Macdonald: Elaine Smith is certainly right to say that there have been some examples of exactly what she describes. That is not the way forward for the sector, and I agree with Elaine Smith and the RMT that we need to ensure that development of the sector protects the people who work in it, and that we look to reduce carbon emissions and prices for consumers.

The economic benefits of renewable energy are already significant. There are 2,000 jobs in Scotland, 11,000 in Britain as a whole, and the United Kingdom content of projects is forecast to rise from one third to one half of the value in offshore wind farms by 2020.

Scotland can do even better: joining up the supply chains of all our offshore energy sectors would be a good place to start. The Offshore Petroleum Industry Training Organisation, for example, has been doing offshore safety training in the North Sea for many years, and its qualifications are recognised worldwide in the oil and gas sector. They are not yet, however, recognised in offshore wind. Mutual recognition between the two sectors would allow workers to move between them, to the benefit of employers and of people who already work in the North Sea.

Forty years of extracting hydrocarbons has also given Scotland a high concentration of offshore expertise, which could be applied directly by future generations in capturing energy from offshore wind. In subsea engineering and offshore project management, for example, Scotland is a world leader. The Oil & Gas Technology Centre in Aberdeen is also more widely an offshore energy innovation centre that funds research and development that will be of direct or indirect benefit to offshore wind.

Claire Perry confirmed in the House of Commons earlier today that a sector deal for offshore wind is nearly concluded, and will include commitments from operators to increased UK content. That is welcome, and I hope that Scottish ministers will press for coherence between offshore wind and oil and gas sector deals, in order to support cross-sectoral working and to support the companies and individuals who work in and between the sectors.

We should be ambitious for growth in offshore wind; for more and properly paid jobs for offshore workers and seafarers; for supply chain opportunities for Scottish ports and industries; for cheaper power for our consumers; and for environmental benefits for future generations. If we are ambitious, we can, as we know from our energy past, succeed and secure a sustainable energy future.

17:13

David Torrance (Kirkcaldy) (SNP): I congratulate Lewis Macdonald on securing this debate on the important role of offshore wind and the contributions that it has made to reaching our renewable energy targets, reducing our carbon footprint, and strengthening our economy.

As we are all well aware, Scotland has been a global leader in renewable energy for years. In 2017, Scotland secured more than 68.1 per cent of its electricity from renewable energy schemes and our renewable energy industry grew by 26 per cent. We now produce 25 per cent of the renewable energy that is used across the UK. Since Scotland's first commercial-scale offshore wind farm—Robin Rigg—was opened in 2010, we have built up enough offshore wind energy capacity to power more than 1.6 million homes. That means that offshore wind energy now accounts for more than half the installed renewable generation capacity in Scotland.

Since 2011, the number of community-owned renewable energy projects in Scotland has increased by 62 per cent, which means that 456 communities are now benefiting from local wind, solar, heat pump and biomass projects across the country.

From national level to community level, Scotland has consistently shown its support for a sustainable future and its strength in the renewable energy sector. It is predicted that, by 2030, the UK's wind capacity will double, and that one fifth to one third of new energy will come from offshore wind power.

Not only is wind power cheaper than many other renewable alternatives, but offshore wind is more reliable and efficient than onshore wind due to the consistent and steady speed and pressure of wind at sea.

According to a survey by Scottish Renewables in 2016, there were 16,000 full-time equivalent employees in the renewable energy sector in Scotland. Additionally, our energy sector has spent decades developing its expertise in creating infrastructure to extract oil from the North Sea. Companies such as Briggs Marine and Environmental Services have more than 40 years of experience in marine energy power generation, from environmental research to oil-spill response. With £210 billion to be invested in the European offshore wind sector between 2016 and 2025, we have a moral obligation and an economic incentive to utilise that knowledge and technology to support the growing offshore wind energy sector.

