

Meeting of the Parliament

Thursday 10 November 2016





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Scottish Parliament

Thursday 10 November 2016

[The Presiding Officer opened the meeting at 11:40]

General Question Time

Study of Medicine

1. **Jeremy Balfour (Lothian) (Con):** To ask the Scottish Government what action it is taking to encourage school pupils to study medicine at university. (S5O-00322)

The Minister for Further Education, Higher Education and Science (Shirley-Anne Somerville): Our education system aims to provide young people with experiences and with careers information, advice and guidance to raise awareness of opportunities and support informed choices. In addition, targeted schools programmes have been developed to encourage and support young people into careers in health and medicine in particular.

Jeremy Balfour: I declare an interest, as I have a number of family members who are studying medicine. I am sure that we all agree that the training that they get at university is very good, but figures that the Universities and Colleges Admissions Service recently published showed a decline in the number of Scottish students applying for medicine courses by the October deadline for applications to such courses. Most worryingly, the figure has dropped by 11 per cent since 2013. Given the general practitioner crisis in all parts of Scotland, particularly Edinburgh and the Lothians, it is surely concerning that there will be fewer Scottish medical graduates in the future.

Shirley-Anne Somerville: The setting of medical student places is based on the workforce planning needs of NHS Scotland. Although the Scotlish Government sets the annual intake into medicine, the selection and recruitment of the individual students who are admitted to study medicine is a matter for individual universities. As a result, the exact number of Scotland-domiciled students varies slightly from year to year.

The evidence suggests that Scotland-domiciled students are more likely to stay and work in NHS Scotland. For that reason, we are taking measures to increase their numbers. We have increased the number of undergraduate medical school places by 50 from this year, with those places focusing on the widening access criteria. The Scottish graduate entry medical programme—ScotGEM—will add another 40 places from 2018 and will have a focus on general practice and rurality.

Royal Alexandra Hospital and Inverciyde Royal Hospital

2. **Neil Bibby (West Scotland) (Lab):** To ask the Scottish Government what recent discussions it has had with NHS Greater Glasgow and Clyde regarding plans to close the children's ward at the Royal Alexandra hospital and the birthing unit at Inverclyde royal hospital. (S5O-00323)

The Cabinet Secretary for Health and Sport (Shona Robison): Ministers and Government officials regularly discuss matters of local importance with health boards. As I confirmed in my statement to the Parliament on 2 November, NHS Greater Glasgow and Clyde decided at its October board meeting to designate the paediatric proposals as major. As such, they are now subject to formal public consultation and I encourage all local stakeholders to take part. Any final service change proposals will be subject to my approval.

The proposals that affect births at the Inverciyde royal hospital and the Vale of Leven hospital are currently subject to public engagement, which is due to end in early December. The Scottish health council continues to monitor that activity and will, ultimately, offer a view on whether the proposals are major. I will consider that alongside the board's views and make a final decision on designation. That will inform the board's consideration of next steps at its meeting on 20 December.

Thousands Neil Bibby: of people Renfrewshire and Inverclyde have signed petitions against the closure of the RAH children's ward and the IRH birthing unit, but the Cabinet Secretary for Health and Sport ignores local people by refusing to offer any reassurance that she will protect the children's ward or call in the decision on the birthing unit. Shona Robison needs to stop hiding in Edinburgh and start listening in Renfrewshire and Inverciyde. I have asked her before and ask her again on behalf of the many concerned families whether she will visit Renfrewshire and Inverclyde to listen to the public's views on the future of their local national health service services.

Shona Robison: Neil Bibby asked that I should make the final determination on the RAH paediatric service change proposals and I have said that I will do that. Because I have said that, he has now moved on to asking me the same about the Inverclyde royal hospital and I will say the same to him as I said in my initial answer: those are not formal proposals that have been designated as major or otherwise, so the process should be allowed to continue as it was for the RAH.

If we get to a position in which the proposals for the IRH go ahead formally and are designated major—I might decide that they should be designated major in the light of local interests—they will come to me. Perhaps, in the end, all the proposals will come to me, and I hope that Neil Bibby will appreciate and understand that. I have told him what the process is on a number of occasions. Ultimately, those decisions might well be my decisions, and I will make them based on the very clear criterion that the proposals must be in the interests of local patients.

Stuart McMillan (Greenock and Inverclyde) (SNP): Does the cabinet secretary find it strange, as I do, that the Labour Party in Scotland, which is always talking about local decision making, wants the decision on the IRH and the Vale of Leven hospital to be made at national level rather than at NHS Greater Glasgow and Clyde level? As the cabinet secretary will be aware, there are seven Labour councillors on the board of NHS Greater Glasgow and Clyde; they are the only political representatives on the board.

Shona Robison: The actions of the Labour Party are often strange, which is probably why it is sitting in third place in the Scottish Parliament.

As I have said repeatedly in the chamber, there is a well-established process, which we will continue to follow. I am not going to prejudge proposals that are currently the subject of public engagement and consultation, and which might not even emerge as formal proposals and might well change. That is the right way to proceed. Members well understand the process, and that is the process that we will follow.

Annie Wells (Glasgow) (Con): How will the Scottish Government ensure that all proposed service changes contribute to the Scottish Government's commitment to shift the balance of care away from acute hospitals and towards primary care?

Shona Robison: As the member will be aware, the First Minister made a very important announcement about the funding of primary care—she said that there will be a £500 million investment in primary care over the course of the parliamentary session. That will accelerate a shift in the balance of care from the acute sector to primary care.

I ask members to appreciate that things cannot stay the same. That does not mean that every service change proposal that is put forward is the right one. Each proposal must be tested firmly in the light of what is best for patients. Any member who stands against any change in acute services anywhere will get in the way of that important shift in the balance of care. I hope that no member would do that.

Jackie Baillie (Dumbarton) (Lab): The cabinet secretary will, of course, be aware that only seven

members of the board of NHS Greater Glasgow and Clyde are Labour councillors; the other 20 or so are appointed by her. Therefore, Stuart McMillan's argument was nonsense.

The cabinet secretary has been invited to come to my area to discuss proposals to close the Vale of Leven maternity unit, but she has refused to do so. Given that she has not given any guarantee that she will take the final decision, if it is the case that it is not a major service change, will she visit to explain the decision to my local community?

Shona Robison: Yet again, Jackie Baillie is getting ahead of herself. For the record, I have been a regular visitor to the Vale of Leven hospital, which would not be open if it had been left to the previous Administration. It was the Scottish National Party Administration that saved the Vale of Leven hospital. Jackie Baillie does not like to talk about that very often.

I have made clear what the process is. Jackie Baillie and other Labour members continue to try to cut across that process, which is well established. The proposals might not end up being formal proposals or they might change. It is right and proper that any proposal that comes to me is the final proposal that the board has formally put forward.

As I said to Neil Bibby, proposals will often be designated major in the light of local interests, but we have not yet reached that position. Should that decision come to me, I will, of course, deal with it in the same way that I would deal with any decision: I will look at the impact on local patients in the area.

Nordic Baltic Strategy

3. Angus MacDonald (Falkirk East) (SNP): To ask the Scottish Government what progress it is making with its Nordic Baltic strategy. (S50-00324)

The Minister for International Development and Europe (Dr Alasdair Allan): I refer to my entry in the register of members' interests, as I am a member of the Norwegian Scottish Association.

Exchanging knowledge and experience with our Nordic and Baltic partners is of great benefit to Scotland, as those countries are recognised as world leaders in many areas of prime importance to the Scotlish Government. There is much to be gained in learning from the positive examples that they set.

The Government's commitment was formalised in 2014 with the publication of the Nordic Baltic policy statement. Since then the Scottish ministers have had a number of engagements with Government representatives of the Nordic and Baltic countries to promote diplomatic, business

and cultural ties. I have just returned from a visit to Tallinn in Estonia and, a few weeks ago, the First Minister visited Reykjavik, where she met Icelandic Government representatives, as well as the foreign minister of Finland, on the margins of the Arctic Circle Assembly.

On a practical level, there have been a number of policy exchanges between Scotland and the Nordic and Baltic countries, the most notable being the development of our policy to provide expectant parents with a baby box containing vital items to help them to look after their babies in the earliest days. The policy is based on the tried and tested Finnish model and we have worked closely with Finnish colleagues on its development.

Such policy exchanges have been encouraged and supported by the work of the Nordic horizons group, which the Scottish Government has funded over the past five years and continues to support. The most recent Nordic policy event on 29 October examined the different relationships that the Nordic countries have with the European Union, providing valuable lessons for Scotland as we explore possible options for our own relationship with the EU.

Angus MacDonald: I thank the minister for his detailed reply. It is good to know that such progress has been made. Does the minister agree that, given the turmoil that Brexit is creating, the Scottish Government should be taking every step to further develop and expand our economic, cultural and social links to our cousins in the Nordic region and Baltic states?

Dr Allan: I will be briefer in this reply. Yes, we should be encouraging all those bilateral relationships.

Fife Council (Meetings)

4. Jenny Gilruth (Mid Fife and Glenrothes) (SNP): To ask the Scottish Government when it last met Fife Council. (S5O-00325)

The Minister for Local Government and Housing (Kevin Stewart): Ministers and officials regularly meet the leaders and chief executives of all Scottish local authorities, including Fife Council, to discuss a wide range of issues, as part of our commitment to working in partnership with local government to improve outcomes for the people of Scotland.

Jenny Gilruth: I was contacted recently by constituents who work as adult services social workers for Fife Council. The company that Fife Council contracts the work out to—Real Life Options—wrote to all its employees nationally last month. The company claims that, despite a number of requests to local authorities, it has not yet received confirmation that any additional funding will be provided to support implementation

of the new Scottish living wage. Does the minister think that it is acceptable for Fife Council to get around paying the Scottish living wage to its employees through contracted employers such as Real Life Options?

Kevin Stewart: The Scottish Government is absolutely committed to seeing all adult services care workers being paid the living wage from 1 October 2016. We have provided significant investment to meet that commitment. We provided an extra £250 million this year to support integration of health and social care, out of which the Fife health and social care partnership was allocated £16.83 million. Of that spend, £8.42 million was available to support additional spend on expanding social care to support the objectives of integration, while the other £8.42 million was provided to help to meet the range of costs that are faced by local authorities in delivery of effective high-quality health and social care, and to enable payment of the living wage to care workers who support adults in the independent and third sectors. That commitment allows councils to commission adult social care on the basis that care workers are paid the real living wage, which gives up to 40,000 people—mainly women—who are doing some of the most valuable work in Scotland a very well deserved pay rise.

We have been working closely with health and social care partnerships and providers to make delivery of the commitment successful. Where that has not happened—as is the case with Fife Council, it seems—pay will be backdated to 1 October. That should be done within a reasonable timeframe.

Alex Rowley (Mid Scotland and Fife) (Lab): I spoke to the leader of Fife Council this morning. He told me that despite repeated requests to meet the Deputy First Minister and Cabinet Secretary for Education and Skills, the council is finding it difficult even to get a response. Will the minister use his good offices to urge Mr Swinney to respond to Fife Council and to ensure that the council can get a meeting to discuss education issues?

Kevin Stewart: All I can say is that I met the leader of Fife Council recently in Kelty, but that matter was not raised with me. I met the deputy leader of Fife Council only yesterday in Kirkcaldy at the Scottish towns partnership meeting: again, the matter was not raised with me. There are multiple opportunities for the leaders of Fife Council to engage with ministers, so it seems to me to be strange that when I met them they did not raise with me the matter to which Mr Rowley has referred.

Scottish Fire and Rescue Service (Funding)

5. Alexander Stewart (Mid Scotland and Fife) (Con): To ask the Scottish Government what action it is taking to address the reported £42.7 million funding gap in the Scottish Fire and Rescue Service. (S5O-00326)

The Minister for Community Safety and Legal Affairs (Annabelle Ewing): The challenge of bringing together eight legacy fire services represented one of the biggest public sector reforms in a generation. Audit Scotland confirmed that the fire service reform process had been a success. The Scottish Fire and Rescue Service revenue budget for 2016-17 was protected in cash terms, and that protection supports the range of excellent work that the Scottish Fire and Rescue Service continues to undertake to protect our communities. Audit Scotland also confirmed that the reform process had no adverse effect on the public, and reported savings to the public purse to date put the service on track to exceed expected savings of £328 million by 2027-28.

Alexander Stewart: We were told that the move to a single fire and rescue service would protect front-line outcomes, but we have seen erosion of those outcomes year on year. Surely, it will be the public who will pay the price for that enforced centralisation.

Annabelle Ewing: The figure to which the member referred in his first question was, of course, a prediction by Audit Scotland. It was based on some knowns-that is, current known costs-but it was also based on some unknowns: that is, predicted but not actual future costs and Office for Budget Responsibility forecasts of United Kingdom public spending. As a next step, we will need to see what the Chancellor of the Exchequer's autumn statement holds for Scotland. However, if Alexander Stewart could get behind the Scottish Fire and Rescue Service, he would be calling on his Westminster colleagues to give back to our firemen and firewomen their VAT, which amounts to £10 million per annum. The member should do the maths.

Age Discrimination

6. Pauline McNeill (Glasgow) (Lab): To ask the Scottish Government what action it takes to tackle any age discrimination against 17 and 18-year-olds. (S5O-00327)

The Deputy First Minister and Cabinet Secretary for Education and Skills (John Swinney): Overarching responsibility for legislation on equal opportunities is reserved to the United Kingdom Government. The Equality Act 2010 provides the legal framework to protect individuals aged 18 and over in the UK from discrimination because of age by those who

provide services or exercise public functions. Those provisions do not apply to children and young people aged 17 or younger. Within our devolved powers, the Scottish Government works with other public authorities to eliminate all forms of unlawful discrimination, to advance equality of opportunity and to foster good relations.

Pauline McNeill: The cabinet secretary will be aware that the national minimum wage for people under 18 is £4 an hour, and £3.40 an hour for apprentices. However, young people who are at school might have no earnings at all. Does the cabinet secretary agree that it is not fair that 16 and 17-year-olds pay adult fares on public transport from their 16th birthday? Would he consider supporting my campaign to extend child fares to all those under the age of 18? Would he also consider the possibility of putting something into a future ScotRail contract to provide 16 and 17-year-olds with the flexibility of independence, which would be an important step for them?

John Swinney: Pauline McNeill has raised valid issues for consideration. Obviously, there are different provisions in Scotland in relation to support for young people; for example, the availability of education maintenance allowance, which is an important contribution for young people in the age group to which she referred.

However, I am sure that the Minister for Transport and the Islands will have heard the point about the ScotRail contract and classification of fares. Of course, Pauline McNeill will be familiar with the legitimate issues regarding the different thresholds at which different age considerations apply, but ministers will certainly reflect on the issues that she has raised.

NHS Borders (Meetings)

7. John Lamont (Ettrick, Roxburgh and Berwickshire) (Con): To ask the Scottish Government when ministers last met representatives of NHS Borders and what issues were discussed. (S5O-00328)

The Cabinet Secretary for Health and Sport (Shona Robison): Scottish ministers and officials meet NHS Borders regularly to discuss matters of interest to the people of the Borders.

John Lamont: The cabinet secretary will be aware of the recent Audit Scotland report "NHS in Scotland 2016" and Audit Scotland's worrying conclusion that NHS Borders is the board that is least likely to balance its books this year, with 55 per cent of planned savings being classified as "high risk". She will also be aware that Audit Scotland noted in the same report that NHS Borders has had the largest increase in spend on internal bank nurses and midwives and is spending twice as much on external agency staff

as it spent in the previous year. What is the Scottish Government doing specifically to support NHS Borders and its staff through those challenges?

Shona Robison: In 2016-17, the NHS Borders resource budget has increased by 5.3 per cent to £193.9 million. The NHS Borders uplift includes £5.3 million for investment in social care, as part of the integration of health and social care. I point out that NHS Borders funding for 2016-17 is more than £4 million above its NHS Scotland resource allocation committee target share. However, we understand the pressures that the growing demand for services brings.

The agency staff issue that John Lamont has raised is a key element of the national programme of work that is under way to reduce agency spend. Part of that is about helping boards to recruit to substantive posts where that makes sense, and to look at other options for reducing spend. I will be happy to write to the member with more details of what NHS Borders is doing to reduce agency spend, as part of that programme.

The Presiding Officer (Ken Macintosh): Before we move to the next item of business, members will want to join me in welcoming to the gallery Mr Asad Qaiser MP, Speaker of the Provincial Assembly of Khyber Pakhtunkhwa in Pakistan. [Applause.]

First Minister's Question Time

12:00

Engagements

1. Ruth Davidson (Edinburgh Central) (Con): To ask the First Minister what engagements she has planned for the rest of the day. (S5F-00445)

The First Minister (Nicola Sturgeon): As this is our last session of First Minister's question time before armistice day and remembrance Sunday, I am sure that all members want to pay tribute and express our gratitude to those who sacrificed their lives for the way of life that we all value.

Later today, I will have engagements to take forward the Government's programme for Scotland.

Ruth Davidson: I associate myself and my party with the First Minister's message.

I know that events elsewhere in the world are taking precedence in the news right now, but this Parliament has a job to do in holding the Government to account. In March, we discovered that the Scottish Government had signed a £10 billion memorandum of understanding with two Chinese companies. We discovered that only because a picture appeared in the Chinese trade press. We learned this week that the deal had collapsed, and we learned about that only thanks to the Scottish Sunday papers. Does the First Minister think that that is the mark of a transparent Government?

The First Minister: This Government is focused on one of our core responsibilities, which is to try to attract jobs and investment to Scotland. That is something for which I will never apologise, and it was the whole purpose that underpinned the memorandum of understanding to which Ruth Davidson referred.

The memorandum did not commit us to particular investment, but it committed us to exploring opportunities for investment. We were made aware in August that, due to the political climate, our partners in the memorandum of understanding felt that they could not proceed at that time. We did not take that as a cancellation of the memorandum of understanding and we remained committed then, as we remain committed now, to pursuing all opportunities for investment.

I regret that the partners now consider the memorandum of understanding to be cancelled, but let me end by saying this: the reason for that is the political climate that was created. As First Minister, I will certainly reflect on lessons that the Scottish Government should learn from the

experience, and—I say this sincerely and genuinely—I hope that the Opposition parties will also reflect. Scrutiny and questions are, of course, legitimate. I agree with Ruth Davidson that the Opposition's job is to hold the Government to account. However, all Opposition parties should be careful not to create in this country a climate that is seen to be inhospitable to investment, because if that happens it is not good for our economy or for any of us.

Ruth Davidson: The First Minister is demanding that the rest of us take responsibility for a deal that we did not even know existed. The Parliament would have scrutinised the deal if she had not hidden it from the Parliament.

The First Minister might have answered a question, but once again it was not the question that she was asked, so let me answer that one for her. It is not the mark of a transparent Government; it is the mark of a Government whose first instinct is to duck and dive and think that it can escape scrutiny when it wants to. This is a Government that even tries to hide which of its MSPs backs Brexit.

The double standards that we see from this shower are extraordinary. The First Minister's former cabinet secretary Richard Lochhead said the other day that it was unacceptable that the United Kingdom Government should do deals without full disclosure, and yet here we have a Scottish Government that did not tell us that the Chinese deal was on and which failed to tell us when it was called off. We have just heard the excuse that Opposition parties dared to ask questions. In all seriousness, is it really the First Minister's position that the collapse of the deal is everybody else's fault and nothing to do with her Government?

The First Minister: If Ruth Davidson cared to listen, she would have heard me say that I, as First Minister, would reflect on any lessons that we had to learn from the experience, and I say that again.

I repeat the fact that the memorandum of understanding was a commitment to build relationships and explore opportunities. It was not actually a commitment to any particular investment. That is why I think that the charge of double standards from Ruth Davidson is a bit staggering. She represents a party that has apparently made commitments to Nissan, yet it refuses to publish the letter that would tell us what those commitments are, even if they are commitments that might carry a price tag for the taxpayer. I suggest that she concentrates on getting her own party's house in order before she comes here to lecture the Scottish Government.

On the wider issue of Brexit, there is certainly no secrecy around who in the Tory party supports Brexit because they all support Brexit now, regardless of what they might have said before the referendum.

I do not think that the Conservatives have any excuse for lecturing anybody when it comes to trade and investment. Let us not forget that the Conservative Party is the one that wants to rip Scotland out of the European Union and out of the single market against our will. That is what will have a damaging impact on jobs and investment in this country.

Ruth Davidson: I cannot believe that the First Minister persists in coming to the chamber to say that the Chinese Communist Party pulled the plug on the deal because they heard the Scottish Liberal Democrats roar. The entire saga is embarrassing for the Government and it is embarrassing for our country. Let me spell out what actually was at stake, or what we are now being told was at stake, which was hidden at the time: it was £10 billion that could have been invested in housing and transport. That is exactly the kind of investment that we expect the Scottish Government to pull out all the stops to secure. Therefore, could we not have expected that at least one of the First Minister's ministerial team would have picked up the phone to the potential investors after May to make sure that the deal was still on track? Why was that call not made?

The First Minister: We continue to engage not just with the partners in this deal but with anybody if we consider that that could lead to investment in Scotland. That is part of our core responsibilities.

It is a bit rich for the Opposition to stand here today and complain about the collapse of a deal—it was actually a memorandum of understanding to explore potential deals—when, for weeks during and after the May Scottish Parliament elections, Opposition parties repeatedly demanded that the whole thing be cancelled. They demanded that it be cancelled and then they have the nerve to come here and say all these things about how the situation has developed as it has. That is double standards and staggering hypocrisy.

The Government will concentrate on making sure that we focus on our job of doing everything that we can to create jobs, investment and trade in and for Scotland. That is even more important now than ever before, given the fact that Ruth Davidson's party is determined to take us out of the European Union against our will.

Ruth Davidson: Again, the First Minister has not answered my question about what calls were made by ministers to try to save the deal. According to John Swinney, there have been no

discussions between the First Minister or other ministers and the Chinese investors since May.

This Government loves to preach from its high horse, but it cannot face up to evidence of its own incompetence. Let me recap. The Government failed to tell us that a deal was signed, it did nothing to keep it going, it failed to tell us when it collapsed and it is all everybody else's fault.

There is an important question here about what happens now. In 2012, the Scottish National Party published a strategy for engagement between Scotland and China to double the number of major Chinese investors here by 2017 and to position Scotland as a base for Chinese investment. If the Government wants to bring forward transparent, well-thought-out plans for Chinese inward investment, it can expect a fair hearing. Rather than blaming us, Brexit or the weather, will the First Minister remove the shroud of secrecy from such deals and be straight with the Scottish people?

The First Minister: Ruth Davidson is absolutely entitled to ask questions of this Government, but to talk about a "shroud of secrecy" when her party is refusing to publish the details of the commitments that have been given to Nissan is, frankly, double standards on stilts.

On how this Government will proceed, we will continue to try to attract investment from China and from other countries—from anywhere that wants to invest in Scotland with reasonable investment proposals. That is our job.

I will end this exchange where I started. I and the Government will reflect on lessons that we need to learn from the experience. That is important, and I accept responsibility for that. However, we have an Opposition that demanded the cancellation of the memorandum of understanding and had a hysterical, over-the-top reaction to the memorandum of understanding. Yes, I take responsibility for learning lessons, but I really think that the Opposition also has to reflect on its behaviour, which led to a political climate in which the partners felt that they could not proceed. Perhaps if we all do that, we might be in a better position in the future.

Cabinet (Meetings)

2. **Kezia Dugdale (Lothian) (Lab):** I associate myself and the Labour benches with the First Minister's remarks on remembrance Sunday.

To ask the First Minister when the Cabinet will next meet. (S5F-00462)

The First Minister (Nicola Sturgeon): The Cabinet will next meet on Tuesday.

Kezia Dugdale: Today is equal pay day. From today until the end of the year, women are

essentially working for free. Equal pay day comes just one day after the most experienced presidential candidate in American history—who just happened to be a woman—was defeated by the least qualified candidate ever. We still have so much to do to break the glass ceiling that women face.

Donald Trump's behaviour towards women sends a danger signal across the world. What steps is the First Minister taking to make Scotland a fairer and safer place for women?

The First Minister: Kezia Dugdale is right to raise this issue. As I said yesterday, I regret the result of the United States election. It was not the outcome that I wanted, but I respect the verdict of the American people.

Hillary Clinton's defeat yesterday perhaps tells us, among many other things, that we are not as far down the road to true gender equality as we hoped that we were, so we have a great deal of work still to do.

Kezia Dugdale raised the fact that today is equal pay day. This is the day that marks the point in the year after which, because of the pay gap, for every other day of this year women are effectively working for nothing.

In Scotland—this is the good news—we are making progress in closing the gender pay gap. It is at 6.2 per cent, which is still far too high, but it is lower than it was and it is lower than that across the United Kingdom as a whole, which stands right now at 9.4 per cent. We still have a long way to go.

The Equal Pay Act 1970 was passed in the year that I was born. It is an absolute scandal that we do not yet have equal pay in this country. We are doing a range of things, from funding close the gap to trying to deal with some of the underlying issues, for example by expanding childcare. We are also using the powers that we have to try to create greater transparency around pay. For example, we recently lowered the threshold at which public authorities publish their gender pay gap and equal pay statements from those with more than 150 workers to those with more than 20 workers. Those are some of the steps that we are taking; there are others, too.

Today is a good reminder, for all sorts of reasons, about equality. When it comes to the battle for true gender equality, much has been achieved but there is still much to do.

Kezia Dugdale: I agree. The reality is that, in January 2017, we will have a misogynist in the White House—a man who has boasted about assaulting women and used the most degrading language possible.

Today, we learn from the Educational Institute of Scotland about the unacceptable level of bullying in our schools, including the use of sexualised and derogatory language. That is happening right here in Scotland. What is more, 42 per cent of our teaching staff have witnessed homophobia and transphobia in Scotlish schools. Does the First Minister agree that the figures are alarming? What action will the Government take to tackle bullying in our schools?

The First Minister: We have given a range of commitments to the time for inclusive education campaign; among others, we will continue to back efforts, stand behind efforts, and step up efforts to make clear that there is zero tolerance of bullying in our schools. That is particularly related, of course, to homophobic bullying.

However, I was very concerned to read the reports this morning that teachers think that, after the Brexit vote, there has been an increase in bullying. That is a reminder to us of the responsibility that we all carry to promote the principles of tolerance, respect and diversity.

There is a lot of debate, as there was in the aftermath of Brexit, about the reasons underlying the US election result yesterday. There is no doubt whatsoever that many people feel economically alienated. I was talking about that in relation to Brexit just this week. We all have a responsibility to oppose austerity and to address those issues. However, we must never allow those legitimate issues to give a veneer of respectability to racism, misogyny or intolerance generally. We all have a responsibility to do that now, perhaps more than ever before.

Kezia Dugdale: Of course, Donald Trump's intolerance is not just aimed at women. We all remember the sickening sight of him mocking a disabled journalist. We cannot forget his plans to build a wall or to ban people of one particular faith from entering America.

However, I am sure that the First Minister would agree that Scotland is not free from that intolerance. We have seen reports of hate crimes against disabled people soaring by 300 per cent since 2010, and cases of Islamophobia have nearly doubled. The events of this week are distressing for those of us who believe in a society that is stronger together; who believe that we can achieve more working together than we can standing apart; and who believe that what unites us is far greater than what divides us.

Does the First Minister agree that co-operation and inclusion can still trump the politics of division and isolation?

The First Minister: Yes, I do. It was rather a sad irony that yesterday, as well as being the day that we found out the result of the US election,

was also the anniversary of the fall of the Berlin wall. That, as well as many other aspects of the election result, made us all very reflective.

I got some criticism yesterday for having expressed my view of who I wanted to win the US election, as indeed did Kezia Dugdale. However, during the campaign, I found so many of President-elect Trump's comments to be deeply abhorrent and I never want to be—I am not ever prepared to be—a politician who maintains a diplomatic silence in the face of attitudes of racism, sexism, misogyny or intolerance of any kind.

It is important today that, first, we hope that President-elect Trump turns out to be a President who is very different from the kind of candidate that he was and that he reaches out to those who felt vilified by his campaign. However, people of progressive opinion the world over have to stand up for those values of tolerance and respect for diversity and difference.

There is more of an obligation on us now than there perhaps has been on our generation before. This is the time for all of us, no matter how difficult and no matter sometimes how controversial or unpopular it may be in certain quarters, to be beacons of hope for those values that we all hold so dear.

The Presiding Officer (Ken Macintosh): I have a constituency supplementary from Anas Sarwar.

Anas Sarwar (Glasgow) (Lab): Figures published this week by the Information Services Division show that more than 1,500 patients are trapped in hospital as delayed discharges, cleared to go home but unable to secure a care package. One of those patients is Janice Arundal. She is blind, has learning disabilities and will turn 59 on Christmas eve. Her clearly emotional and distressed brother David came to my surgery to explain that Janice has been in hospital since November 2015, having fallen and broken two bones in her neck.

Janice was cleared to leave hospital in April and became a delayed discharge. As of today, she has been waiting 209 days at the Glasgow royal infirmary. It should not take a question in Parliament to sort that, but sadly it seems that it does, despite the Cabinet Secretary for Health and Sport promising to eradicate delayed discharge. What can the First Minister say to Janice and her family, and to the other 1,500 patients and their families, about this scandalous situation?

The First Minister: That situation is completely unacceptable and I would never suggest otherwise. I would expect the local health board and the local council, which now work together in an integrated joint partnership, to rectify the

situation without further delay. Obviously I do not know any more details of the case other than those that Anas Sarwar has just shared with us, but from what he said I find it completely unacceptable.

On the wider issue of delayed discharge—which is extremely important, principally because of the impact that it has on individuals but also because of its impact on the wider healthcare system—we have taken and continue to take a number of actions. I have talked about the integration of health and social care, which no previous Administration managed to bring about. We have done that and it is a step in the right direction. We are transferring resources from the acute health sector to integrated partnerships so that we can do more to build up social care services.

We are seeing progress in reducing delayed discharges. The number of bed days that are lost from delayed discharge has decreased over the past year, and the number of delayed discharges is on a downward trend, although I want that move downwards to be faster and more consistent. Those are real priorities for us, on which we are taking action to get the results that we want.

Anas Sarwar rightly reminded us that behind all the statistics that we cite in the chamber lie human beings. If he wants to pass on to the health secretary the details of the case that he mentioned, I will ensure that she liaises with the health board and the local council to ensure that action is taken.

Cabinet (Meetings)

3. Willie Rennie (North East Fife) (LD): To ask the First Minister what issues will be discussed at the next meeting of the Cabinet. (S5F-00435)

The First Minister (Nicola Sturgeon): Matters of importance to the people of Scotland.

Willie Rennie: Minorities across America are frightened and people around the world are horrified by the election of President Trump. I agree with the First Minister that we all need to stand together for tolerance and compassion. What has happened shows that our democracy is precious and that scrutiny of Government is important, so I hope that the First Minister will not mind me asking questions—at the risk of being accused of hysteria—about the collapse of the Chinese deal.

The First Minister has criticised those who have previously asked questions about the deal. Organisations such as Amnesty International have concerns about one of the companies: the Chinese state-owned CR3. The First Minister said today that the deal is not dead yet. It has been a few months since the deal was signed. Has the

First Minister carried out an investigation into the company's human rights record yet?

The First Minister: Amnesty International rightly and responsibly raised concerns with the Scottish Government and we have responded to that, if my memory serves me correctly—I will certainly check that that is the case.

We take seriously concerns of that nature that are raised and we carry out proper investigations. The point that I made previously about the memorandum of understanding, and that I have already made again today, is that the memorandum itself did not commit us to any investment. Had there been any specific projects coming forward, full due diligence would rightly and properly have been carried out at that time.

I have said that the Government will reflect more widely on any lessons that we have to learn from the experience, and I hope that the Opposition will do so too. I am not trying to blame anybody—I am simply stating a fact. When something comes to an end because of a political climate, we all have to ask ourselves how that political climate came about.

There is an irony in Willie Rennie's question, or at least in the preface to it, in which he talked about the collapse of the deal. Willie Rennie is the chief Opposition politician who has demanded that we cancel the deal ever since he first knew about it. We will continue to take forward exploration of investment and we will do so responsibly, learning the lessons from the experience that we consider are appropriate.

Willie Rennie: Of course I want the deal cancelled, because the Scottish Government had not even bothered to find out about the human rights record of the company in the first place. It is a dereliction of duty by the Government to so casually sign a memorandum of understanding with a company that it knows nothing about. What is the value of the First Minister's signature if it can be so easily dismissed and binned after there has been no scrutiny?

The First Minister was incapable of answering my question. Has she done an investigation into the company's human rights record? I suspect not—she has not even bothered.

Ruth Davidson was absolutely spot on when she said that the First Minister has blamed everybody else. This is an important point; it is about the performance of the Government with regard to human rights. Ruth Davidson was right to say that the First Minister has blamed everybody else in the chamber for the collapse of the deal, but she has not even bothered to pick up the phone. Why did she not even bother do to that? If it was that important, surely it was worth a

phone call. Surely she is responsible for the collapse of the deal, and nobody else.

The First Minister: I am afraid that Willie Rennie has to make up his mind. Either he wanted the deal—to use his word—cancelled or he wanted me to pick up the phone to try to retrieve and rescue it. He cannot have it both ways.

Contrary to what Willie Rennie has said, those watching will have heard me say a number of times that I accept that there are lessons for the Government to learn, and we will reflect on and learn those lessons. However, when we have partners saying that they feel that they cannot proceed with investment because of the political climate created, we have the right to question who contributed to creating that political climate. That is what I am doing. We will learn the lessons. All that I am saying is that Opposition parties should perhaps also reflect.

The Presiding Officer: There are a number of supplementaries, the first of which is from Gordon MacDonald.

Gordon MacDonald (Edinburgh Pentlands) (SNP): The First Minister has rightly condemned the brutal Ministry of Defence cuts announced this week, which include the Redford barracks in the Colinton area of my constituency. She will also have noted that two Highland Tory MSPs chose to ignore the closure of Fort George in their questions on yesterday's statement in Parliament. Unlike those Tory MSPs, will the First Minister confirm that her Government will fight not only for the Highlands but for all the areas affected by the base closures?

The First Minister: I was extremely angry when I heard about the United Kingdom Government's proposals for the defence footprint in Scotland, I should say that the proposals were put forward with no consultation with the Scottish Government whatsoever, and if they go ahead they will represent a 20 per cent reduction in the defence footprint in Scotland. That is unacceptable. There are many communities, including those in the member's constituency, that will be badly affected by those decisions, so it is right that we oppose them and seek to understand more about what the UK Government intends to do to compensate the communities involved, and that we stand side by side with communities. Those on the other side of the chamber may not always want to do that, but those on this side of the chamber will do so. The proposals represent a Government that always seems to be willing and able to find money to invest in Trident nuclear weapons but cannot find the investment to safeguard our conventional footprint here in Scotland. I think that those are the wrong decisions.

Ross Thomson (North East Scotland) (Con): In response to a parliamentary question that I lodged, the Cabinet Secretary for Justice, Michael Matheson, stated that Police Scotland has powers to move on unauthorised Traveller encampments where there are exceptional circumstances, including vandalism, antisocial behaviour and encampments of six or more caravans. However, Inspector Colin Taylor from Police Scotland in North East Scotland, the area that I represent, stated that there is nothing within the law that allows police simply to move on trespassers. From responses such as those, it is clear that the Scottish Government is saying one thing and that the police are saying another. On 21 September, I wrote to the First Minister on the issue and I am still waiting for a response. Can she please confirm now what steps the Scottish Government is taking to ensure that the police are aware of the powers that are available to them and feel comfortable enough to use them?

The First Minister: I am happy to ask the Cabinet Secretary for Justice to write to the member to clarify the issue. Trespass is not a recognised law in Scotland. I do not know for sure, but that may be the reason behind the comments that the member has cited. It seems to me that the answer to which he referred was pretty clear, but I will ask the Cabinet Secretary for Justice to contact the member to answer any further questions that he has about the matter.

Maree Todd (Highlands and Islands) (SNP): What is the First Minister's reaction to the UK Government's announcement of the long-awaited new bidding for its contract for difference scheme, supporting low-carbon projects?

The First Minister: The decision that was announced yesterday is deeply concerning. The UK Government, after a great deal of delay, announced its decision on contract for difference and there are two aspects of that announcement that are of extreme concern to Scotland.

First, there is what I can only describe as the betrayal of our island communities by not treating onshore wind developments in those communities as an unusual form of energy and therefore able to bid into the auction for the contract for difference. That is completely contrary to commitments that were given to our island communities. Secondly, not having a ring-fenced amount for marine technology in this contract for difference raises real concerns for world-leading projects such as MeyGen.

We will continue to liaise with the UK Government. Again, though, just like the basing review that we have been discussing, this announcement was made yesterday, when eyes were elsewhere, without any consultation with the Scottish Government. I do not think that that is the

right way to proceed, particularly when these decisions have such an impact on our economy right across the country.

US Presidential Election

4. Stewart Stevenson (Banffshire and Buchan Coast) (SNP): To ask the First Minister what assessment the Scottish Government has made of the impact on Scotland of the outcome of the US presidential election. (S5F-00450)

The First Minister (Nicola Sturgeon): While the outcome of the US presidential election is not the one that I had hoped for, it is the verdict of the American people. That said, I hope that the new President will reach out to those who felt marginalised and, often, vilified by his campaign. I hope that he makes clear that he will be a President for all of modern multicultural America and one who values the principles of tolerance, respect and diversity. The Scottish Government will continue to monitor developments during the transition period between now and January. We will fully assess the impact for Scotland once President-elect Trump forms the Administration and its priorities are made clear.