Over the years, my constituency has repeatedly shown its commitment to offshore energy. For example, we are home to the 7MW Levenmouth demonstration turbine—the world's largest open access offshore wind turbine, which is dedicated to research and training. The Fife energy park gives companies easy access to the offshore energy market in the North Sea and allows us to take advantage of the fact that nearly 25 per cent of Europe's offshore wind resources pass over Scotland's seas.

One of the energy park's current occupants is Burntisland Fabrications—a world leader in developing deep-water substructures that are used for offshore wind projects. Not only is BiFab a globally essential contributor to the offshore supply chain, but it is key to creating the highly skilled jobs that are necessary to attract young people to the region, to increase wages in the most deprived areas, and to create additional jobs as demand for local services rises.

Scottish offshore wind manufacturers will have to be competitive to win contracts in order to ensure funding and to protect jobs in the years to come. That will require increased investment in staff, training, and infrastructure in order to compete with European firms.

In the near future, it will be important to follow the resulting contract terms of agreement deals, such as BiFab's bid for the Moray East project,

because they will set a precedent for all big offshore wind projects in the future.

Sustained support for our renewables sector is absolutely essential to the health of the Scottish economy. Offshore wind energy continues to be a cost-effective investment that supports our coastal communities. Such a commitment will create a range of new opportunities for future energy developments and, as our power-generation capacity grows, we should be able not only to meet Scotland's electricity needs but to support technology that will allow us to decarbonise other areas of society.

Strong offshore wind energy infrastructure will allow us to support further research by organisations such as the Hydrogen Office in Fife. It is working to develop hydrogen-powered fuel cells that can capture energy that is generated by wind turbines at night and use the stored energy to power vehicles, from cars to freight shipping, and it is creating the first hydrogen heating system. Another example is the Fife Renewables Innovation Centre, which has been leading the way in attracting investment and creating jobs in the renewable energy sector.

I ask, in recognition of offshore wind week, that the Parliament reaffirms its commitment to the sector, ensures that we are prepared to meet increased manufacturing demand, and calls on the UK Government to uphold its promise of long-term support for offshore wind to foster investor confidence and maintain our leading position in the field.

17:18

Alexander Burnett (Aberdeenshire West) (Con): I thank Lewis Macdonald for bringing this debate to Parliament in offshore wind week and I echo his recognition of AREG and all the good work that it has done over the years.

It comes as no surprise that the motion has been supported by every party across the chamber, considering the excellent contribution that the offshore wind industry has been making to Scotland. Scottish Renewables reported that Scotland is Europe's windiest country, and with Scotland having 25 per cent of Europe's offshore wind resource, it is great to see business take advantage of our natural resources in an environmentally friendly way.

As a constituency MSP from the north-east, I have had the pleasure of visiting Vattenfall's European offshore wind deployment centre off the coast of Aberdeen. Anyone who has seen the project will marvel at its impressive scale. The turbines are so powerful that developers have said that a single rotation of the blades could power an average UK home for a day.

That is not the only success story that we have heard about this year. Just last month, I lodged a motion congratulating Kincardine Offshore Windfarm Ltd on generating power from its first turbine at what it believes will be the world's largest floating offshore wind farm. I thank Lewis Macdonald for recognising that achievement in his motion.

Offshore wind has been a fantastic boost to the energy industry in Scotland. It has created over 2,000 jobs and brought £1.8 billion gross value to the United Kingdom, with that figure expected to rise to £2.9 billion by 2030. The potential for supply chains to the offshore industry is huge. Floating offshore wind farms such as Hywind can generate renewable energy in previously difficult locations. A recent report by the Offshore Renewable Energy Catapult noted that, with the right support, up to 17,000 jobs and an additional £33.6 billion could be added to the British economy. That would be a fantastic boost to the Scottish economy and would only solidify Scotland's position as a global leader on offshore wind.