Stewart Stevenson: On 19 November 1863, at Gettysburg, the founder of the Republican Party, Abraham Lincoln, said that his nation was

"dedicated to the proposition that all men are created equal."

Does the First Minister agree that, although the US President-elect's comments during the election barely connected with that proposition, he will have our support if he embraces, in his acts and his thoughts, Lincoln's statement as a proper foundation of what can truly make America great again and a great friend of ours?

The First Minister: I agree with that. I was struck yesterday by comments made by the German Chancellor, Angela Merkel, when she said that she wanted to have a constructive engagement with the new President but one based on the values of respect for all, tolerance and diversity. I echo that sentiment. The relationship between Scotland and the United States of America is a strong one, which I believe will endure. As the elected First Minister of Scotland, I want to engage positively and constructively with the American Administration, but I will never, ever shy away from standing up for those important principles. I very much hope that we see a President Trump who is very different from the candidate Trump whom we have all witnessed and by whom many of us have been appalled in the past few months.

Jackson Carlaw (Eastwood) (Con): No doubt the First Minister will be urgently considering

whether Mr Trump's election represents a material change in circumstances.

Mr Trump has said that he will expedite a new trading relationship between a United Kingdom leaving the European Union and the United States. How will the First Minister ensure that that new potential trade, Scottish business and Scottish jobs are not prejudiced as a result of her direct intervention against the new White House, to which she has just referred, and her dismissal of the President-elect as a business ambassador for Scotland, to which role he had been appointed by her predecessor?

The First Minister: I am not sure whether anything that I have said about Donald Trump even comes close to some of the tweets about him from Ruth Davidson that I saw earlier, which I believe have now been deleted from her Twitter account.

Members: Oh!

The First Minister: Maybe I am misadvised about that.

What I have just said is important. The relationship between the United States and Scotland is a long-standing one and is based on ties of family, culture and business. I want those ties not just to continue but to be enhanced and to get even stronger. As First Minister, I want to engage with the next American Administration, just as we have engaged with the current one. However, I believe that it is important for all politicians, at this moment in our history, to stand up and be counted on important principles of tolerance, respect and diversity. I will not shy away from doing that. I hope that Donald Trump builds an Administration that is founded on those principles. If he does that, we can continue to ensure that that close relationship gets even closer in future.

Memorandum of Understanding

5. Murdo Fraser (Mid Scotland and Fife) (Con): I fear that we may have been here before.

To ask the First Minister what lessons have been learnt following two Chinese companies withdrawing from a memorandum of understanding with the Scottish Government. (S5F-00452)

The First Minister (Nicola Sturgeon): The purpose of the memorandum of understanding was to build relationships with a view to developing investment projects in Scotland. Although the partners made clear to us in August that moving forward at this time was not possible given the political climate, we remain committed to exploring investment partnerships with China and other countries. Securing jobs and investment is a

key part of the job of this Government, particularly at a time when Brexit puts our economy at risk.

Murdo Fraser: The Ernst & Young attractiveness survey shows that Scotland's record in attracting foreign direct investment projects from China is not as good as that of the United Kingdom as a whole. China is in the top five origins for investment in the UK but does not even feature in Scotland's top 10. Perhaps that is no surprise, given that we have just seen what the Chinese have dubbed "the Scotlish shambles". How will the Scotlish Government improve its handling of deals with China so that we can see a greater level of Chinese investment in Scotland?

The First Minister: We will continue to work hard to attract more investment from China, as well as other countries.

It is interesting that Murdo Fraser chooses to cite the EY report, and I am glad that he has done so. Of course, unfortunately, he forgot to say that that report shows that, for many years now, Scotland has been the most successful part of the UK, outside of London, at attracting inward investment. That is something to be proud of. It demonstrates the success of the Government and our enterprise agencies in bringing investment and jobs into Scotland. That is what is now put at risk by the Tories' obsession with taking us out of Europe and why it is so important that we continue to do the job that we are determined to do.

Temporary Accommodation (Children)

6. Pauline McNeill (Glasgow) (Lab): To ask the First Minister what steps the Scottish Government is taking to reduce the number of children in temporary accommodation. (S5F-00470)

The First Minister (Nicola Sturgeon): We know that the number of children who are in temporary accommodation has fallen since 2007, but it is still too high. Scotland's strong homelessness rights mean that families are in temporary accommodation while they wait for appropriate permanent housing. We want the time that children spend in temporary accommodation to be as short as possible, which is why we will introduce a cap of one week for families living in bed-and-breakfast accommodation.

Of course, we are fully committed to the prevention of homelessness, and will deliver at least 50,000 affordable homes by the end of this parliamentary session, to ensure that vulnerable families have more housing options available to them.

Pauline McNeill: The First Minister will know that, of the groups in temporary accommodation, households with children spend the longest time there—an average of 23 weeks. This Christmas,

591 more families with children will spend their time in temporary accommodation than was the case last year. Shelter has described that as "a scandal". The figure seems to be on the rise; it does not seem to be decreasing. I am sure that the First Minister will agree that children's health, education and wellbeing are affected by the issue.

Will the First Minister consider two further steps that she could take, in addition to what she has said today about the one-week cap for people in bed-and-breakfast accommodation? First, she could consider strengthening the statutory duty in the Housing (Scotland) Act 2014 that gives reasons why families should be housed as a matter of priority.

Secondly, I welcome what she said about her target of building 50,000 affordable homes, but could she consider ensuring that there are conditions on house builders with regard to the types of houses that will be built in association with that target? For example, if we build more pensioner houses, that would free up family accommodation to house desperate families who need urgent action from the Government.

The First Minister: I am happy to give further consideration to those suggestions, including the idea of amending the 2014 act. I agree with the second point, about the type of housing, but I point out to Pauline McNeill that it is already the responsibility of local partners, when they put together their strategic housing investment plans, to consider the range of housing that is required in their areas. That kind of planning already exists in the system and it is important that it is undertaken properly.

I agree with Pauline McNeill that we do not want any children living in temporary accommodation. The numbers have come down since 2007, although there has been a slight increase in the most recent year. Most temporary accommodation is in the social rented sector and is generally of high quality. I do not say that as any sort of excuse, but it is an important contextual point that should be pointed out. Nevertheless, it is not good for children to live in temporary accommodation, which is why it is important to reduce the cap to one week so that children get into settled accommodation as soon as possible.

Our underlying ambition to build more houses is a key part of the solution, and we will continue to ensure that we make the right decisions to ensure that we meet the target.

Christine Grahame (Midlothian South, Tweeddale and Lauderdale) (SNP): Given the UK's callous cap on benefits and the prediction that thousands of children and families will be thrown into poverty, with the possibility that they will be unable to meet rental payments, does the

First Minister foresee further pressures on temporary accommodation for children and families? If so, how will the Government cope with that?

The First Minister: Yes, I foresee such pressures. The issue worries me greatly. The increase in temporary accommodation might in part—although not exclusively—be down to benefit changes, to the extent that it results from more people suffering homelessness. It is therefore important that we have the right frameworks in place, including the right support frameworks with regard to the benefits system.

Some of the changes that have been made—for example, the reduction of the work allowance in universal credit and the transfer to public housing of arrangements on limits on the amount of housing benefit that can be claimed for private sector housing—are worrying and might well make the situation worse. That is why we will continue to put pressure on the UK Government not to do those things. Moreover, as we take more—though not enough—responsibility around some of the matters ourselves, we will try to ensure that we have the right systems in place.

Religious Observance (Schools)

7. Maurice Golden (West Scotland) (Con): To ask the First Minister whether optional religious observance in schools for 16 to 18-year-olds will support the values of a diverse and outward-looking Scotland. (S5F-00438)

Minister (Nicola First Sturgeon): Religious observance is a school community activity that offers opportunities for young people to reflect meaningfully on different points of view and values, including their own. It promotes critical thinking and helps young people to become aware of different ideas and beliefs about life. The values of a diverse and outward-looking Scotland are fully supported by that aspect of the school experience, and any decisions about a young person withdrawing from it should involve parents or carers and the young person, especially as that young person grows in maturity and understanding of their own learning.

Maurice Golden: Can the First Minister assure constituents of mine in West Scotland, as well as people beyond it, that within the parameters of any consultation or potentially amended guidance or legislation in respect of the matter, there will be no threat to faith schools and how they choose to deliver education?

The First Minister: Nothing in the consultation that has been announced is about faith schools, so I absolutely give that commitment. However, we are, as the member has indicated, considering a consultation on revising the guidance. That

principally concerns the issue that has been raised by the Humanist Society Scotland, in a court action that has now sisted, about whether young people can, without the agreement of their parents, withdraw from religious education or observance. We are looking at that issue, and it is right for us to do so. After all, as young people get older, their responsibility for making such decisions clearly becomes enhanced. Of course, that position already exists in England and Wales. We are considering a consultation on that particularly narrow issue.

Accessible Hospital Transport

The Deputy Presiding Officer (Christine Grahame): The next item of business is a members' business debate on motion S5M-01935, in the name of Liz Smith, on accessible hospital transport in Scotland. The debate will be concluded without any question being put. [Interruption.] I remind people in the public gallery that the Parliament is still in session.

I ask members who wish to speak to press their request-to-speak buttons now. [Interruption.] I repeat my request to people in the gallery to leave quietly out of respect to members who are taking part in the debate.

Motion debated.

That the Parliament acknowledges the use of bus services by the public to travel to and from hospital appointments; notes that these services are often used by older, infirm and disabled passengers and that journeys often take place at times of anxiety, bereavement or distress; understands that a number of services, such as the X7 between Perth Royal Infirmary and Ninewells Hospital, the G1 and G2 routes that serve the Queen Elizabeth Hospital in Glasgow, and the X40 in Aberdeen, have been cut, are under threat or do not provide suitable access for disabled travellers; believes that all hospital patients should be able to travel to and from appointments in comfort, and notes the calls for the Scottish Government to work with its partners and the private bus operators to address what it considers an important issue.

12:46

Liz Smith (Mid Scotland and Fife) (Con): As we have seen with projects such as the new Forth and the Edinburgh to Glasgow improvement programme, securing Scotland's transport infrastructure is essential for our country's future. However, for many Scots, what is important is not just the big projects but their local bus routes-especially those that provide vital links to hospitals and medical clinics. Those bus services are essential to the quality of life and the physical and mental health of patients and their families. Without those services, many Scottish communities would struggle, especially in an age when there is so much pressure to merge acute services.

The situation was made plain in a letter from one of my constituents. Because of complications from recent surgery, this lady is required to travel regularly from Perth royal infirmary to Ninewells hospital in Dundee. In the past, she used the 333 service but, since that route was withdrawn in November 2014, Stagecoach East Scotland has extended an existing coach route—the X7 service, which runs from Aberdeen to Dundee—to Ninewells hospital and now on to PRI. Although Stagecoach is offering a new coach, which in some respects provides a higher quality of service,

it is leaving behind many people with mobility issues, such as my constituent. For example, the coach has only two seats downstairs, which are both often in use by other passengers. As my constituent suffers from chronic arthritis, she struggles to climb the stairs, and she claims that drivers are not in a position to help her when boarding the bus. [Interruption.]

The Deputy Presiding Officer: I am going to say this again: I cannot hear the member speaking because of the noise from the public gallery. I am sorry, Ms Smith—please go ahead.

Liz Smith: That is okay.

My colleague Alexander Stewart will say more, as he has been on the case for some time, as have councillors from across the political spectrum. There is an issue for people who have visual impairment, those who are recovering from orthopaedic injuries, those with heart conditions and people who find it difficult to negotiate the stairs on a moving bus.

There is a genuine concern that the buses are badly designed for the hospital link route. On top of that, the new £750,000 coaches cannot turn properly at Perth royal infirmary, as the turning circle was designed for the buses that were used on the old 333 service. Stagecoach offers a low-floor alternative—the 16—but that takes one hour and 13 minutes, compared with the 45-minute journey that the X7 provides. For someone such as my constituent, who has been on a difficult road with her treatment, the situation is very difficult indeed.

That constituent's story is not the only case—there are dozens of similar stories from across Scotland. In August, there were problems for Fife passengers after changes to the 77 service between Gauldry and Ninewells hospital. The alternative service, which terminates at Dundee bus station rather than Ninewells, forces passengers to change buses and has been branded awful by local councillors. It has prompted a raft of complaints from constituents and many who are in the medical profession.

The X42 route, which connects Cupar and Ninewells, is also under threat, with a proposed alternative service also terminating at Dundee bus station. In Glasgow, the G1 and G2 bus services from Maryhill to Queen Elizabeth university hospital have been closed. In Falkirk, the First Bus services X86 and 24, which provide residents with vital access to Forth Valley royal hospital, have also been cut, which led community council members to label the cuts as unacceptable because they directly affect

"the elderly, infirm and those who do not have a car."

In the Borders, the council-funded 71 route from Hawick to Borders general hospital was cut in July 2014, which left Hawick residents without a direct bus to their nearest major hospital. In Aberdeen, First Group has threatened to end the X40 and 11 services from Kingswells to Aberdeen royal infirmary, which is a move that local people claim will leave residents of the suburb without access to their hospital and will cause them to miss important medical appointments.

When those cases are put alongside each other, they give us a worrying picture of a Scotland where communities and, in particular, older people feel abandoned by transport providers and cut off from essential services. Although it is heartening that Transport Scotland is now offering subsidised bus services for older and infirm residents in some areas—an excellent example comes from the Strathclyde partnership for transport area—many of our elderly and infirm who face routine visits to their GPs are experiencing daunting and exhausting trips on buses. A weekly check-up can become a four-hour odyssey that requires multiple changes at different bus stations. For older residents, that can often prove to be too much, particularly at times of distress or bereavement and in poor weather.

The issue is not limited to the elderly. Non-drivers face equally challenging experiences to get to and from hospital. Centralisation has meant that many hospital appointments no longer take place in local hospitals, which results in longer and more costly journeys being required. It is often difficult for people to get a bus from outlying places to a hospital and, in many cases, it is impossible to visit in-patients in the evenings. That means that bus companies are in a difficult position—for example, the first bus to Livingston from Dunfermline leaves at 9 am and the last one back is at 5.40 in the evening.

Buses are a lifeline for rural communities and it is commonly agreed across the Parliament that support for community schemes needs to be increased by extending the free bus pass scheme to community transport. Otherwise, far too many people will become victims of a patchy national strategy that means that access to local hospitals is even more difficult for those who are most in need. This is not a party-political issue, and I hope that Scottish ministers will give it a lot of consideration.

The Deputy Presiding Officer: Well done for persisting. We will deal on another occasion with the issue of noise, which is not fair to members.

12:52

Fulton MacGregor (Coatbridge and Chryston) (SNP): I thank Liz Smith for bringing

this important subject to a members' business debate. I agree with the first part of the motion. Bus services to and from hospitals are used by a variety of people and, as Liz Smith said, they are used by the most vulnerable in our society.

My area of Lanarkshire has three major hospitals and on occasion members of the public need to be taken to one that is not their local hospital in order to receive the most appropriate expert care. I had a query recently from an elderly gentleman who was taken for emergency treatment to Hairmyres hospital. He reported being taken to the hospital promptly and treated well by staff. However, when he recovered and was discharged, he found it extremely difficult to get public transport back to his home in Coatbridge. There were no available family members to collect him and he eventually resigned himself to getting a taxi. He was satisfied with the national health service care that he received, but he was worried about what someone who could not afford a taxi would do in his position.

Members will note that my use of that example indicates that I agree that there is a transport issue that can affect constituents from time to time. However, I do not agree with the second part of the motion, which suggests that the Scottish Government has not taken appropriate steps to address the issue or that it is somehow solely responsible—although I do not think that Liz Smith said that entirely.

Neil Bibby (West Scotland) (Lab): It is fair to say that the Scottish Government has not acted appropriately. There has been no new bus legislation since 2007 and we are in danger of having the weakest bus laws in the whole of Britain once the Bus Services Bill is passed at Westminster.

Fulton MacGregor: I thank the member for interjecting but, if he lets me continue, I will go on to describe how a local issue in Lanarkshire has been dealt with by a number of stakeholders. I am sure that the Minister for Transport and the Islands will summarise a lot of the stuff that the Scottish Government has been doing.

During the recent NHS Lanarkshire health care strategy consultation, transport between hospitals for visitors and patients was raised on many occasions. In fact, it was one of the most widely raised issues. For instance, in relation to the recent temporary move of orthopaedics from Monklands hospital, it has generally been agreed by all stakeholders—including NHS Lanarkshire, the council and local representatives—that public transport services could be better and more responsive for individuals.

If the Presiding Officer will allow me to digress for a second, I will say that I hope that the NHS

board will soon decide on orthopaedics being permanently at Monklands hospital. Many people have engaged with the consultation to outline the reasons why the service should be located at the new-build hospital, funding for which has been given by the Scottish Government.

The Deputy Presiding Officer: I am in a good mood, so I am allowing that rather wild diversion.

Fulton MacGregor: Thank you for that wee detour, Presiding Officer.

Bearing it in mind that many stakeholders are involved in providing transport to and from hospital facilities, I contacted NHS Lanarkshire yesterday, which told me that it is committed to continuing to work with Strathclyde partnership for transport, as Liz Smith mentioned, to ensure that each of its sites is supported by appropriate public transport links and that transport and travel information is available quickly and easily through the creation of a transport hub.

The board is committed to working with the Scottish Ambulance Service to support its patients and services with the provision of routine, as well as emergency, transport. NHS Lanarkshire will also work with the community transport sector to identify how its services can help to support patients who cannot access public transport and do not meet the Scottish Ambulance Service's eligibility criteria for patient transport.

I have spent most of my time talking about a local issue in Lanarkshire and describing what is proposed to address transport to hospitals. It is clear that there is still work to be done and that it is incumbent on local members of all parties to help to resolve the issues in their areas and come up with ideas and suggestions for all the stakeholders.

I firmly believe that the Scottish Government has demonstrated commitment to improving transport links and enhancing partnership working between operators and transport authorities. It will continue to invest nearly £250 million a year in the network and to improve services by, for example, investing in increasing passenger numbers and providing more environmentally friendly buses. There is also a desire to consider whether local transport authority powers can be further improved and what additional support and guidance might be helpful to authorities.

To conclude, there is no doubt that bus services to hospital facilities can be difficult for our most vulnerable people, including those who are elderly or disabled. I commend the launch of Scotland's first accessible travel framework by the transport minister, Humza Yousaf, on 29 September. Through the framework, we will improve accessibility for all members of the public and

strive to give everyone in our society equal opportunity.

The Deputy Presiding Officer: You could see that I was thinking that that was a long conclusion.

12:58

Brian Whittle (South Scotland) (Con): I thank Liz Smith for bringing the motion to the chamber, as it gives me the opportunity to speak on behalf of my constituents in the South Scotland region, which has a large rural population.

I am sure that all members agree that a decent, affordable public transport service that is accessible to all is mandatory. Certainly, regular bus services to and from hospital should be a given. However, that is not always the experience that users of public transport highlight.

For example, in May, First proposed pulling the majority of its bus services in the Borders. In July, Scottish Borders Council approved plans to halve the number of buses running between Galashiels and Edinburgh. In April, south west of Scotland transport partnership abandoned plans to halt several Sunday and weekday evening services in Dumfries and Galloway. However, other services were still cut and campaigners said that they

"heard stories of ... people wanting to go to hospital on the bus but were struggling".

In 2015, the only bus linking Ayrshire's two acute hospitals was withdrawn by Stagecoach. A doctor criticised the move, saying:

"I have a morning clinic at Ayr and an afternoon one at Crosshouse and I don't drive. This bus is the only way I can carry out my work."

When the bus service was launched, it received a £20,000-a-year subsidy from NHS Ayrshire and Arran. Stagecoach blamed the

"decreasing patronage and a further cut to the reimbursement paid to bus operators under the Scottish Government's free concession travel scheme".

However, it is not all doom and gloom. Last month, a new bus service was launched in East Lothian to provide access for local shopping and hospital and doctors appointments in the area of Haddington. Lothian Country bus 113, which connects East Lothian with Edinburgh and the Western general hospital, won best bus service in Scotland at the Scottish transport awards. Although it appears that Lothian Buses has managed to be successful in that area, in May First proposed withdrawing from East Lothian; in doing so, it blamed an "increasingly competitive market". That highlights the patchiness of the approach to public bus transport coverage in the rural communities, which require the same access to services, and have the same right of access to services, as everyone else.

Liz Smith and Fulton MacGregor aptly highlighted the difficulties that the elderly, the frail and the sick face when bus services are withdrawn, but I would like to draw members' attention to another hidden problem and cost arising from the travel difficulties that are caused by a reduction in public transport accessibility: missed treatments and screenings, which lead to missed opportunities to diagnose conditions and deliver preventative treatment before those conditions escalate and more serious, traumatic and costlier treatment is required. For example, higher levels of breast cancer in rural and the most deprived areas have been attributed directly to non-attendance at routine breast screening. There are other similar examples. The issue is exacerbated when public bus transport links are withdrawn, which makes attendance at such appointments that much more difficult.

We appreciate that there is a balance to be struck between cost effectiveness and service delivery, but there are cases in which the face-value cost does not paint the full picture. It is paramount that people have rights of access to medical services regardless of their personal circumstances, and it is incumbent on the Scottish Government and the Parliament to ensure that everyone has decent public bus transport that is accessible and affordable to all. Therefore, I am delighted to support the motion.

The Deputy Presiding Officer: I see that members are threading in other issues that are tenuously connected with the motion—that is all right. Mr Whittle managed to do that.

13:01

Neil Bibby (West Scotland) (Lab): I congratulate Liz Smith on securing the debate and giving us the opportunity to discuss bus services to and from our hospitals.

I know from the views that I have received from community representatives in Clydebank just how strongly people feel about the importance of having good public transport links to the new Queen Elizabeth university hospital. Without a direct service, many people in Clydebank now find that they have to take three buses to get there.

As the motion rightly points out, passengers who travel to hospitals can often be anxious, bereaved or distressed. Bus services are not a luxury that the private sector might choose to provide but essential public services and assets of real value to the community that the travelling public cannot do without. That is why it has been so disappointing to see the scale of the decline in bus services in Scotland over the past few years.

The total number of journeys on Scotland's bus services has fallen to a record low. The rate of

decline is 10 times higher in Scotland than it is across Britain as a whole. Transport Scotland's figures show that the number of bus journeys has fallen by 74 million since 2007, and 66 million vehicle kilometres have been stripped out of the bus network over the same period. The number of buses in operators' fleets has dropped by 14 per cent over the most recent five years for which figures are available, and there has been a 5 per cent contraction in the size of the workforce in the bus industry.

Instead of achieving a modal shift towards public transport, the Scottish National Party Government has presided over a decade of decline in bus services. The bus market is broken and the SNP Government has shunned every opportunity that it has been given to fix it. That is why the cuts that are referred to in Liz Smith's motion come as no surprise.

If we want to protect vital services to hospitals or anywhere else, for that matter-we must consider more democratic alternatives to the deregulated market. To its credit, the United Kingdom Government is doing that at the moment in its Bus Services Bill. I make it clear that that bill is by no means perfect, but it is interesting that, while Labour, the Liberal Democrats and the Conservatives now all support the extension of London-style bus franchising powers in England, Scotland continues to lag behind the regulatory curve. We could change that if there was the will to do so across the Parliament. I hope that Liz Smith and the Scottish Conservatives will seriously consider the case for extending those powers to Scotland. We could give transport authorities the power to protect services to the hospitals and decide the best way of delivering bus services in their communities.

We will hear from the transport minister shortly but, when he was confronted about bus cuts in his own city, including services that bring people closer to connections with the new Queen Elizabeth university hospital, he was keen to shift the blame for a commercial operator's service cuts on to Strathclyde partnership for transport. Of course, there are times when transport authorities need to step in, but with bus cuts from one end of Glasgow to the other, the minister's response to what is happening in the bus industry so far has been wholly inadequate. There is no recognition of the financial pressures that the Government have put on SPT's member authorities and on local government across Scotland; there is no comprehension of the limitations that are placed on public transport authorities when they decide to tender for a route; and there is no comprehension of the scale of the cuts that operators have made to bus services across Scotland.

Remember that the 66 million vehicle kilometres that have been stripped out of the bus network across both commercial and subsidised routes. The public sector simply cannot afford to replace services at the rate at which they are being axed. The position of the transport minister and the Scottish Government is untenable. The old ways will not work any more. Something has got to change. If the main parties at Westminster can agree that it is time to roll back or even replace the deregulated market, why cannot we? The time has come for action to protect vital bus services. It is time to look at alternatives to the current system, which is letting passengers down. It is time for London-style bus franchising powers to come to Scotland and it is time to put passengers and communities first.

13:07

Alexander Stewart (Mid Scotland and Fife) (Con): I note my registered interest as a serving councillor and as the chairman of Perth Access Cars, a patient group that is based at Perth royal infirmary.

I pay tribute to my colleague Liz Smith for securing a debate on this most important issue. Access to transportation to hospital and medical clinics is vitally important in our communities. I have had a particular interest in such services for many years, in my role as a councillor on Perth and Kinross Council.

Many of those who work at the Perth royal infirmary in my council ward of Perth City South regularly have to go to Ninewells hospital in Dundee as part of their work, and patients have to go for consultations, clinics and treatment. There was no regular transport link between the two establishments before the introduction of the 333 bus service, so from time to time we had ludicrous situations in which medical staff, patients and even records were taxied between Perth royal infirmary and Ninewells hospital. Moreover, time and again, my council constituents told me that getting to an appointment from Perth could mean having to take up to three buses each way. For an elderly or disabled person, that meant that a half-hour consultation could consume their whole day. The reality is that non-driving patients face an equally challenging experience to get to and from hospital, as do younger, non-disabled patients and patients who do not receive benefits, who usually have to fund such trips themselves.

It is not just out-patient appointments that cause a problem. If someone has been admitted to hospital, it may well be impossible for individuals to visit them in the evenings or weekends because the bus service is so erratic, meaning that there is no opportunity for a visit. For example, when a constituent and her husband, who are both nondrivers, wanted to visit their son, they had to rely on family members taking them on the 80-mile round trip each day; otherwise, they would have had to stay in a local hotel, which could have cost up to £100.

Over many years, I regularly fought to ensure some kind of transportation between the Perth and Ninewells facilities. However, it took eight years for that to become a reality. I could not believe that I had to keep going back year after year with the same questions about funding. It was obvious that there was an opportunity for funding to be given, but that did not happen. It took eight years of fighting by me and others in the council before we finally got the bus service. I pay tribute to a fellow councillor, Councillor Willie Wilson, who worked with me to achieve the introduction of the dedicated bus service.

We had support for the campaign from across the political spectrum, and from the Stagecoach Group and NHS Tayside. The bus service materialised in the form of the 333 route. The service was a considerable achievement and became an astounding success, so I was extremely disappointed when the decision was taken to replace that dedicated hospital shuttle with the new X7 service between Perth and Aberdeen. Stagecoach has reported an increase in the uptake of the new service, but it neglects to point out that that is because of the different demographics of those who use the service, which sometimes means that there is a conflict with those who are going to hospital. As Liz Smith pointed out, there are myriad problems with the new service. For example, the bus cannot have an accessible location, the double-decker coaches have little seating on the lower deck, and there is dedicated access ramp for individuals journeying to hospital. The bus service is not really suitable for individuals who have ailments and want to go to hospital.

All those factors again highlight the need for dedicated bus services between the two hospitals. If we have such services, they are used. We have difficulties with parking around hospitals, but a dedicated bus service relieves the pressure on parking. That is not rocket science; it is just reality. The situation should be managed properly across the hospital sector.

It is clear from members' contributions to the debate that communities across Scotland face the same problems with hospital transport, and that has to be recognised. I am pleased that there is consensus in the chamber on the issue. It is clear that there is a general desire for hospital bus services to continue, which Transform Scotland supports. We need to look at transforming transport schemes across Scotland. If we can get better hospital bus services, that will go some way

towards achieving the wider aim. I hope that the Scottish Government takes that issue on board.

I am delighted to have taken part in the debate and I pay tribute again to Liz Smith for bringing the debate to the chamber today.

The Deputy Presiding Officer: Thank you, Mr Stewart. I was nodding in agreement when you referred to the difficulties with parking at hospitals. I think that we all know about that.

I call the Minister for Transport and the Islands, Humza Yousaf, to wind up for the Government you have seven minutes, minister.

13:12

The Minister for Transport and the Islands (Humza Yousaf): I thank Liz Smith for securing the debate and I thank members for what I thought were good contributions to the debate, by and large. I also thank Liz Smith for the tone of her remarks.

All members who have spoken in the debate highlighted local problems and issues that go to the very heart of their communities. I have been in post for about six months and at any time of the day-morning, afternoon or evening-all that I have to do is look at my Twitter feed to see how emotional people get about transport. I do not say that in a negative way. Transport is an emotive issue because it connects us with our families and communities, it connects businesses with other businesses, and it helps to get staff into work and deliveries made. It can also make the difference in getting people to their hospital or GP surgery appointment—or not. Brian Whittle said rightly that those with long-term health conditions can be affected if they are prevented from getting to appointments because of poor public transport. All the points in that regard were well made. As transport minister, I do not take lightly my responsibility for hospital transport, which is a huge issue for me.

I put on record the Scottish Government's support for the bus industry. Members referred to the £58 million bus service operators grant. We are coming into the spending review period, and I have felt the strength of feeling among bus operators and MSPs about the importance of that subsidy. We also provide funding of £212 million for free bus travel for disabled and older people. I hope that members across the chamber recognise that that funding promotes social inclusion and, over the years, has had substantial health benefits by helping people get to hospital and GP appointments.

I will address some of the issues that members raised, and raised well, particularly in relation to the bus services that are mentioned in the motion. Liz Smith made an important point about the X7 service and accessibility. After I launched Scotland's accessible travel framework, which Fulton MacGregor and other members mentioned, I was genuinely astounded by some of the stories that I heard from people who use public transport. I have no doubt that we have come a long way—for example, there is legislation on low-floor single-decker and double-decker buses—but some of the challenges that people with disabilities face in using public transport are simply unacceptable in 2016. The first accessible travel framework, which was developed and will be monitored throughout its 10-year lifetime by people with disabilities, is a huge step forward.

Stagecoach is aware of the issue with the X7 that Liz Smith raised and is working with the Mobility and Access Committee for Scotland and with passengers with disabilities to see how it can retrofit some of its fleet of buses and coaches to make improvements.

Liz Smith: I accept what the minister is saying. He made an important point.

Another issue, which I know is not the Government's direct responsibility, although I think that Government influence would be helpful, is the practicality of getting much larger buses into hospitals. Alexander Stewart talked about the parking issue. If a bus cannot physically get into the hospital area, that is a serious issue for many people. Will the minister encourage bus service providers to think about that when he talks to them?

Humza Yousaf: I will certainly endeavour to do that. Liz Smith touched on an important point about the need for transport and planning to work closely together. She will be aware that the Government is preparing a consultation paper on the planning review, into which everyone across Government will look to have an input. As transport minister, I should feed her point into that discussion.

On services that affect people in Aberdeen, I spoke to a number of councillors yesterday and met Councillor Willie Young, from Aberdeen City Council, to discuss the matter. On services in Glasgow, I am well aware of the services to the Queen Elizabeth university hospital that Neil Bibby mentioned. I have made representations to First, in particular, about services. The hospital is well served by bus routes. Some 60 buses an hour come in and out of the hospital, but I am more than happy to have conversations with bus companies about whether they can go further.

I want to talk about wider issues and challenges that we face in relation to buses. There has been a decline in patronage on the buses. From some of Neil Bibby's remarks, we might think that that started with the Scottish National Party Government. Let me give members some context: it absolutely did not start with the SNP Government.

Neil Bibby: Will the minister take an intervention?

Humza Yousaf: In a second.

The decline started in 1960, and the steepest decline was in the period from 1960, when there were 1,664 million passengers, to 1970, when there were 860 million passengers. At the time, of course, the buses were regulated. The decline in patronage is not simply an issue of bus ownership.

The decline in bus patronage has been steepest in Glasgow and the west. That is not to shift the blame to SPT—I hope that I have not given that impression—or to Glasgow City Council, North Lanarkshire Council or South Lanarkshire Council. It is an issue that we all—national Government, councils and regional transport partnerships—have to deal with. Regulation of the buses is not a silver bullet.

Let me try to reassure Neil Bibby if I can. In our manifesto we committed to introducing a transport bill. As I think that I have said, both to him and on the public record, there will be a bus element to the bill, and I look forward to receiving his submissions on that.

The bus operators tell me that the biggest issue is not ownership—although I will happily explore Neil Bibby's idea of local franchising and other models—but congestion. If it takes 50 per cent longer for a bus to go through Glasgow than it took many years ago, there is an issue to do with buses becoming less reliable and therefore less popular.

There are issues there for all of us to tackle. I am more than willing to tackle the issue of reliability and declining patronage—I am committed to doing so. I want an upward trend in bus patronage, so I will do everything that I can do in that regard.

Members mentioned community transport. Although I see the real value of community transport, there are real difficulties with extending the concessionary travel scheme to it. The majority of community transport is provided by private cars, and there are also the obvious budgetary pressures. However, I am willing to look at how I can support community transport. For example, one of the most prohibitive costs for community transport initiatives that rely on minibuses is that of getting a minibus licence. Therefore, I recently announced that we have committed to putting some money into a fund that will help community transport projects get those licences.

I commend Liz Smith for bringing the motion to Parliament. I will certainly work with members from all parties to see how we can ensure that our public transport—buses and so on—works for the people of Scotland, particularly for those who are vulnerable and simply want to get to the doctor's surgery, clinic or hospital. We all have a duty to ensure that all the people of Scotland can access public transport, regardless of ability or postcode.

13:20

Meeting suspended.

14:30

On resuming—

Scottish Parliamentary Corporate Body Question Time

Illegal Camps

1. Adam Tomkins (Glasgow) (Con): To ask the Scottish Parliamentary Corporate Body what steps it is taking to prevent illegal camps being set up on the Parliament estate. (S5O-00332)

Andy Wightman (Scottish Parliamentary Corporate Body): Members will note that the unlawful camp on the Parliament's land was removed last week and fencing was erected across part of the Parliament's estate. The fencing is a temporary measure to allow remedial work to the landscaping to take place.

The corporate body intends to consider possible longer-term measures. We are conscious that any such measures must be effective in terms of cost and function. They would also have to be sympathetic to the landscape and maintain freedom of access for the many people who come to the public areas of the Parliament's estate to protest peacefully and lawfully or simply to enjoy the surroundings.

Adam Tomkins: I make it plain that I make absolutely no criticism of the parliamentary authorities for the wholly admirable way in which they have dealt with the lawful removal of the illegal indycamp from the Parliament's estate. However, I am concerned, as many members will be, that illegal camps should not be set up on the Parliament's estate in the first place. The public of course have the right to peaceful protest, but not when that interferes with the rights of others, causes physical damage to the Parliament's grounds or is incompatible with the nature of the Parliament's grounds, which the Court of Session said are unsuitable as a campsite. What can the corporate body do, and what is it doing, to ensure that such disruptive, aggressive and illegal behaviour is not allowed to recur on the Parliament's grounds?

Andy Wightman: It is too soon to say exactly what the corporate body might do in response to the issue. We are considering landscaping works on the grounds, which is one obvious possibility. However, there is a limit to what we can do lawfully to prevent incursions on to the Parliament estate without interfering with legitimate rights to access our land. In addition to proportionate physical barriers, there are, it has now been demonstrated, legal remedies that can be used

successfully if further encampments are attempted.

We should note that the form of protest that was the subject of the recent court judgments is not one that is guaranteed under convention rights. We understand that the protesters plan to seek leave to appeal to the Supreme Court, but we are confident that the order that we achieved from the court and the precedent that has been set, together with the possible landscaping works, will help to limit the risks of this happening again. I stress that the Parliament very much welcomes legitimate protest and demonstrations and the freedom of the public to access the parliamentary estate.

Roof Drainage

2. Edward Mountain (Highlands and Islands) (Con): To ask the Scottish Parliamentary Corporate Body what assessment has been made of the drainage on the roof of the garden lobby. (S5O-00334)

David Stewart (Scottish Parliamentary Corporate Body): An inspection of the roof was carried out in 2007 by our property service consultants, Lee Boyd. The garden lobby roof consists of stainless steel roof lights, which are designed as leaves and positioned close together. Combined with the three-dimensional form, that creates a complex roof arrangement. The inspection confirmed that the design can lead to water pooling in certain areas after heavy or persistent rainfall. The bespoke roof has shallow falls and raised seams, which are part of the original architectural design. Our consultants advised that the issue does not affect the roof's waterproof structure. As a result, we clean the roof regularly to maintain its appearance and to check that the drainage points are clear and free flowing.

Edward Mountain: As we have heard, water continually sits on the garden lobby roof. Despite the regular cleaning, algae growth continues within a couple of weeks of cleaning. As a qualified chartered surveyor, I am concerned that the obvious design defect, which should have been rectified when the roof was built, will result in the premature failure of the roof. What is the annual cost of cleaning the roof, which appears to be done every three or four weeks? Would it not be better to fix the problem now rather than continually clean it?