As a country, we must do all that we can to move to clean energy, and offshore wind has been a great step towards achieving our goal. The Scottish Conservatives are committed to maintaining that success and global leadership, particularly as offshore wind is playing a big part in helping to decarbonise the energy supply across Scotland and the UK. With the cost of offshore wind falling by nearly 30 per cent in the past four years, the industry is proving that it is a viable and sustainable part of our energy mix. Scottish Renewables has reported that the offshore wind industry has actually beaten the price target that was set by the Department for Business, Energy and Industrial Strategy of £85 per megawatt hour by 2026. The Moray East offshore wind farm, which is due to be commissioned after 2020, will mark the first time that renewable electricity has been generated at a price equivalent to that of conventional gas.

It is important that we continue to strive to meet Scotland's energy needs and climate change commitments. The Scottish Conservatives are keen to see an evidence-based approach to the mix of renewables across Scotland and to diversify so that we are not dependent on one kind of generation. Offshore wind has helped us to move towards a better energy mix across the country. I look forward to working with companies across Scotland in building their offshore wind farms and I hope that the industry continues to thrive.

17:21

Claudia Beamish (South Scotland) (Lab): I thank my colleague Lewis Macdonald for bringing

the debate to the chamber, and I thank Scottish Renewables for organising offshore wind week. It is fantastic to celebrate the industry 15 years since planning permission was first granted for an offshore wind farm at Robin Rigg, off the coast of my region of South Scotland. I recently visited Aberdeen and was fascinated to see the magnificent giant turbine blades resting in Aberdeen harbour, waiting to go out to sea. To me, they are a grand symbol of progression and sustainability.

The progress of the offshore wind sector since 2003 has been remarkable and, as Scottish Renewables has put it, is a true Scottish success story. It delivers one of the cheapest forms of electricity generation, which means a direct relationship between the cost of generation and the end bill for consumers. Prices per megawatt hour have beaten Westminster targets, as Alexander Burnett said. Vitally, the industry is a boon for Scotland's coastal communities, which are the most vulnerable to the effects of climate change and coastal erosion and whose economies have been asked to transition first. The expansion of the industry means that those with marine or engineering experience can shift to highly skilled employment opportunities in a growing network of supply chain jobs. The associated socioeconomic opportunities can only strengthen those communities.

It is somewhat disappointing that, as I understand from the RMT, only half of those who have applied to the Scottish Government's transition training fund for assistance with training in shifting from oil and gas to renewables have been successful. I hope that the minister will comment on that in his closing remarks. However, to be positive, 2,000 people are currently employed in the sector, and new technologies and innovations suggest that the number could rise. For example, floating wind is a chance for Scotland to be a world leader if it is appropriately fostered. As we have heard, according to a report by ORE Catapult, there is a chance for up to 17,000 jobs by 2050.

Shifts such as that from the more traditional finite energy industry to the renewables sector demonstrate the absolute necessity of a just transition commission. For as long as our economy is transitioning, there should be a commission, and I will continue to press for one to be set out in statute in the Climate Change (Emissions Reduction Targets) (Scotland) Bill. Offshore wind will play a central role in Scotland's industrial future, and that transition must be equitable for the coastal communities and workers involved.

Offshore wind is a fantastic example of how political enthusiasm can drive an industry forward.

It was the UK and Scottish Labour Governments that demonstrated an early commitment to the offshore wind industry, the fruits of which can be seen today. It is a meeting point of environmental protection and economic development—a source of innovation that increases competition and lifts the economy, as well as bettering our chances against climate change.

As the Parliament takes any decision towards a net zero economy, we should turn our minds to and celebrate the offshore wind triumph. Scottish Labour is supportive of a publicly owned offshore wind energy company to regain control of the energy supply and transition to a publicly owned, decentralised energy system. The industry holds great potential to speed up deployment and capture jobs and value for the Scottish public, while reducing energy bills for consumers. Of Scotland's total offshore wind sector, 30 per cent is owned by public entities, which is a good-news story. However, those are not Scottish or UK entities. Although it is a pity that those opportunities are at present outside Scotland, it is an inspiration that such a significant percentage is public. Scotland can be proud to hold the title of Europe's windiest country, and it is right that that abundant natural resource should be used for the public good.

I look forward to the minister's closing remarks.