David Stewart: Clearly, Edward Mountain is very knowledgeable on such matters, as he is a qualified surveyor. I will write to him with the annual costs that he has requested. The consultants found in 2007 that pooling does not affect the integrity of the structure, so we have chosen to manage pooling through our planned maintenance regime.

Boiling Water Dispensers

3. Alexander Stewart (Mid Scotland and Fife) (Con): To ask the Scottish Parliamentary Corporate Body whether it will consider installing additional boiling water dispensers in the building, in light of health and safety concerns. (S50-00333)

David Stewart (Scottish Parliamentary Corporate Body): The Scottish Parliamentary Corporate Body currently has no plans to install additional hot water boilers in the members block. There is no mains water available other than at the north end of the corridors. The showers and toilets at the other end use tank-fed water, which is not of a quality suitable for tea points, and plumbing mains water to that end of the corridor would incur considerable cost. Tea points are provided on all levels of the MSP block and, where possible, doors are held open to allow unrestricted access along corridors.

Alexander Stewart: What measures, including risk management assessments, are in place to deal with any drinks spillages in the building?

David Stewart: Any spillages should be reported to the facilities management helpdesk, which will promptly inform the cleaning team. We have not received any reports of accidents in the past 12 months. We strongly encourage members, staff and visitors to report accidents through the health and safety reporting site, which will allow us to identify problems and take the appropriate remedial action.

Unsold Food

4. **Stuart McMillan (Greenock and Inverciyde) (SNP):** To ask the Scottish Parliamentary Corporate Body what it does with unsold food from eating facilities in the building. (S5O-00301)

Gordon MacDonald (Scottish Parliamentary Corporate Body): We estimate that only 4 per cent of food at Holyrood goes to waste. That is because staff work with our contractor to minimise waste, which has included the introduction of a waste monitoring system that helps us to understand how much food is being wasted and where that is happening, so that we can take the appropriate measures. All food waste is collected by our waste disposal contractor and taken away for industrial composting.

Stuart McMillan: In the past few weeks I have been made aware of the food waste issue by an MSP's staff members, who asked catering staff where unsold food goes. Will the corporate body consider distributing unsold food to any local organisation that could help people who are homeless or in need? Any unsold food would be very much welcomed.

Gordon MacDonald: I share some of Stuart McMillan's concerns about what we could do. However, any food that is packaged will be kept until the use-by date and then will be classed as waste. Any unpackaged food that has been fully prepared and served is no longer temperature controlled and therefore becomes a risk for human consumption and has to be classed as waste.

I am aware that the issue was raised earlier this year at a previous corporate body question time. Officials keep it under regular review.

Climate Change Action

The Deputy Presiding Officer (Linda Fabiani): The next item of business is a statement by Roseanna Cunningham on Scotland's contribution to international action on climate change and the Paris agreement. The cabinet secretary will take questions at the end of her statement, so there should be no interventions or interruptions.

14:39

The Cabinet Secretary for Environment, Climate Change and Land Reform (Roseanna Cunningham): I will begin with a short formal statement on our annual progress, as required by the Climate Change (Scotland) Act 2009.

On 31 October, I laid before Parliament a statutory report on the status of the latest annual target under the 2009 act. The report shows that the annual target and domestic effort target for 2014 were both met. It reflects emissions statistics that were published in June, which showed progress so strong that Scotland exceeded the level of its world-leading 2020 target of a 42 per cent cut six years early. Scotland's emissions in 2014 were 45.8 per cent lower than they had been in 1990. By any standards, that is excellent performance. For comparison, Scotland is among the top performers in the EU—European Union—15 and is second only to Sweden, since 1990.

While visiting Scotland in March, Christiana Figueres, who is the outgoing head of the United Nations Framework Convention on Climate Change, said that Scotland's actions are exemplary. Lord Deben, chair of the Committee on Climate Change, has said:

"the Scottish Government's policies and programmes have made a significant difference—you are meeting a target, and the target is tough."—[Official Report, Environment, Climate Change and Land Reform Committee, 13 September 2016; c 3.]

Building on Scotland's outstanding progress, and recognising that the Paris agreement—to which I will return in a moment—represents a call to action for all countries, we have committed to outlining proposals for a new climate change bill, including a new and more testing emissions reduction target for 2020. Our approach to setting the levels of future statutory targets will continue to be based on best evidence, including the independent expert advice of the Committee on Climate Change on the implications of the Paris agreement for Scotland. We will consult on the bill, based on the committee's advice, early next year.

Although we anticipate new legislation, the Scottish Government remains committed to discharging the requirements of the 2009 act in a

manner that is evidence based and high in ambition. In particular, my ministerial colleagues and I are working together in the Cabinet subcommittee on climate change to agree the package of policies and proposals for our climate change plan. The plan will set out policies and proposals to deliver Scotland's statutory emissions reduction targets out to 2032, under the 2009 act. As requested by the Environment, Climate Change and Land Reform Committee, we will bring a draft of the plan for parliamentary scrutiny in January.

That is the initial formal statement that I am required to make to Parliament. I will follow it by talking a little more about the new international context that the historic Paris agreement represents. The agreement is the first truly global action plan to tackle climate change. The 196 countries of the UNFCCC have agreed, in the words of the treaty, that

"climate change represents an urgent and potentially irreversible threat to human societies and the planet, and ... requires ... the widest possible co-operation by all countries".

The agreed international aim is to limit the global temperature rise to well below 2°C and to pursue efforts to limit it to 1.5°C, with rapid reductions in emissions to net zero in the second half of this century.

The agreement was the first big challenge for the UN sustainable development framework—the international set of goals to fight poverty and transform the world economy. In July 2015, the First Minister announced that the Scottish Government would adopt the framework, which makes Scotland one of the first nations to commit to the goals.

The Paris agreement followed calls from the G7 leaders of industrialised countries for urgent and concrete action, deep cuts in emissions and decarbonisation of the global economy this century. There have, of course, also been strong calls for action from world faith leaders. I draw members' attention to the global interfaith message that has been issued today to the UN climate conference in Marrakech, which has been signed by Scottish faith leaders.

Tackling major global issues like climate change usually requires leadership from the USA. EU climate diplomacy kept the UNFCCC process moving forward during the years following the Copenhagen summit, but it was the partnership between the USA and China in 2014 that finally enabled a level of ambition at Paris that was at the top end of expectations. The US presidential election this week undoubtedly means a tougher job for progressive US states, so it makes it all the more important that we promote very strongly the economic case for action on climate change—the

massive investment and future jobs that will flow from the low-carbon transition.

How is Scotland contributing to the international agenda? We have significantly scaled up renewable electricity capacity; in 2015 it accounted for 56.7 per cent of Scotland's gross electricity consumption. Scaling up existing technologies is very important in the international context. The fact that we have delivered a 45.8 per cent cut in emissions and exceeded our 2020 target level six years early shows other countries that deep emissions cuts are possible. We have also delivered five years ahead of schedule our 2020 target to provide 500MW of community and locally owned renewables. Incidentally, we have set new and more testing targets of there being 1GW by 2020 and 2GW by 2030. In addition, we have achieved a 15.2 per cent cut in total energy consumption, which means that we have passed our 2020 target of 12 per cent six years early.

We have contributed to achievements at Europe level—the EU is currently ahead of schedule, having achieved a 24 per cent cut in emissions against the 20 per cent target for 2020. Based on Scottish and EU experience, progress is likely to be faster than we expected. That is important, because the existing pledges under the Paris agreement are only enough to limit global temperature rise to perhaps around 3°C. It is clear that more will need to be done.

Scotland and the EU have both been cutting emissions while growing the economy. As I said, that is a very important international message now. Low-carbon and renewable energy employs more than 21,000 people in Scotland. Speaking at Edinburgh castle in September, Laurent Fabius, the French minister who presided over the success at Paris, emphasised the huge support from devolved, region and state governments, and from local government, cities, businesses, nongovernmental organisations, faith groups, trades unions and civic society that helped to make the Paris agreement. That echoes the Scottish experience of strong cross-party and cross-society support for climate action. We believe that nonstate actors will help to drive a strongly progressive agenda faster than expected.

The Climate Group brings together Governments and businesses on the international stage to promote high ambition. Scotland has been a very active member of the Climate Group's states and regions alliance for more than a decade. The alliance has provided an excellent platform for Scottish ministers to get our important messages across. We have also signed what is known as the under 2 MOU—the subnational global climate leadership memorandum of understanding—which involves setting targets for 2050 by a huge coalition representing more than

800 million people. Importantly, we now report annually on our progress directly to the international community under the initiative called the compact of states and regions.

Scotland is continuing to champion climate justice, because the worst impacts of climate change are falling on the poor and vulnerable. Following the Parliament's debate on climate justice in 2012 and Scotland's international climate justice conference in October 2013, the Scottish national action plan on human rights commits us to continue to champion climate justice.

Scotland's innovative climate justice fund, which was initially supported through the provision of £6 million from our hydro nation programme, has supported 11 projects in Malawi, Zambia, Tanzania and Rwanda by the Scottish Catholic International Aid Fund, Voluntary Service Overseas, Tearfund, the University of Strathclyde, Glasgow Caledonian University, Oxfam Scotland, Christian Aid Scotland and Water Witness International. The First Minister announced that Scotland will invest £3 million a year in the fund over the next five years. In March, we announced that £2 million would be provided from hydro nation to help to improve more lives in Malawi through the University of Strathclyde's water futures programme.

The fund has provided additional support to the humanitarian crisis in Malawi. Last month, £240,000 was provided on a match-funding basis to Oxfam, Christian Aid, SCIAF and EMMS International, thereby doubling the Scottish Government's contribution. That money will help to provide at least 35,000 people with basic food supplies over the coming months. In a further diversification of the fund's activities, the First Minister announced a £1 million contribution to the capacity-building initiative for transparency, which is an important foundation for the success of the Paris agreement that supports developing countries' engagement with the treaty.

Although the worst impacts of climate change will fall on developing countries and areas such as the Arctic, we should not assume that Scotland will be immune. An independent assessment of Scotland's adaptation programme in 2016 highlighted the good start that we have made on our adaptation programme, but cautioned of the challenges ahead.

Peatland restoration is a valuable investment in climate adaptation because it reduces emissions from degraded areas and creates carbon sequestration opportunities. It provides significant co-benefits such as biodiversity, water quality and natural flood management, which I expect will be recognised in the forthcoming climate change plan. I confirm that we have made £400,000

available to Scottish Natural Heritage to bring forward further action this financial year.

To return to the Paris agreement, I attended the extraordinary environment council in Brussels on 30 September to lend Scotland's very strong support for early ratification by the EU. We were delighted last week to welcome the coming into force of the agreement four years early, on 4 November. The EU, which currently pledges to make at least 40 per cent emissions cuts by 2030, is working to deliver that pledge. The EU has committed to playing a full part in the mechanisms under the Paris agreement that are designed to raise global ambition over time.

In conclusion, we cut our emissions by 45.8 per cent between 1990 and 2014, thereby meeting our 2014 annual target and exceeding our 2020 target of a 42 per cent cut six years early. We will continue to rise to the challenge. In 2017, the Scottish Government will publish a new energy strategy that will be fully integrated with a new climate change plan and a new climate change bill, and will establish a new and more testing 2020 target. Other countries must now match Scotland's ambition and actions.

The Deputy Presiding Officer: The cabinet secretary will now take questions on the issues raised in her statement. I intend to allow about 20 minutes for that. If members wish to ask a question, it would be helpful if they would press their request-to-speak buttons now.

Maurice Golden (West Scotland) (Con): I thank the cabinet secretary for providing an advance copy of her statement. First, I note that we welcome the ratification of the Paris agreement on climate change and encourage all UN member states to do all that they can to deliver under the obligations contained in the agreement.

The Scottish Government has overseen the establishment of ambitious climate change targets and the good news is that emissions in Scotland are now 46 per cent lower than in 1990, after failing to meet their target in the preceding four years. Emission reductions and leadership need to be shown in those sectors that have lagged behind, such as transport, heat and energy efficiency. For example, transport emissions have decreased by less than 1 per cent in comparison with the 1990 baseline.

As we continue our transition towards a low-carbon economy, having a range of secure and balanced energy sources, combined with the ecological and technological solutions that will drive down emissions and enhance carbon sequestration, will be key. However, the infrastructure—both natural and physical—has to be put in place today in order to achieve that.

Does the cabinet secretary agree that sectorspecific targets are key to ensuring carbon emissions in sectors such as transport, to ensure that they contribute to our climate change targets? Will she include those targets in the upcoming climate change plan?

Roseanna Cunningham: I welcome the support of the Conservatives for the overall approach that we are taking to climate change. I know that that support is replicated across the chamber and that it is one of our strengths in Scotland.

Mr Golden raised a specific issue on transport. I do not want to get drawn too far into that specific point, but I think that he was playing that into the question of the sector-specific targets. We have not made a final decision on what will be in the bill and how it will be constructed. I caution against an assumption that sector-specific targets are an easy answer. We need to ensure that we get the balance right across all sectors in the economy and we are able to do that by not having sector-specific targets.

From my perspective, it would be very difficult to allocate the savings to specific sectors in some cases. I will give one small example. If we were to go down the road that the EU wishes us to go down, by 2019 every new-build home would have an electric vehicle charging point as standard, but would that count for transport or for housing? Would we have to find some mechanism to allocate between the two? There are some things that look cross-sectoral, so how would sectorspecific targets those be applied in circumstances?

We will look at all possible approaches, but we will work out what is best for Scotland and we will consult on that in the bill.

Claudia Beamish (South Scotland) (Lab): I thank the cabinet secretary for prior sight of the statement. Scotland is indeed a world leader in tackling climate change and addressing climate justice. There are of course continuing challenges, and the Scottish Government must squarely address the need to tackle those challenges in the heaviest-emitting sectors, and bring new opportunities and jobs.

However, I want to focus on the global perspective in view of US President-elect Trump's utter denial of the irrefutable climate science and evidence: from whole US states threatened with intolerable temperatures, to small island states threatened with annihilation if the increase in global temperature is not held below 2 degrees. Reassuringly, China's National Center for Climate Change Strategy and International Cooperation has stated that its climate policy is not dependent on the US presidency.

At this critical time for the future of our planet, does the cabinet secretary agree that building confidence in, and connections between, countries and regions will be key in maintaining momentum and action? May Scottish Labour wish her well in Marrakech in continuing to contribute to what is an essential process for the future of humanity?

Roseanna Cunningham: I thank Claudia Beamish for expressing the Labour Party's support for the climate change policy. I hear what she says about some of the sectors that we understand and accept need to be focused on, and that is something that is being actively discussed. I hope that other parties in the chamber will respond well to the draft climate change plan when it is published and to the new bill when it comes.

The member's main concern is about the international scenario, which is obviously a concern for everybody just now. To try to be as generous as possible, perhaps all of us hear rhetoric during election campaigns that might not always be as fortunate as it could be. We will have to see what happens, because climate change is happening and the issue will not go away. America will be subject to the damaging effects of climate change, regardless of what the leadership there might or might not think or do about it.

I understand that the EU Climate Action and Energy Commissioner, Miguel Cañete, wrote to Mr Trump yesterday, stressing the need for continued EU-US co-operation. Scotland has had a long relationship with the US, which we value. The Paris agreement is supported by strong action from states, cities, businesses and faith groups, so a progressive agenda can still be driven at those levels.

We have been through periods previously when US leadership on climate change was absent. However, there are huge jobs, investment and growth opportunities from the low-carbon economy and the innovation required for the low-carbon transition. The US could benefit from that low-carbon economy as well. We should try to approach the matter with as much optimism as possible in the circumstances.

Graeme Dey (Angus South) (SNP): Although I recognise and welcome the progress that has been made to date, if we are to respond to the call for action of the Paris agreement, we will need to secure very significant behavioural change across society. The United Kingdom Committee on Climate Change recently appointed a behavioural scientist, and the committee's chair, Lord Deben, has suggested that behaviour is an area that the Scottish Government ought to explore more closely. Is the cabinet secretary already taking that forward, or would she be prepared to consider it?

Roseanna Cunningham: I think that we would all agree that influencing behaviours is one of the keys to delivering our climate change targets, and we are keen to work on that with the UKCCC.

We are looking at how we can strengthen the behavioural aspects of our climate change policies. For example, the individual social and material tool—the ISM—helps policy areas to break down the factors that influence people's behaviours. We are using the tool across a range of policy areas, including housing and energy. Last year, officials give a presentation to the UKCCC on our work on behaviours. We are conscious of the challenge, but we think that we have some useful work that will help with that. A summary of that work will accompany the draft climate change plan. I know that the member will welcome that.

Edward Mountain (Highlands and Islands) (Con): I thank the cabinet secretary for the early sight of her statement. Professor Robin Matthews of the James Hutton Institute has suggested that restoring 21,000 hectares of peatland annually would contribute to an 8 per cent reduction in Scottish carbon emissions. The minister has announced expenditure of £400,000 in the coming year. I welcome that, but, on previous performance, that will deliver less than 15 per cent of Professor Matthews's target. Is the Government being ambitious enough on restoration of peatland, much of which is in the region that I represent?

Roseanna Cunningham: Peatland restoration is one of the general areas that we accept is a challenge for us. We accept that we need to do more and are looking at the area closely.

Scotland's national peatland plan recognises the multiple benefits of peatlands and the links with a number of policy drivers, such as biodiversity, as well as with climate change. Some policies include a target for restoration. The member might be aware of the biodiversity route map, in the context of our contribution to the EU's restoration target of 15 per cent. We are looking at peatlands in the context of the forthcoming climate change action plan; it is a serious issue.

Through SNH-led action on peatland, more than 5,000 hectares were restored in 2014-15 and almost 4,000 were restored in 2015-16. However, I am the first to agree that the rate of restoration must increase substantially. Of course, many peatland areas are in private ownership, and I hope that the member will not take it amiss if I gently suggest that private landowners must also think about action that they can take.

Angus MacDonald (Falkirk East) (SNP): The cabinet secretary will be aware of the need for the UK to have an intended nationally determined contribution under the Paris agreement. EU

member states opted to implement jointly their commitments under climate treaties, and given the complexity of the issue the EU submitted an INDC to cover the period 2020 to 2025 on behalf of all EU member states.

As a result of Brexit, the UK will have to complete its own INDC. That needs to be done soon. Does the cabinet secretary share my concern that the UK Government will not have the capacity to complete its INDC in time? Will she raise the issue with her UK counterpart when she is in Marrakech?

Roseanna Cunningham: Presiding Officer, with your permission I will remain standing for the remainder of this item of business. I am having a slight problem with my back, and getting up and down is causing difficulty.

The Deputy Presiding Officer: Yes, that is fine.

Roseanna Cunningham: I appreciate Angus MacDonald's interest in the matter, but it is perhaps a little too far down the road for us to be able to deal with it at the moment. COP22 is currently under way in Marrakech and I will be part of the UK representation there, as will colleagues from Westminster. The UK is a party to the UNFCCC individually, as well as through the EU, and will be bound by all the obligations of the agreement under international law. The UK stresses that it remains committed to international efforts to tackle climate change. At any rate, at present we continue to be a member of the EU, so existing rules apply.

I understand that Norway and Iceland have submitted INDCs under the Paris agreement, although they will deliver their commitment collectively with the EU and its member states. The EU INDC covers the period to 2030. We would perhaps be a little premature in having the conversation that Angus MacDonald envisages at the moment, but it is one that people know has to be had.

Oh dear, I sat down again.

Richard Leonard (Central Scotland) (Lab): In her statement, the cabinet secretary said that 21,000 people are employed in low-carbon and renewable energy in Scotland. That is very welcome. Does she agree that, with a long-term plan for the economy that includes planning agreements with renewable energy companies, and with an active industrial policy in place from her Government, the number of jobs could substantially increase, not least in our indigenous steel industry, our engineering industries and our manufacturing supply base?

Roseanna Cunningham: That is one of the things that we are investigating closely for the

climate change plan. The issue is at the forefront of our minds, because there are economic opportunities that come with tackling climate change. We also need to consider how some of the existing industries can be recast.

A deal of work is being done on that basis. Aspects of what we are doing are already built into the manufacturing strategy so that all the work that we do on waste and the circular economy is embedded throughout. We are beginning to see it going through all the portfolios and it will begin to show its effects and, I hope, the kind of thing that I, the member and most members in the chamber would like to see.

Oh. I was about to sit down again.

The Deputy Presiding Officer: Do I have to instruct you to stay standing, cabinet secretary?

Roseanna Cunningham: I am on auto-pilot, I am afraid.

Mark Ruskell (Mid Scotland and Fife) (Green): Keep standing. I thank the cabinet secretary for the advance copy of her statement and I look forward to testing the climate plan when it emerges in January.

Although we now have a climate change denier in the White House, hope has not been extinguished across America. States including New York, California and Colorado have joined Scotland and regional Governments around the world to limit global warming to less than 2°C through the under 2 MOU initiative that the cabinet secretary mentioned. Those states represent almost one third of the world's economy.

What specific actions will the Scottish Government take with those progressive US states on innovation, research and investment so that whatever chaos emerges from the White House, we stay collectively focused on the jobs that will come from tackling climate change?

Roseanna Cunningham: I welcome the question because one of the key opportunities that Marrakech gives us is the ability to make connections—along the lines that the member suggested—through the MOU and the Climate Group, which brings together a wide range of states, what one might call sub-states, nongovernment organisations and so on. A great deal of work can be done there.

We must not forget that, however much I might wish it to be otherwise, Scotland sits as an equivalent to the likes of Colorado and so on. I go to Marrakech on Saturday with the ability to talk about the great successes that we have had in Scotland, and with an open mind to learn from others, who will have come up with ideas that we might be able to translate to our situation. I hope that I get an opportunity to have the kind of

engagement that is essential for the future. I very much hope that it starts when I arrive in Marrakech on Saturday.

Edward Mountain: Stand up!

Roseanna Cunningham: Edward Mountain was waiting for me to sit down again.

Tavish Scott (Shetland Islands) (LD): Perhaps the Presiding Officer should invite us all to stay sitting down, which would be more helpful to the cabinet secretary.

I thank the cabinet secretary for the copy of her statement. Does she share my concern and that of many others that the President-elect of the United States has vowed to cancel the Paris agreement altogether? In those circumstances, when she goes to Marrakech on Saturday, will she, along with ministerial colleagues from across the country, the much-vaunted use relationship to put pressure on the incoming US Administration to address that point? Has she noticed the helpful briefing in today's Press & Journal that illustrates that the Scottish Government might have a particular route to the US Government to raise this and other issues?

Roseanna Cunningham: I cannot say who will be in Marrakech from the incoming Administration, although I anticipate that a number of people from the current Administration will be there. It was the current Administration that signed up to the Paris agreement.

I am conscious of some of the things that the President-elect has said about climate change. He has spoken about not just his denial, but about his intention to cut federal funding for climate change activity and to restart the coal industry. Some of his early signals about appointments that he might make indicate that there might be a challenge. However, as I indicated earlier, we have to try to be as optimistic as possible and keep in mind the fact that people will suffer the impact of climate change regardless of what their leadership might or might not believe in. It will be a significant concern for considerable parts of the United States of America, as it is for every other part of the world. Sooner or later that will have to be dealt with

I also understand that it might not be quite so straightforward to reverse ferret out of the Paris agreement as might be thought. It may take three or four years. Let us hope that, in those three or four years, we all—in every way available to us—effect change in the Administration's views.

Edward Mountain: Stand up!

The Deputy Presiding Officer: We have had quite long questions and answers. I am able to give a little bit of extra time for this item of business, because I am very keen to get everyone

in, but I request that everyone be a little bit shorter with their questions and answers. I would also ask that you please remain on your feet, Ms Cunningham.

Fulton MacGregor (Coatbridge and Chryston) (SNP): Tackling climate change is a major challenge that requires effort by each and every one of us. The cabinet secretary's leadership is hugely valuable, but does she agree that every minister in our Government and every MSP in this chamber should see themselves as a climate change champion?

Roseanna Cunningham: Oh yes. We all have our part to play; not just ministers, but every MSP and, indeed, every household. I give members in the chamber this reassurance: my colleagues are united in their determination to ensure that Scotland's record on climate change continues to set an example for the rest of the United Kingdom. We take our responsibilities very seriously and the UK Government hears from me on the topic fairly frequently.

It is a big challenge; in some sectors, it is a huge challenge. There is no point in our pretending that it is not challenging. Some things that we need to do are not easy and they will not be easy. Our goal is to cut emissions while building a successful low-carbon economy. That takes us back to Richard Leonard's comments, and the need for an economy that generates jobs, increases prosperity, improves health and makes Scotland a cleaner, greener place in which to live. Those conversations are had not just at the level of the Cabinet sub-committee on climate change, but at an informal level.

The Deputy Presiding Officer: "Oh yes" would have been enough, cabinet secretary.

Roseanna Cunningham: Oh, really?

Alexander Burnett (Aberdeenshire West) (Con): I thank the cabinet secretary for advance notice of her statement. As she will be aware, the national performance framework outcomes are targets that the Scottish Government aspires to meet. Outcome 14 states that the Scottish Government will

"reduce the local and global environmental impact of our consumption and production."

How does the cabinet secretary square that with importing fracked gas from America and the additional carbon cost that that incurs?

Roseanna Cunningham: Mr Burnett is nothing if not persistent on that issue. I talked about the matter yesterday. The Minister for Business, Innovation and Energy has made very clear what we are doing in that regard. He has laid out the plan for the future: the energy strategy will be published alongside the draft climate change plan

in January 2017. We have been crystal clear on our approach. I hope that the member accepts that that is what is going to happen.

The Deputy Presiding Officer: Snappy questions and answers, please.

Stewart Stevenson (Banffshire and Buchan Coast) (SNP): Does the cabinet secretary recall hearing a long line of assurances to our island communities about the future of what is rather oddly described as remote onshore island wind?

Yesterday was a highly suspicious day for the UK Government to announce that it was reneging on its promises—it was hoping that the announcement would be buried by other news. Should we now make sure that we make common cause with Maurice Golden, who said that infrastructure needs to be put in place, and others of a progressive nature on climate change in this Parliament, to get that decision overturned?

Roseanna Cunningham: I would certainly welcome support from across the chamber, including from the Conservatives, on the matter. It was a long-awaited announcement, and it was very disappointing on a number of fronts. I am not quite sure what the timing was all about—I will let others draw their own conclusions on that.

We have repeatedly sought assurances from UK ministers. It is a matter of regret that this Government was not consulted before the announcement; that is unfortunate, because our islands have huge renewable energy potential, possibly the greatest in the whole of Europe.

Mark Griffin (Central Scotland) (Lab): How does the Government support families living in fuel poverty to reduce their consumption, carbon emissions and the cost of their fuel bills? Without Government support and intervention, it is unlikely that we will ever see the emissions savings realised.

Roseanna Cunningham: The energy efficiency programme will be designed to support people through the whole process with the intention of, ideally, dealing with both the emissions side and the fuel poverty side of the issue. That is one thing that we will do. The programme will include support for households. I hope that the member will welcome that and welcome the considerable financial commitment that will be made over this parliamentary session in that particular area.

The Deputy Presiding Officer: And the last quick question, please.

Clare Haughey (Rutherglen) (SNP): Does the cabinet secretary share my view that recent events at home and abroad underline the need for concerted international co-operation in the fight against climate change?

Roseanna Cunningham: I am not sure that there is very much that I can add to what I have already said on that area. Obviously, 2016 has just been one of those years. There has been seismic political change here in the UK and now in the United States.

However, as I have indicated before, politics may change but the science has not. Politics may change but the impact of climate change will not. The need for concerted global action is just as great now as it was before.

Science, Technology, Engineering and Mathematics Education and Training Strategy

The Deputy Presiding Officer (Linda Fabiani): The next item of business is a debate on motion S5M-02418, in the name of Shirley-Anne Somerville, on the Scottish Government's consultation on a strategy for science, technology, engineering and mathematics education and training. I call Shirley-Anne Somerville to speak to and move the motion—you have around 12 minutes, cabinet secretary.

15:16

The Minister for Further Education, Higher Education and Science (Shirley-Anne Somerville): Thank you for the promotion, Presiding Officer.

The Deputy Presiding Officer: I am terribly sorry, Mr Swinney. I call the minister to speak.

Shirley-Anne Somerville: On Tuesday this week, I had the great privilege of spending time with the children and teachers at Cargenbridge primary school in Dumfries. There I saw primary 6 and 7 pupils enjoying an interesting and lively lesson making kaleidoscopes, learning along the way about the principles of light and combining science, technology and mathematics into one practical, lively and very interesting lesson. I also heard how the school's close partnership with a local manufacturer, which was developed over a number of years, is helping the children at the school develop an appreciation of the skills needed in the workplace.

I was at that primary school to launch the Government's consultation on a STEM education and training strategy for Scotland. What I saw there encapsulates the priorities of the strategy perfectly: excellence, which means a deep attention to learning and teaching quality; equity, which means ensuring a quality experience for all, regardless of gender or circumstances; inspiration, which means inspiring and enthusing people to study the STEM subjects; and connection, which means the school making the most of links with local employers to bring learning to life and local employers securing their talent pipeline.

Put simply, all children and young people need to have that kind of experience during their school years. On that—and only that—I agree with the Labour and Conservative amendments when they say that urgent action is required to develop STEM skills, knowledge and capability. Members can be assured that such action is indeed well under way.

The consultation that I launched on Tuesday sets out an ambitious and comprehensive plan. It

is the first ever single plan co-ordinating all our activity across Government on developing Scotland's STEM talent and capability.

I thank Professor Sheila Rowan, Scotland's chief scientific adviser, for helping me to develop the strategy and for agreeing to help the Government forge strong links with the science community as we take the strategy forward.

Science, technology, engineering and mathematics are the cornerstones of modern life and of a modern, competitive economy. We all need to be STEM literate to succeed at work, particularly in the growing range of careers and occupations that are dependent on specialist STEM skills, and—as I saw at Cargenbridge on Tuesday—the STEM subjects ignite our curiosity about the world around us.

All our children and young people need to be able to develop STEM skills and confidence throughout their education, as do adults. That is why we are already taking action. The developing the young workforce programme is driving action nationally, regionally and locally to ensure that children and young people gain the STEM capability that they will need in the workplace. We have the most comprehensive package of support for science engagement in the United Kingdom through our science centres and festivals. We are taking action to support science provision all the way through primary school. That includes a threeyear £1 million partnership with the Wood Foundation, which from this month will see primary science leaders in place in the initial five participating local authorities and an investment this year of £855,000 to upskill primary and secondary teachers and technicians.

Tavish Scott (Shetland Islands) (LD): Yesterday the cabinet secretary made the fair point at a science conference close to Parliament that the number of pupils who sit science, maths and computer subjects at higher level has been falling. Will the strategy deal with exactly that point? Can the minister explain to Parliament why those numbers are going in the wrong direction?

Shirley-Anne Somerville: The numbers are going down in part because the number of students in one particular school year was lower. There has been an increase in numbers in areas such as human biology and computing science. However, Tavish Scott highlights the important point that we need to enthuse more pupils to take part in all the STEM subjects in our schools. We recognise that there was a dip last year, although over the longer term the numbers are pointing in the right direction.

I know that the Opposition likes to pluck statistics out of one year, particularly if it is a bad one, but the overall trends are positive. Since 2007, there has been a 7 per cent increase in passes at higher level in STEM subjects. We want to keep that long-term trend on track and enable more people to study for STEM-related qualifications and—crucially—to achieve them.

We all agree that the gender balance in STEM needs to be addressed. In that area too, we are making progress, as the number of girls who are taking and passing highers in key STEM subjects has increased since 2007.

There are other challenges, and our strategy sets out how we will tackle them.

Alison Johnstone (Lothian) (Green): I welcome the strategy's intentions in relation to gender segregation, but will the minister commit to pushing the issue right up the agenda? The minister and I recently attended the Equate Scotland reception and heard from many women who are enjoying fabulous careers in STEM. It is really important that we ensure that all our young people have the opportunity to be involved. Will the minister commit to ensuring that they all have the chance to attend the fabulous science festivals and events that take place in Scotland?

Shirley-Anne Somerville: Alison Johnstone raises two important points. On the point about girls and young women taking up STEM subjects, I recently had the opportunity to visit City of Glasgow College, where I met some women who were taking part in a women-only first-year engineering course, which was very important to them. It will be interesting to tease out that point during the consultation and get some evidence because that approach has clearly made a difference to those women and we need to look at how we can extend and incorporate it to help women in STEM.

On the point about science festivals and centres, the strategy already states that we need to extend those opportunities to every young person in Scotland, regardless of where they are. I am particularly keen to seek advice and suggestions on how we target rural areas, those in deprived communities and young women to ensure that they all get the maximum benefit that they can in that respect. I am happy to take those points on board.

The strategy highlights that we need to improve levels of enthusiasm for STEM skills and knowledge to raise attainment and aspirations in learning, life and work. We also need to encourage and promote the uptake of the more specialist STEM skills that are required to gain employment in the growing STEM sectors in our economy.

As I mentioned, there are four priority themes in the strategy: excellence, equity, inspiration and connection. On the theme of excellence, we will take action to improve the number of STEM teachers in secondary schools. We will build on the success of last year's marketing campaign to attract more people with STEM undergraduate degrees into teaching. New and innovative routes into STEM teaching will be in place from the next academic year onwards, and we will help teachers and educators, particularly those in primary schools, to build their own STEM capabilities and confidence.

Daniel Johnson (Edinburgh Southern) (Lab): Can the minister spell out in more detail what those alternative routes might be and what they will mean in terms of qualifications and time spent in training? Will there be a guarantee that full teaching qualifications will be required before people can teach in a classroom?

Shirley-Anne Somerville: I will not go into detail on that in this debate. The delivery of the consultation on that will come soon, and we have had a number of responses. It is important that we secure people with qualifications to work in our schools, but we should encourage them to get into the area, rather than changing the basis of teaching in our schools. Qualifications are still very important within that.

We will deliver the making maths count recommendations for improving young people's confidence and fluency in mathematics, and we will continue to encourage colleges and universities to prioritise STEM courses through the outcome agreement process.

On the theme of equity, we will take action to address gender bias in young people's career options, including by expanding our successful collaboration with the Institute of Physics improving gender balance project. We will seek ways to tackle gender imbalance in college and university STEM courses, and also in modern apprenticeship routes, through the equality action plan.

On the theme of inspiration, as I mentioned to Alison Johnstone, we are keen to support the science centres and festivals to engage people of all ages in STEM and to direct that effort at hard-to-reach individuals, groups and communities in deprived, rural and remote areas. The making maths count group said earlier this year that the Government needed to do more to help people understand the relevance of mathematics to daily life and work, and we will do that by finding new ways to promote the value and benefit of broader STEM learning.

On the theme of connection, we will embed awareness of STEM careers in STEM teaching and learning at school, and we will help practitioners to do that. We will encourage schools to use labour market information and their links

with employers to design and deliver a relevant STEM curriculum for their children and young people. We will promote new pathways into STEM careers, including the continued expansion of the pathways that can begin at school—for example, through foundation apprenticeships.

Actions that cut across all the themes include our important manifesto commitment to ensure that a Scottish STEM ambassador programme is developed to inspire young people, helping more develop high-quality, embedded partnerships with local employers and individuals, including in the public and third sectors—like the example that I saw at Cargenbridge-and encouraging peer-to-peer mentoring and support in relation to STEM. We will also explore hub arrangements to achieve deeper connections and collaborations between education and employers, and will learn from international best practice on that. I give the example of the LUMA centres in Finland, which were mentioned in the recent report by the science, technology, engineering and mathematics education committee.

This is just the start. We are open to new thinking, creative solutions and bold ideas. During the consultation process, I am particularly keen to hear from children and young people as well as from parents and carers. We also want to hear from education practitioners, employers and the STEM community. I am pleased that many in the sector have already commended our move to consult, including Professor Yellowlees, the convener of the Royal Society of Edinburgh's learned societies group on STEM education.

It is disappointing, therefore, that the Opposition parties have united today to retread largely inaccurate claims. We all agree there is more to do, but consulting on the strategy shows our willingness and absolute commitment to address all those claims and, indeed, to listen to others' ideas. If the Opposition parties have any suggestions, I would like to hear them. While we wait for that to happen, I will get on with working with the chief scientific adviser to engage with the larger sector and with the community to see how we can develop a STEM strategy that will enable us to meet the demands and challenges of our economy and build the society that we want to see now and in the future.

I move,

That the Parliament welcomes the publication of the Scottish Government consultation, *A STEM Education and Training Strategy for Scotland*, and its four key priority areas for action, which are excellence, equality, inspiration and connection; acknowledges the importance of STEM to increasing economic competitiveness, tackling inequality and raising educational attainment, and recognises that there is more to do to develop STEM skills, knowledge and capability if the demands and challenges of the economy

are to be met and build the society that Scotland wants to see now and in the future.

15:28

Liz Smith (Mid Scotland and Fife) (Con): I am interested in the minister's comment that this is just the beginning and that she wants to hear suggestions from the Opposition parties. I looked back at the past decade of parliamentary debates on STEM, and I was struck not only by their frequency but by the consistency of the propositions made by individual parties. I do not agree with all of them, but in many cases I agree broadly with what members have proposed, and I suspect that this afternoon's debate will be no different, because there is a strong argument that the Opposition has been making sensible suggestions for quite a long period of time, despite which we seem to be standing still to some extent.