17:26

Mark Ruskell (Mid Scotland and Fife (Green)): I thank Lewis Macdonald for lodging the motion. The chamber has debated many motions about offshore wind over the years. Mr Macdonald reminded us of the private bill in 2003 under the Labour-Liberal Democrat Government to enable the Robin Rigg wind farm to be planted in the Solway. He is right to pay tribute to the pioneers of the Aberdeen Renewal Energy Group—that gang of five, who were such strong champions. I have met many of them at renewables conferences over the years. With passion and professionalism they drove the confidence in offshore wind, and I pay tribute to them tonight.

The rate of commercial progress in the past few years has been simply breathtaking. We still have a quarter of Europe's wind resource, but the cost per megawatt of harvesting it has dramatically fallen from around £150 in 2014 to just over £57 last year, smashing Westminster's target of £85 eight years early. The moment when it was announced that the cost of offshore wind had fallen below that of gas was another tipping point in our energy transition and real testament to the innovation that has been developed across the supply chain.

We are witnessing such blistering progress, and the prospect of floating wind as another widespread commercial technology developed in Scotland is very exciting. ORE Catapult's analysis of the domestic generation potential from floating wind, combined with the potential export market, paints a healthy picture for the economy in some of our most deprived coastal communities.

Like David Torrance, I want to see Fife at the heart of the forthcoming sector deal on offshore wind. The skills and expertise are there in the communities. We have great graduates coming through Fife College at Rosyth, with all the skills for operation and maintenance work. We have skilled engineers and workers, with all the passion, professionalism and integrity needed to make companies like BiFab a success. But we also need the pipeline of projects to come through to kick start the order books for BiFab and many other Fife businesses that depend on it.

The physical assets have to be fit for the work as well. Scottish Enterprise needs to help bring the yards up to standard, working with BiFab's owners to deliver the facilities it needs to be globally competitive. The prize is great, because if we can double the domestic content of UK offshore wind farms from a third to two thirds in the next decade, we can realise nearly £3 billion of gross value added for every single gigawatt installed. That is real jobs and livelihoods, if we can capture just a fraction of the benefit for Fife communities.

We need certainty and progress in that pipeline of projects, in both Government support and, critically, planning. I confess that it really pained me to see the legal challenges laid against the outer Firth of Forth wind farms at such a critical point in our energy transition and fight against climate change.

At the same time, we cannot wish away the pressures on protected seabirds and marine mammals. They are real, and European laws are there to defend species that are on the brink of extinction. We need to learn the lessons from the legal challenges, which were initially upheld on issues of process. The disclosure of data and allowing its review early on in the planning process—by all bodies, including non-governmental organisations—is important. Our natural heritage is our shared treasure and its state and health should not be concealed under commercial sensitivity; we must enter into decisions with eyes fully open. The need for that due process must be reflected in whatever environmental governance arrangements we end up with after March.

The future has arrived. Offshore wind has arrived. Let us harness with wisdom and care its tremendous power to transform.

17:30

Liam McArthur (Orkney Islands) (LD): I join others in thanking Lewis Macdonald for securing the debate. I also recognise his long-standing interest in and support for not only the offshore wind sector but the whole energy sphere. As others have said, it is important that we have this debate in offshore wind week so that we can restate the support across this chamber for the development of the sector.

As a number of members have already observed, the sector is a success story in terms of meeting our ambitions with regard to the environment and reducing emissions; in terms of our economy and creating jobs and wealth; and in terms of our efforts to combat the scourge of fuel poverty. For all those reasons, it is absolutely appropriate that we should take this opportunity to celebrate that success, which dates back to the time of the Robin Rigg bill—and my time in the Scottish Executive. I well remember Lewis Macdonald's involvement in that. Interestingly, that process involved pushing back the boundaries of how we regulate in this environment and in a cross-border context.

Since that time, we have seen success story after success story including the Beatrice wind farm and the Vattenfall developments. However, it would be a mistake to suggest that all of that was inevitable. The effort that has gone into achieving those successes should not be undervalued just because of the progress that we have seen. It is right that we acknowledge some of the pioneers of the sector, but they would be the first to admit that the contribution that they have made rested heavily on the people who supported their efforts along the way.