Let me be clear: there is no disagreement with what the Scottish Government's motion says, but it leaves out something very significant. If we consider what was said in the introduction to the science and engineering education advisory group report of 2012, when the Scottish Government, quite rightly, identified that energy and life sciences were two key priorities in Scotland, the question is: what has held us back? We all use statistics to our own advantage, but the overall set of statistics on STEM is not good.

I remind members of Tim Peake's words when he came back from that wonderful space mission and spoke to thousands of youngsters. He said:

"Don't let anybody tell you you can't do anything."

It was a message to us all that there are lots of budding scientists out there, but something is holding them back. That is what we must address in the debate.

I suggest that, in Scotland, a large part of the problem relates to teacher shortages in schools—not general shortages but specific shortages. That was hinted at by the Cabinet Secretary for Education and Skills when he spoke to the Royal Society of Chemistry yesterday.

I am sure that, this afternoon, Opposition parties will use statistics from work that has been done over quite a long period. I will summarise the figures. Over a decade, there are 410 fewer maths teachers, 187 fewer computing teachers and 105 fewer chemistry teachers. There are also concerns that there will be decreases in other subjects, not least because, as Tavish Scott said, there are some worrying downturns when it comes to higher and advanced higher entries. Yes, it is true that some cohorts of pupils have declined in number but, over a 10-year period, that is still a worrying downturn. Ten out of 32 local authorities have had trouble recruiting a computing teacher and 12 per

cent of schools do not have a computing science teacher at all.

Computing at school Scotland is not the only organisation to be critical of that. The STEMEC report notes a failure to meet the targets—

Shirley-Anne Somerville: Is Liz Smith pleased to welcome the figures from last year, which showed that student intake numbers in chemistry, physics, maths and computing are up? While there are issues that we need to take on board, we have been increasing the number of students for five years in a row and we are taking action year by year.

Liz Smith: I have the statistics right in front of me, but there are general statistics on top of that that produce a trend that is not particularly encouraging. If we put that together with the problem of teacher recruitment, we see that there is a serious issue—that is what we are driving at this afternoon.

A very good call was made by the Royal Society of Chemistry, whose event we were all at yesterday. Two years ago, it made that specific claim about having dedicated science teachers in primary schools. That is one of the best suggestions that we can put forward, because that is the very age when we want to ensure that they are most inspired by—

The Deputy First Minister and Cabinet Secretary for Education and Skills (John Swinney): Liz Smith knows the seriousness with which I am intent on addressing this issue, but she must also complete some of her arguments. She frequently comes to the chamber to demand that the Government prioritises literacy and numeracy and, in the curriculum guidance that I issued in August, that is precisely what I have done. Now she says that we have to have dedicated primary school teachers specialising in science. There needs to be a rounded consistency in the arguments that Liz Smith puts forward, because there is a logical inconsistency in demanding that we prioritise literacy and numeracy and then saying, "But you've got to do this thing as well." That is a point that I make frequently to the Conservatives, who are not shy about coming forward with that argument, but then allow the issues that they demand we concentrate on in the curriculum to proliferate.

The Deputy Presiding Officer: I can allow you some extra time, Ms Smith.

Liz Smith: Cabinet secretary, it is not an either/or situation. At the Royal Society of Chemistry event yesterday, when you were asked by a member of the audience whether you would put the same priority on science as on literacy and numeracy, you were equivocal in your comments. This is something that we need to—

John Swinney: I will respond if time is on our side—

Liz Smith: Carry on.

The Deputy Presiding Officer: We do not have too much time, Mr Swinney.

John Swinney: I will address some of the issues later. However, I was not equivocal at all. I made it clear that I was giving greater priority to literacy, numeracy and health and wellbeing, and that I could not give priority to everything. If there was anything equivocal about my answer, I hope that I have said it more bluntly in Parliament today. I simply point out the contradiction in Liz Smith's argument that we need to strengthen literacy and numeracy, and science as well. The broad general education must cover all of these issues, but priority must be given to certain factors.

Liz Smith: Cabinet secretary, I am not disagreeing about literacy and numeracy. However, you made the commitment in 2012 on the importance of the life sciences and the STEM subjects for the national economy, never mind education. There is no contradiction—all of those things are what is good for education in Scotland just now.

I will make progress on some other aspects of what I want to say.

John Swinney: You have got a long way to go.

Liz Smith: I do not mind staying on the point that we are discussing, because it is important and I have received a huge number of emails since the event yesterday, when we again made a commitment on primary school science teaching, which is a fundamental, core aspect of the issue that must be addressed.

Some of the colleges and universities have done a lot of tremendously good work, and the minister was correct to point that out. Nonetheless, we need to expand on what is being done, and it may be that the issue is wider. Earlier, Daniel Johnson asked about the pathways into the profession, and I think that we need to have some answers on that. It is vital that we know what the intention is. Again, it is not a contradiction to argue that we can have highly professional teaching at the same time as allowing other people who have an expertise and an enthusiasm to come and do some science teaching. I will be pleased if the Government is considering that, but I would like to have some detail on that, because it is an important point.

We have been here before—in fact, we have been where we are for a very long time. I have been assiduous in going through the debates that we have had in this chamber on this subject, as well as the debates that have been held in learned societies, royal societies and so on, and I can say

that we are standing still—we are not moving forward. If there is one plea that I would make to the Scottish Government this evening, in conjunction with the other Opposition parties, it is that it should put some priority on the teaching of science.

I move amendment S5M-02418.1, to leave out from "and recognises" to end and insert:

"in particular, notes that, two years on, there has been no response from the Scottish Government to the call for fully trained science teachers in primary schools made by the Royal Societies and no reversal of the recent and damaging cuts to the numbers of Scottish secondary school teachers in key STEM subjects, and therefore considers that urgent action is required to develop STEM skills, knowledge and capability if Scotland is to meet the demands and challenges of the economy and build the society it wants to see now and in the future."

15:37

lain Gray (East Lothian) (Lab): I welcome the Government's strategy for education and training. It would be churlish not to at least welcome the fact that there is a strategy before us—that has to be a good thing. However, we cannot ignore the fact that, as Liz Smith noted, it has been a long time coming. Of course, it is not actually here yet, since this week's document is a consultation on the strategy, which we are told is due next March. That is not to say that much work has not been done on the issue over the years, most notably by STEMEC, which published its own report a few weeks ago.

Yesterday, at the science in the Parliament event, the cabinet secretary said that he hoped that the members of STEMEC would recognise that the themes of its report are reflected in the Government document. I think that the members of that committee will indeed be able to recognise that that is the case and will be pleased to see that. However, I fear that they will be disappointed by the fact that the Government's document fails to reflect the clear and practical recommendations that they made. In truth, it replaces many of those recommendations with rather pious hopes.

Consider, for example, the issue of the shortage of teachers in STEM. I freely admit that teacher education institutions have increased their spaces for STEM teachers, but we know that they struggle to fill all of those places, particularly in some subjects such as physics and computer science. STEMEC makes suggestions to address that, such as the use of incentives. That approach has been adopted elsewhere in the UK, but the Scottish Government has always resisted it.

The Government's strategy itself says that it will

"Improve the pipeline of STEM teachers into secondary schools"

without telling us how it will do that. Its only suggestion sounds rather like a dilution of professional standards. Perhaps it is not, but the minister's explanation has not left us any the wiser

What about the Scottish schools education research centre, to which STEMEC devotes a whole section? That institution has been driving innovation in science teaching since my days as a science teacher. It is well known, well used and well trusted by the profession but, although STEMEC recommends funding the expansion of the institution, with its proven track record, the Government strategy ignores SSERC altogether.

On science in primary schools, which Liz Smith talked about, STEMEC makes clear proposals on, for example, raising the requirement for STEM qualifications for new entrants in the primary teaching profession and providing specific STEM support for new primary teachers in their first years in the profession. Although the Government document acknowledges that the early years and primary school are crucial to STEM, it has no new plan, no new action and no new funding to reflect the importance of that.

Indeed, if there is one theme of the STEMEC report that the Government document does not reflect, it is inaction. These recommendations had already been made in the SEEAG report in 2012 and were largely set out in the excellence in science teaching report in 2011. Indeed, most of them were presaged in 2003 in the science advisory committee's report, "Why Science Education Matters: Supporting and Improving Science Education in Scottish Schools", and over the years, many of the same points have been made by bodies such as the Royal Society of Edinburgh. What the report itself says is, "Plus ça change, plus c'est la même chose". Nothing has changed 13 years on and the Government is still consulting on what to do instead of getting on with doing what everyone is telling it that it must do.

Sandra White (Glasgow Kelvin) (SNP): The motion and, I think, the amendments talk about innovation. Does the member agree that places such as the Glasgow Science Centre, which has been married up with curriculum for excellence and brings science into primary schools, represent a good and innovative way of embracing young primary school kids and helping them to learn about and enjoy science?

lain Gray: I absolutely do, but what STEMEC would tell the member is that primary teachers' confidence in building on that kind of engagement is critical to improving science teaching in our primary schools. It is not an either/or; it is about building on something that the STEMEC report says should be supported.

If there is one thing that characterises science, it is its empiricism. Any valid theory must be testable with reference to the real world and real-world observations. To test my hypothesis that the Government has not done enough on STEM, we should look at the data. It tells us that we have lost 800 teachers in STEM subjects over the past 10 years; that the number of laboratory assistants in schools is down by half since 2007 and of technicians is down by a quarter; and that average annual spend on science is, in primary schools, £1.62 per pupil compared with £2.89 in England and, in secondary schools, is £7.33 compared with more than £10 in England. Those are not my figures-they come from the Royal Society of Edinburgh.

For years, we have been telling ministers that STEM subjects are being squeezed in the curriculum. We are now seeing the impact on highers, with pupils last year sitting more than 4,000 fewer STEM highers. That is not a blip but a trend that has been evident in secondary 4 for some years and is now coming through into S5 and S6.

Science can never ignore the evidence, which is why it is not enough to welcome the strategy or to consult seriously without acknowledging the decline in outcomes and the failure over years to deliver on recommendations from bodies such as STEMEC. That is why we have lodged the amendment we have.

I have to give Mr Swinney credit for what he said at yesterday's science in the Parliament conference. He acknowledged of his own accord the fall in the number of STEM teachers and the decline in the number of STEM highers in the past year. I say to the minister that if what we say about the statistics is inaccurate, the cabinet secretary shares in that inaccuracy. The honesty on his part was commendable and, for that reason, I see no reason why the Government should not accept the amendments.

Although the cabinet secretary may have accepted yesterday the challenges that exist for STEM education, the strategy does not rise to meet them—largely, it is more of the same. Unless the Government returns next year with clear, practical and funded solutions such as those recommended by STEMEC, we risk the same slow decline in STEM education over the next 10 years as we have seen over the past 10.

I move amendment S5M-02418.1.1, to insert after "key STEM subjects":

"; further notes that, in the past year, there has been a fall in the number of pupils taking science and mathematics Highers, girls are still under-represented in most STEM Highers and that there has been a lack of progress in girls taking these subjects". The Deputy Presiding Officer: We now move to the open debate, in which speeches should be of no more than five minutes. I remind all members that they should speak through the chair and not directly to each other during debates.

15:45

Clare Adamson (Motherwell and Wishaw) (SNP): I declare an interest, as a board member of the Scottish schools education research centre, which lain Gray highly commended today.

Presiding Officer, there's been a murder—a pure dead bad murder. I think that I have got some attention now, which is exactly what science departments and faculties and primary schools across Scotland have done by hosting "CSI" events in their curriculum to intrigue, inspire and entertain pupils. In 2013, St Aidan's primary school in my area had a visit from a forensic specialist to crack a case. It was not a murder: it was a chocolate heist from the staffroom. During the six-week project, the children learned how to examine fingerprints and hair samples, use digital microscopes and work field science. They worked on hair fibre and powder analysis, fingerprinting and dental forensics, all to solve the crime of who had stolen the chocolates from the staffroom. The headteacher says that it was an amazing experience for the young people as part of their ComputerXplorers classes, and the children really enjoyed it. The project involved learning about not just science but information and communications technology, problem solving and working in a team.

That is the sort of great experience that we want for all children in Scotland. I realise that there is a lack of confidence in some primary schools about tackling such issues and giving young people such experiences. I commend the SSERC for its broadcasting of seminars into schools, which it calls cookalongs. The necessary equipment for the lesson is provided to the primary school and the teacher delivers a lesson along with the expert. That allows the pupils to get the advantage of hearing from an expert in the field and it builds the confidence of the teacher in delivering science.

One of the important things about the strategy will be inspiration. It is key that we encourage, motivate and inspire our young people. A long, long time ago and—as we might well touch on multiverse theory this afternoon—perhaps even in a galaxy far, far away, my inspiration came from watching old BBC broadcasts of David Attenborough programmes and "Horizon" and the occasional Open University broadcast late at night, along with reading science fiction. I learned about my hero, Richard Feynman, from his autobiography, "Surely You're Jokina Feynman: Adventures of a Curious Character".

That made me curious about physics and code breaking, which led to my career in IT, and to curiosity itself. Young people today can view every one of Mr Feynman's lectures online. I remember the first time that I heard his voice at the time of the Challenger disaster—hitherto, it had just been in my imagination as a young woman. We have to get inspiring people such as Richard Feynman to reach our young people today.

How do we inspire young people in a world that is overloaded with information on the world wide web? Just this weekend, I had the pleasure of hosting in the Parliament a CERN TED talks event, which was delivered from CERN. CERN is of course engaged in educational programmes and many Scottish schools have taken part in those over the years. The talk covered oceanography, drone technology-imagine we could really play quidditch!-dark matter, DNA editing, medical testing biotechnology and neurons, literacy using subtitling of Bollywood movies and block-chains and artificial intelligence. It was quite an afternoon. I was delighted to be joined by some of our colleagues from the chamber, including Jenny Gilruth, who brought along her sister, who is a physics teacher and who I am sure was inspired by the event.

Why is that so important? There were two TED talks that I want to bring to the chamber's attention. Kate Stafford did one on oceanography, which was amazing. Another one, on do-it-yourself science, was given by a scientist who was involved in the oil disaster in the US and who founded a not-for-profit organisation called Public Lab, which engages with communities and helps design DIY research tools for grass-roots science. It is an example of real communities benefiting from scientists coming in who know a lot about the local area.

The most important TED talk was by Sheila Rowan, on gravity waves. Why was it important? What could inspire our young people more than our very own home-grown expert in her area, the director of the institute for gravitational research at the University of Glasgow?

We should be using those examples to inspire our young women and STEM teaching in Scotland.

The Deputy Presiding Officer (Christine Grahame): I am loth to stop you giving that explanation. I do not know what block-chains are, but no doubt somebody in the debate will tell me.

15:51

Ross Thomson (North East Scotland) (Con): I declare an interest as a member of Aberdeen City Council.

I am sure that all members across the chamber recognise the excellent reputation that Scotland has around the globe as a true leader in STEM subjects. Since the dawn of the Scottish enlightenment, Scotland has demonstrated its dvnamic entrepreneurial spirit. When enlightenment met the industrial revolution, our combination of sheer intellectual endeavour and commercial might shaped a new world and a new economic outlook. Scotland cemented herself as the home of ideas. We recognise the great scientific achievements in our history from the discovery of antibiotics and tropical medicine to the invention of the steam engine and the television. We must aim to channel that historic success into the promotion of important STEM education and training for future generations to come.

Given our proud heritage, it is increasingly alarming that, when it comes to the Government's record on STEM education and training, we have a legacy that is less than satisfactory. A significant failure of the Government is that at all age cohorts and Scottish credit and qualifications framework levels the uptake of and attainment in STEM subjects by girls and women significantly lags behind that of their male counterparts. Despite boys and girls having an equal interest in science and technology at a young age, girls' engagement in STEM declines as they progress through the education system and, as such, it is boys who are more likely to proceed with subjects such as physics, chemistry, engineering and computing.

Keir Bloomer, who was one of the architects of curriculum for excellence, has warned that we need to do much more to improve basic skills. At secondary school, girls represent only 7 per cent of entries for higher technological studies and 20 per of entries for higher computing, and between 2011 and 2016 the number of female students taking higher biology fell by an astounding 21 per cent.

From such statistics it is obvious that not enough is being done by this SNP Government to encourage girls to take up these vitally important subjects, which are increasingly becoming more attractive and sought after in a technologically advancing economy. Equate Scotland says:

"The possibilities in the industry are limitless, but for women the opportunities are limited."

Stuart McMillan (Greenock and Inverclyde) (SNP): Is Ross Thomson seriously saying that, over the generations, there have always been opportunities for women in STEM subjects and workplaces?

Ross Thomson: There are opportunities, although we need to do more. Stuart McMillan should come to the Equate Scotland reception—I

know that there will be things in Parliament this week. We should be working together to ensure that we attract more women and girls into not just STEM but apprenticeships. There is a culture change and image change that the Parliament and the Government need to help with.

It is hard to believe that such damning figures are unrelated to the critical shortage of qualified teachers in schools across Scotland. Therefore, before girls and women can overcome those "limited" opportunities, the Scottish Government must effectively address the challenge that we face in recruiting teachers.

In my region-North East Scotland-we still face a major teacher recruitment crisis. There is a growing shortage of secondary teachers of STEM subjects. Aberdeen City Council, in particular, has been very open about the problems that it has faced in recruiting and retaining teachers despite a range of initiatives including cash incentives and offers of low-cost accommodation. Only last year, we asked for assistance in the shape of a weighting allowance to take account of the high cost of living and for a review of the funding settlement for local authorities. However, so far, that has been ignored and, therefore, the chronic shortage of teachers means that we are now in danger of some schools having to close their doors altogether.

We urgently need to examine the roots of that complex problem. When seven councils covering a geographic area from Shetland to Oban come together to say the same thing, it becomes a national issue that transcends party politics and which we must work together to address. The north-east desperately needs the Government to provide meaningful support to help to address the problem, which is crippling our schools and doing our young people a disservice. For Scotland to flourish and continue to lead the world in STEM, we need qualified teachers in our classrooms, which is why I will support the amendment in the name of Liz Smith and urge members across the chamber to do the same.

15:56

Jenny Gilruth (Mid Fife and Glenrothes) (SNP): The motion commends the Government's STEM education and training strategy to Parliament. It is clear that there is a link between the Government's aspirations to close the attainment gap and to upskill the next generation, especially of girls, in science, technology, engineering and maths.

Yesterday, Donald Trump became Presidentelect of the most powerful economy in the world. In her concession speech, Hillary Clinton commented: "to all the little girls who are watching this, never doubt that you are valuable and powerful and deserving of every chance and opportunity in the world to pursue and achieve your own dreams."

I note the Labour Party amendment, which comments on the decrease in the number of pupils taking STEM subjects. Since 2007, the total number of pupils across Scotland's high schools has decreased by nearly 30,000, so there is an overall trend of decline in our pupil population. However, £88 million of Scottish Government funding is being spent this year alone to support the Government's commitment to maintain teacher numbers and redress the balance.