Where do we go from here? It is right that, as Lewis Macdonald suggested, we ensure that we build on that success by being equally ambitious in the future. We can set those ambitious targets for ourselves based on some of what we have seen in relation to the plummeting costs in the sector and its improving competitiveness, and on the innovation that we can see not only in the fixed-bottom developments, but in the floating developments, where, through Hywind Scotland and others, we see Scotland leading the way and playing to our strengths, on which, ultimately, any economic or industrial strategy is best founded.

Our strengths certainly involve our wind resource. As others have observed, 25 per cent of the offshore wind capability in Western Europe is in Scotland. Those strengths also include the skills base that we already have and the academic research that has underpinned the sector. All those elements suggest that the success that we have seen in the past is a success that we can aspire to replicate in the future.

I am conscious that, tomorrow afternoon, we will deal with stage 3 of the Scottish Crown Estate Bill. Lewis Macdonald has already put in a pitch for Crown Estate Scotland to be slightly more supportive in terms of the environment and the role that it has to play with regard to the future success of offshore wind. I make a plea that the offshore sector should demonstrate what it is able to contribute in terms of community benefit for our island and coastal communities.

The aspiration to have something that is subsidy-free puts me in mind of the lunacy of having renewables such as tidal and wave power competing directly with offshore wind for future support. It is absolutely right that we continue to support our offshore wind sector into the next phase of its development. However, I think that we risk choking at birth technologies such as tidal and wave if we put them up in competition with offshore wind.

I congratulate Lewis Macdonald again on securing the debate, enabling it to take place and the Parliament to once again underscore our collective support for the future success of the offshore wind sector.

17:35

Stewart Stevenson (Banffshire and Buchan Coast) (SNP): I start by declaring that I am a shareholder in SSE and in the Boyndie Wind Farm Co-op, which is a wind farm close to where I stay.

This is an excellent opportunity—thanks to Lewis Macdonald—to celebrate offshore wind week 2018 and the contribution that offshore wind makes to our economy, employment in local communities and of course the climate change agenda. It was only a couple of years ago that the then President of the French Republic, François Hollande, offered his plea that we work together against climate change:

“The time is past when humankind thought it could selfishly draw on exhaustible resources. We know now the world is not a commodity”.

With Scotland, as we have heard, being the windiest place in Europe, we have something that shows no sign of being an exhaustible resource. The development of offshore wind has been a terrific contribution to the climate change agenda.

I have two wind farms near where I stay. I only have to go a few hundred metres to the east and at night I can look out over the Moray Firth and see the Beatrice wind turbines that were put up as the first offshore wind trial in the area. More significant, though, is the Hywind Scotland offshore development, floating off Peterhead, which has been referred to by a number of members and in the motion. The development is truly groundbreaking, water-breaking technology,

and it opens the door to deployment of that technology in shallow coastal areas around the world.

Offshore wind is not particularly new. There has been a wind farm next to the Øresund bridge between Denmark and Sweden for a considerable period. However, the Hywind technology and the technologies that we are seeing developed off our coasts are much higher capacity and have much higher outputs, partly because of developments in China and the use of rare earths in new magnets to increase what can come from ahead.

In the past couple of weeks, I visited a firm in Peterhead called Survitec, which is one of many firms that are developing new technologies. Flashover fires can happen in a matter of seconds, so Survitec has developed a rapid-escape technology for people who are at the top of a wind turbine. I wish the company extremely well—it certainly deserves to get wide market acceptance. However, it will not be alone in exploiting the opportunities that come from having such sources of offshore wind close to some of our communities. Service vessels will go out to service them, and a number of the harbours in my constituency—Fraserburgh, Peterhead and Buckie—look forward to opportunities to service wind farms. I understand that in Caithness, Wick will look to get its share of the business. We will see how that develops, because healthy competition between harbours is not at all a bad thing.

The First Minister visited the Hywind wind farm pilot project, which underlines the potential of Scotland’s huge offshore wind resource. Right at the top of Government it is recognised how important offshore wind is. I wish it well and repeat my thanks to Lewis Macdonald for providing the opportunity to congratulate everyone who is involved in offshore wind and, more to the point, those who will be in the future.

17:39

Maurice Golden (West Scotland) (Con): I congratulate Lewis Macdonald on securing this members’ business debate slot.

There is agreement across the chamber that global warming and climate change are among the most pressing issues facing humanity. The recent Intergovernmental Panel on Climate Change report makes it clear that the duty to act is shared by all countries. For Scotland, a key component in fulfilling that duty will be to bring our abundant renewables resources to bear.

It is more important than ever that we support the development of renewables in Scotland. Given that Scotland is estimated to have a quarter of the entire European potential, offshore wind must play

a leading role. There is no better time to highlight that than this week—offshore wind week—when we celebrate the success of offshore wind and renewables in general. However, it is not just the raw resource that counts in Scotland's favour. As part of the United Kingdom, we have access to the wider UK energy market, with all the benefit that that brings for future investment and expansion—and expand we have.

It was not long ago—just 15 years, in fact—that planning permission was granted for the first offshore wind farm in the Solway Firth. As today's motion mentions, since then, the sector has grown rapidly, with a number of projects coming online, including the Hywind Scotland development off Peterhead and Vattenfall's European offshore wind deployment centre in Aberdeen Bay. Perhaps more impressive yet, when the Kincardine offshore floating wind farm off the coast of Stonehaven is completed, it is expected to be the world's largest floating wind farm. Those sorts of milestones act as a clear sign of ambition and of the level of success that is being realised in Scottish waters.

There has been expansion across renewables in general in Scotland, with consistent support from the Scottish and UK Governments fuelling a renewables revolution that has led to the proportion of our electricity that is generated from renewables jumping from 38 per cent in 2014 to 68 per cent last year—the highest level in any part of the UK. One way in which we could utilise any excess electricity that is generated would be to construct an electric arc furnace for recycling steel, which could perhaps be accessed from the 471 oil and gas platforms and the 10,000km of pipeline in the North Sea.

We want Scotland to maintain that edge and our word-leading reputation. In addition to there being a solid environmental case, there is a solid economic case that underpins offshore wind. Costs have almost halved in recent years—down from a strike price of more than £100 per MWh to about £57 per MWh—which has made offshore increasingly attractive as an investment and as an economically sustainable energy source.

Now it is time to back the companies, the investors and the workers who will deliver the projects of tomorrow and the economic and environmental benefits that will follow. A key component of that will be ensuring that we have adequate provision of the shallow water and deep water sites that will be needed. As we look to 2030 and beyond, we must keep our sights on the prize of establishing Scotland as a leader in offshore development not just in the UK, but in Europe and across the world.

17:43

The Minister for Energy, Connectivity and the Islands (Paul Wheelhouse): Like other members, I thank Lewis Macdonald for securing the debate, and I welcome the speeches from members across the chamber. We cannot always stand in the chamber and say that we are all united in support of a particular issue or technology, so it is nice to be able to welcome speeches from Alexander Burnett and Maurice Golden for once. Today is a great opportunity.

Each year, offshore wind week, which is hosted by Scottish Renewables and RenewableUK, marks an important series of events in the offshore wind calendar and brings the sector the recognition that it deserves, so it is only right that we have this debate in the chamber. As I said, it is very positive that there is unanimity in our views.

Our commitment to offshore wind is outlined in Scotland's energy strategy, which was published last December and which sets out a vision for the future of energy in Scotland. In short, the strategy sets two world-leading climate change targets for 2030 with the aims of meeting the equivalent of 50 per cent of Scotland's heat, transport and electricity energy consumption from renewable sources and of increasing by 30 per cent the productivity of energy use across the Scottish economy. The figure of 68 per cent that Maurice Golden identified has been upgraded—more recent figures confirm that 69 per cent of our energy is generated from renewables, so we have achieved an even higher level than was thought.

We are now setting more ambitious targets through the Climate Change (Emissions Reduction Targets) (Scotland) Bill, which Roseanna Cunningham introduced in May. Those targets will ensure that Scotland will be carbon neutral by 2050. Finding renewable and low-carbon solutions will remain one of our key priorities, and we will continue to champion and explore the ability of Scotland's huge renewable energy resources to meet our electricity needs and contribute to meeting those significant targets.

Last week, WWF reported that, in October, onshore and offshore wind turbines generated the equivalent of the energy needed to meet 98 per cent of Scotland's electricity demand, or enough to power nearly 5 million homes. Members will understand that Scotland has more than 2 million homes, not 5 million, so we are doing well. On 27 of the 31 days in October, wind power alone met more than 100 per cent of the country's electricity needs. That is a positive story.

Those figures are testament to how reliable and consistent wind energy technology can be and show why offshore wind will play a vital role in our future energy system, particularly if we can

combine it with storage. Lewis Macdonald made a point about that. He will know that Hywind Scotland is linked to the charmingly named Batwind project, which combines battery technology with the offshore turbines at Peterhead.

The UK leads the world in offshore wind, and I would like to think that Scotland plays an important role in that with more than 7GW of operational capacity. As members have said, the sector still has exciting growth potential in Scotland, and we have granted planning permission for more than 4GW of offshore wind development.

David Torrance referred to the work that BiFab is doing; it has contributed to the Beatrice offshore wind site, which is under construction. I understand that 35 of the 84 turbines in that 588MW scheme have been installed. That site is a tremendous success story, and it will provide enough power for 450,000 homes, which shows the scale of the potential that we are talking about.

We are home to the world's first floating wind farm—the 30MW Hywind Scotland project, which is located off Peterhead. I was pleased to join the First Minister in attending its formal opening, and a number of other members were there to show their support. A second such wind farm—the 50MW Kincardine Offshore Windfarm Ltd site, which is off the coast of Aberdeen—is under construction. I welcome the positive remarks about that project from members from across the chamber, and I welcome Mr Burnett's motion.

Those projects were made possible because, in 2013, the Scottish Government used its executive power to introduce the enhanced Scottish renewables obligation certificate scheme. That scheme is no longer available to us, but it helped to bring on innovative projects to demonstrate the technology, and we now see the exciting potential for floating offshore wind farms in particular.

In September, I joined the First Minister at the opening of Vattenfall's European offshore wind deployment centre—I saw Lewis Macdonald there and we had a good catch-up about offshore wind. I add my praise for the work of AREG; Morag McCorkindale is a force of nature, and her team has been really important in the centre's development. As has been said, the project not only boasts two of the most powerful turbines in the world but has demonstrated innovation in the construction and installation process—the innovative suction bucket jacket foundations at the site were installed in a record time of two hours and 40 minutes, which is a fantastic achievement.

We have supported such projects because we recognise that continuous innovation and cost reduction in the sector will be key to maximising the benefits for Scotland and the wider UK

economy. That is why the Scottish Government has committed £2 million in innovation grant funding to offshore wind in this financial year—that funding is split between the Carbon Trust, the Offshore Renewable Energy Catapult and the energy skills partnership.

In London last week, I was pleased to help to celebrate the 10th anniversary of the offshore wind accelerator, which has made positive progress. It has made huge strides forward in cost reductions for offshore wind—we have all referred to the downward trajectory, which I congratulate it on.

Marine Scotland is working closely with Crown Estate Scotland to deliver a sectoral marine plan that will guide future leasing rounds for commercial-scale offshore wind sites in Scottish waters. Lewis Macdonald, Liam McArthur and others have referred to that work.

Mark Ruskell spoke about the conservation of seabirds, and we are trying to bring forward a range of shallow and deepwater sites that will allow fixed and floating offshore wind projects to be proposed. We need to do that with respect for the environment, and we are taking feedback from a number of developers about sites that they believe should be in the sectoral marine plan. The aim is to produce something that can be accepted, which will get momentum behind the offshore wind sector's development.

Lewis Macdonald: I am pleased to hear what the minister has said about bringing forward a balance of shallow water and deep water sites. Will that involve a change in the areas of search when the Crown Estate moves on to the next phase, to enable the mix that you described?

Paul Wheelhouse: I cannot prejudge the final version of the plan, but we are listening to those who are promoting different sites. We must take on board the considerations that Mark Ruskell outlined, such as the impacts on ecology and seabird populations. I would argue that climate change is probably the single biggest threat that those species face, so we have a duty to try to address that, but I am aware that there are concerns about the diversion of seabirds from their feeding routes and we hope to feed back on that. Crown Estate Scotland and Marine Scotland are very much working together on that and are sharing information as they go along.

We continue to engage with the UK Government to ensure that the Scottish supply chain and devolved powers to support the sector are reflected in the offshore wind sector deal proposal. Last week, I met Baroness Brown, who is leading on the sector deal, and I also met the Minister of State for Energy and Clean Growth, Claire Perry, to discuss a number of issues. That was a positive

meeting at which she stressed her support for offshore floating and fixed-bottom wind farms.

As members have indicated, it is clear that the support mechanisms, such as contracts for difference, need to reflect the additional costs that floating wind farms currently face. We would certainly argue that that would be a positive opportunity. Equinor, which developed the Hywind Scotland site, is taking forward an innovative project in the oil and gas sector in Norwegian waters—it is called project Tampen—that will put 11 offshore floating turbines between two oil and gas fields and will significantly decarbonise the production of oil and gas. That is a good example of how sectors can work together. We are certainly encouraging the offshore wind sector deal team and the oil and gas sector deal team to work together as best they can. This morning, I met Trevor Garlick to discuss that very subject.

Our transition to a low-carbon economy represents one of Scotland's most significant opportunities for economic and industrial development. As others have said—Stewart Stevenson referred to this—Wick is benefiting significantly from the Beatrice offshore wind site. I am pleased to say that Fraserburgh, having been selected as the operations and maintenance base for the Moray East site, will benefit significantly from that project.

I was delighted to hear today the announcement of a £10 million deal between the Moray East offshore wind farm and Port of Cromarty Firth, which means that a number of storage facilities will be provided by the port over an 18-month contract. That deal is not only a significant milestone in the delivery of the project; the use of the port as a hub during construction will attract high-value jobs and investment to the local area, which I very much welcome. I look forward to seeing the progression of that partnership and the progression of the operations and maintenance contract that was awarded to Fraserburgh harbour by Moray East offshore wind farm, which I announced during a visit there last month.

I am conscious of the time, Presiding Officer.

The oil and gas expertise that has been gained through over 40 years of experience of operating in the North Sea is helping us to overcome the engineering and innovation challenges that are faced in offshore wind in areas such as corrosion and maintenance activities. That expertise is providing the skills that are necessary to transition to the renewables sector.

Given the time constraints, I will get back to Claudia Beamish on the issue of the TTF.

We will continue to work closely with our enterprise agencies and other partners to maximise the economic benefit to the Scottish

supply chain from renewable energy development in Scotland. Regular CFD auctions, which were announced by Claire Perry in July—we had pushed for them and I very much welcome them—will provide much-needed visibility that will give supply chain companies the opportunity and confidence to make the strategic investments and meaningful collaborations that are required to compete both within the UK and internationally, as David Torrance said.

This has been a valuable debate. I know that members on all sides of the chamber are focused on ensuring that we maximise the economic opportunity that will arise from the future development of offshore wind. I hope that members are assured that we are already taking the necessary steps to prepare for the future of offshore wind through the scoping work that has been done for the sectoral marine plan, through our actions to drive forward innovation in the sector and through our continuous support for the Scottish supply chain.

The future energy transition will bring many opportunities. I hope that we all agree that Scotland should remain at the forefront of renewable energy including offshore wind.

Meeting closed at 17:53.

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