For too long, subject choice in our secondary schools has been gendered. A survey that was conducted recently by Equate Scotland found that more than 70 per cent of girls, women, teachers and employers want regular talks in Scottish schools promoting STEM subjects to girls.

I am delighted that the First Minister has backed Equate Scotland's report. She has put on record her commitment to work in partnership to address the underrepresentation of women in STEM courses and careers such as physics. Indeed, my youngest sister—whom Clare Adamson has already mentioned and who rejoices every time I mention her in a parliamentary speech—was the only girl in her higher and advanced higher physics class at school. Despite the gender segregation that she experienced at school, she is now a physics teacher in the First Minister's constituency.

The STEM consultation commits the Government to working with schools and employers to prevent bias in career choice and to encourage more diverse subject choices in order to meet the participation improvement targets. Between 2007 and 2016, the numbers of entries by girls to the main science higher qualifications, including computing, were up by 3 per cent. The numbers of passes for girls in higher chemistry and physics are up 8 per cent and 10 per cent respectively. Passes by girls in biology are down 16.9 per cent, but that is in the context of a 62 per cent increase in passes by girls in human biology. As a former secondary teacher, I would say that the delivery of human biology differs across the country, so schools perhaps need to consider the courses that they provide and their uptake, because many girls prefer to specialise in human biology as opposed to biology in general.

When I was at school, I studied chemistry and physics at standard grade. Chemistry will forever to me be a world of moles and atoms—somewhere I could see no logic—but physics I loved. I loved it because I had a great teacher: Mr Pearce. He was a great teacher because he took time to explain things. We measured velocity in

class and I pinched my little sister's Duplo truck and watched it roll down a plank and on to our wooden science benches. We measured the distance, the time and the speed, and I remember using the same equation in maths and suddenly understanding the links between physics and maths. It was like a lightbulb going on in my head.

Members will know that the Government is committed to closing the attainment gap between Scotland's poorest and its richest pupils. To do that, we need to raise ambition in the next generation. Therefore, increasing uptake in the STEM subjects will be vital.

I recently visited the new Levenmouth campus of Fife College, which has been supported by the provision of more than £25 million of Scottish Government funding. Fife College's strategy is focused on reducing inequalities, reducing the number of low-income households and raising educational attainment while reducing educational inequality. I spoke to one of the tutors at the college about the gender make-up of his engineering classes. He told me that, when the college manages to get girls through the front door, they are not just good but brilliant. He agreed with me that, rather than being about the quality of the female students who present for engineering courses, the issue is about building their confidence in school to the extent that they can believe in and realise their capabilities in engineering.

Traditional stereotypical notions of what constitute an engineer persist, but the STEM consultation framework explicitly seeks to take action to reduce equity gaps, particularly in relation to deprivation and gender. The Scottish Government's STEM strategy is ambitious for Scotland's future. It seeks to redress the gender imbalance in subject choice and to build confidence among the next generation in the belief that STEM subjects can be enjoyed by everyone, regardless of gender.

Yesterday, many members were devastated by the fact that Hillary Clinton had not managed to smash one of the largest glass ceilings in elected politics, but the Scottish Government's STEM strategy sets out a route map for Scotland's girls to become future lead learners in science, technology, engineering and maths, which is something that everyone in the chamber should support.

16:01

Mark Griffin (Central Scotland) (Lab): We have heard a lot about provision of STEM education in schools. For me, a key point is the expectation that by 2030 more than 7 million jobs in the UK will depend on science skills. Those

science roles are exactly what we need—highquality, high-skilled and highly paid jobs for which emerging economies will struggle to compete with us.

By 2030, the four-year-olds and five-year-olds who started primary school this summer will be in work or at university. If current spending levels continue, pupils in England with the same academic ability and the same aptitude for science will have enjoyed more than 10 years of state education during which—according to a report that has been published by the learned societies group on Scottish STEM education—80 per cent more will have been spent on science equipment in primary school and 27 per cent more in secondary school than will have been spent in Scotland.

There is also the issue of science technicians and support staff. Last year, I submitted to all 32 local authorities a freedom of information request on science technician numbers. I found that there had been a drop in the overall number of science technicians and that one authority had cut the number of technician staff by more than 50 per cent. Technicians are the staff who maintain and repair the practical science equipment that our schools have and they are the people who set up the science labs and the complex experiments that teaching staff just do not have the time to set up. It is hard to imagine that those numbers will increase as budget cuts to local authorities continue to bite.

If the Scottish Government wants to talk about inspiration as one of the four key priorities for action, I suggest that the best way to inspire young people to pursue a career in STEM is through teaching them practical science. The minister's description of the work that the pupils were doing in the school that she visited is a perfect example. However, if we are to allow that to happen, we must address the imbalance between what is spent on practical science equipment and staff in the rest of the UK and what is spent in Scotland.

That would also go some way to addressing another of the Government's key priority action areas—inequality. The learned societies group also reported that 98 per cent of Scottish schools are dependent on external funding for science equipment. We are in a situation in this country in which middle-class communities have the ability to support activities in schools that will improve the life chances of pupils to a level that deprived communities struggle to match. The Scottish Government should aim to level the playing field for all schools by supporting increased funding for science equipment.

Shirley-Anne Somerville: Mark Griffin has raised some interesting points about lab technicians and equipment, which are matters for local authorities. However, the school that I visited did not need expensive equipment: the

kaleidoscopes were made from Pringles tubes—other tubes are available for making kaleidoscopes. The equipment was created through innovative teaching. What I was saying in my speech was that through SSERC and other bodies we can create innovative and experimental teaching, using everyday objects to explore science in the real world. Expenditure is one thing, but we are investing in the teachers for everyone to experience that.

The Deputy Presiding Officer: I will give you some time back, Mr Griffin, because that was quite a long intervention.

Mark Griffin: Thank you.

I accept that teachers can employ innovative methods, but for complex science equipment we will need a bit more than a Pringles tube. There is such a big disparity: 80 per cent more is spent in England than in Scotland on practical science equipment. That will have an impact on pupils in Scotland.

I was also speaking about inequality. I have mentioned before that I studied mechanical engineering at university, which is a key source of skills and graduates for many of the growing sectors in Scotland that provide fantastic opportunities for highly skilled and highly paid work. On my course were 120 students, only four of whom were women. We must also consider the issue of female STEM graduates leaving their professions and going on to employment in other fields. How the Government opens up careers in science and technology to half the population will determine how successful it is in tackling the issue of inequality in STEM.

Other members have mentioned Equate Scotland, which has recommended tackling the problem through recruitment of more female STEM teachers so that there is no visible gender difference. Another step is to ensure that guidance teachers and school careers advisers are trained in guiding students to embrace what they are good at, rather than their encouraging students to study, or discouraging them from studying, a subject based on their sex. There is work being done to stop the bias in guidance in schools, through which girls are guided towards biology. It would be interesting to hear the Government's response to those suggestions.

It is clear that there are big challenges with falling teacher numbers, a reduction in science support staff and shortfalls in funding for equipment. However, at the same time there is a big prize to aim for if the situation is resolved: 7 million highly paid science jobs. We can aim for that, and we can achieve it.

16:07

Stewart Stevenson (Banffshire and Buchan Coast) (SNP): You asked about block-chain, Presiding Officer. It would take rather longer than five minutes to explain, but I will say that one commercial product that you may be familiar with that depends on block-chain technology is the electronic currency called bitcoin. I will leave that with you, Presiding Officer.

Ross Thomson—unfortunately he has left, but he can read this speech later—said that the Scots invented the steam engine. They did not—a guy called Hero, who was a Greek philosopher and thinker, invented the steam turbine in 100 AD. It is thought that he was building on ideas from 200 years before that. We Scots invented most things, but we can concede on one or two.

Richard Feynman has been mentioned: he was a terrific communicator and teacher. As a member of the commission that investigated the Challenger space shuttle disaster, he was gagged and not allowed to speak, but at the press conference, he was able to show what had happened without saying a single word. I have talked about that before—members can read about it in some of my old speeches.

I want briefly to pick up on the role of gender. When I started in computers in the 1960s, about 50 per cent of people who were working in programming were female. The reason was that working in computers was an unknown profession that was not sexy and did not draw people. Furthermore, the great heroes of computing are mostly female. Ada Lovelace, the only legitimate child of Lord Byron, was Charles Babbage's computer programmer for his analytical engine, which was a mechanical computer. She developed the first algorithm for computer programming, and algorithms are how we develop computer programmes today. Rear Admiral Grace Hopper was the person who created the way in which we now develop computer programmes, in particular COBOL—common business-oriented using language. She is also responsible for the term "computer bug", which she used when a bug-an American word for moth—got trapped in the electromechanical contacts of a computer. Anyone who goes to the Smithsonian Institution can see the bug that Grace Hopper sellotaped into a laboratory notebook in 1944. The differentiation between male and female engagement in computing is a comparatively modern thing and I have no explanation for why it has happened.

I want to talk about education, but not in the way that it is being talked about now. I am an autodidact, which means that the gaps in my knowledge are entirely my fault and nobody else's. I did have inspirational teachers, including Doc Inglis—a bluff Lancastrian who took my first-year

class around the school searching for infinity. We looked in the dustbins and behind the blackboard. The point is that I remember that to this day—that is what inspiring teachers do. When I was in sixth year, he came and did his tax return with us, either to show us how little money he got paid for putting up with us or to show us that there is a practical application for being numerate.

People say that they are uncomfortable with numbers. Whenever people say that to me, I ask, "Do you think you could give me an 11-digit number?", and they say, "Oh, no! Certainly not." Then I ask, "Well—does this number mean anything to you? It's zero, one, three, one, three, four, eight, five thousand." People in the Scottish Parliament will, I hope, say "Oh, yes. I know that number. It's the number for the Parliament switchboard." Everybody has a basic ability to engage with numbers, but it is subconscious and we do not realise that we have it.

The key thing that is perhaps omitted from any numeracy strategy is ensuring that parents and families can create a number-friendly environment at the outset of children's lives, which can make a difference to their attitudes to numbers at a later stage in their lives. There are science games that we can play, for example. My four-year-old goddaughter and I dissolved salt crystals because she had seen a rock crystal and asked what a crystal was, and I said "Here's a crystal." We dissolved it in water, then we put that in a pan, boiled it off and got the salt back. She went away and briefed her nursery class on that piece of science.

When she next comes to see me, we are going to do a couple of things. We will use a mixture of alum and vinegar to write a message on the white of a hard-boiled egg through the shell. The message can be read only when the shell is peeled off, and we will discuss why that matters. Next, because young children are always somewhat scatological, we will use human urine to write a message on a piece of paper; it will disappear but then reappear when we heat the bit of paper.

There are lots of things that we can engage kids with that will make a real difference to their attitude to numbers and to science, and equip them with a questioning mind. At the end of the day, I am not bothered about what knowledge anybody has; if they have a questioning mind, they are going to get knowledge themselves about what matters to them. That is what will ultimately make them successful in life. All the business about teaching STEM subjects to support the economy and so on is entirely secondary. I want to see successful, happy and engaged people in STEM subjects. If we, individually and as parents and families, help with that, we will make substantial progress. I

hope that that is ultimately reflected in the strategy that we end up with.

The Deputy Presiding Officer: I was loth to stop you, Mr Stevenson, in your journey through quaint scientific experiments. I will need to read your speech later in the *Official Report*.

The next speaker is Tavish Scott, to be followed by Stuart McMillan. Mr Scott, follow that, please.

16:13

Tavish Scott (Shetland Islands) (LD): Thank you, Presiding Officer. It is always a great pleasure to follow Mr Stevenson. I think that I heard him say earlier that he goes back and reads his old speeches. The speech that he just gave will be worthy of reading many times, from many different perspectives. There were so many references in it to so many different things that I am not going to mention them, because I would be defeated by them all.

Instead, I will start by referring to evidence that was given to the Parliament's Education and Skills Committee yesterday when, as part of our budget considerations, we looked at the future of Skills Development Scotland.

In its submission to the committee, the Confederation of British Industry Scotland said, in relation to the teaching of science, technology, engineering and mathematics:

"Most young people attribute their decision to pursue STEM subjects to an inspirational teacher".

That appears to be a good place to start. It is why the CBI and others—there was much mention of Sir Ian Wood's work in this broad area—think that they have a role in providing assistance in that regard.

It is about not just inspirational teachers and the number of teachers—there has been much statistical analysis of that—but who a young person's parents are and what they do. At home in Shetland I know plenty of young men of my son's age who are engineers because their dads are either in an engineering business or work in the oil industry and had an influence on their choices. There is of course a role for schools and for teachers to be all that they can be in encouraging the next generation—girls as well as boys, as Alison Johnstone rightly said, given the woeful statistics on girls becoming scientists, IT professionals or engineers—but it is also about the influence of the family.

Work has been done that strongly illustrates that the earlier the teaching of science happens in school the better. I take the cabinet secretary's point about the pressures in primary school. It was not long ago that parents and the profession were being told that learning two languages at primary school was the overriding priority. I was at my primary school-age son's parents night the other evening, and in the 10-minute slot that his mum and I were given to consider how his schooling was going we got nine minutes on numeracy and literacy, before I asked, "But how is he actually doing?" As a parent, I confess that I am concerned about the push on just two areas. Of course numeracy and literacy are important, but we need to remember that primary school is also about enabling kids to grow up and become little social characters in their own right.

I take the wider point that the cabinet secretary made and that other members implicitly recognised about the pressures under which we put primary school teachers and about how the early teaching of science, admirable as it is, can fit into the curriculum.

Given the concerns that we have all expressed about the workload on teachers at primary and secondary levels, we cannot have this debate without being consistent in that regard. I was quizzing the cabinet secretary the other day-I do not think that he was wholly thanking me for thaton the benchmarks that the Government has just issued to primary and secondary schools. My observation, which is shared by many teaching professionals, is that Education Scotland needed to reduce the Es and Os-the experiences and outcomes-at the same time as it introduced the benchmarks. In other words, can there be a reduction in teacher workload and paperwork alongside the introduction of benchmarks that I am told are sensible and constructive? If we are loading science on to all that as well, we need to recognise the impact on primary and secondary schools.

On secondary schools, I cannot be the only parent who knows that his son cannot do three science subjects in fifth year. The school timetable under curriculum for excellence, certainly in most schools that I know about, simply does not facilitate that, because of the narrowing of choice that has happened. We cannot see the issues in isolation. I welcome the strategy, as lain Gray rightly did, but as we aspire to encourage more pupils to take STEM subjects, we need at least to be alive to the reality, which is that curriculum for excellence is reducing schools' ability to provide choice and offer three sciences in the way in which my school did many moons ago—not that I did three sciences.

Members talked about the cabinet secretary's remarks yesterday. I thought that he was commendably fair on the challenges, as lain Gray rightly said. All that the Opposition is doing today is saying that those challenges have been around for some time. We have all been in the Parliament for a considerable time and, as Liz Smith said, we

want the strategy to deliver on those challenges. The Parliament is encouraging the Government to do that.

The Deputy Presiding Officer: Thank you. I have no spare time now; I ask for speeches of a tight five minutes.

16:19

Stuart McMillan (Greenock and Inverclyde) (SNP): It has been an interesting and informative debate. I always enjoy the contributions from my colleague Stewart Stevenson, because I know that I will learn one or two things.

I want to touch on two points, one of which was raised in Stewart Stevenson's contribution and one in Ross Thomson's.

Ross Thomson spoke about opportunities and I want to gently make him aware of the situation in the heavy engineering and shipbuilding sectors. In the past four years, Ferguson Marine in Port Glasgow hired its first ever female technical apprentice. The member should think about the fact that it took until the past four years before the first ever female shipbuilding apprenticeship was given on a shipyard on the Clyde.

There have not always been opportunities for females in STEM areas. My colleague Stewart Stevenson talked about the computing sector and the figure of 50 per cent females, but the opportunities in shipbuilding and heavy engineering were certainly not always there.

I welcome the STEM consultation and the four key priorities of excellence, equality, inspiration and connection. Progress has been made but there is still more to do. We can say that for every single walk of life; there is always more that people can do.

There has been a 3 per cent increase in the number of girls entering science qualifications, including computing, since 2007. The number of girls passing higher chemistry and physics is up by 8 per cent and 10 per cent respectively. There is a 62 per cent increase in the number of girls passing human biology, which helps to explain the 16.9 per cent decrease in girls taking biology. In 2014-15, there were 27 per cent more female full-time equivalent science and maths students, and 55 per cent more full-time equivalent engineering students in colleges compared with 2006-07.

The figures are positive and should be welcomed by all but, as I have said, we can always do more. The increase in the number of college students is hugely important.

On Monday, I attended the Inverclyde alliance community planning partnership meeting. We heard a hugely informative presentation from the principal of West College Scotland, Audrey Cumberford, part of which centred on the college's refocused drive on STEM subjects. There is an increase in local demand for people who have STEM qualifications. Ferguson Marine in Port Glasgow has an ambitious and welcome apprenticeship programme, and it has a link with the college to help to deliver it. As a result, there are now more female apprentices.

The consultation is welcome, but I also believe that every MSP has a role to play in helping to satisfy our economic challenges. If we are not already doing so, we should be promoting the STEM subjects when we talk to our constituents, whether they are young or older. I urge all members to promote the consultation. I have written to every school in my constituency to make them aware of the consultation and have asked the head teachers to pass the information on to students, teachers and parents.

I want to touch on another point that was raised during today's First Minister's questions. Murdo Fraser talked about a "Scottish shambles". Notwithstanding the talking down of our nation, I am sure that members, including Mr Fraser, will agree that there are many examples of shambolic projects elsewhere. The initial cost estimate for Hinkley Point C was £14 billion and it is now up to £37 billion. The cost of HS2 has continued to increase and is now up to £55.7 billion; the cost per kilometre is 10 times that of the cost of global counterparts. Trident has also seen continuous increases in prices and it is now reported to be at billion. Deloitte £205 estimates that refurbishment of the Westminster Parliament will cost between £3 billion and £4.3 billion and others have highlighted higher figures.

I raise those issues to highlight two things. First, as well as STEM challenges in dealing with such huge projects, I encourage the UK Government to get some accountants involved to limit the exorbitant increases, if the projects actually go ahead. Secondly, before Mr Fraser talks down Scotland, he should consider the actions and mathematical illiteracy of his political masters in London.

16:24

Jamie Greene (West Scotland) (Con): First, I thank Jenny Gilruth for putting some doubts in my head about whether d equals s over t or t equals d over s. I always got that triangle wrong at school, but I will go away and research it.

Today's debate is important. There have been interesting speeches from across the chamber. Scotland as a nation encompasses a strong global reputation for its excellence in STEM subjects, and it is through the talent and entrepreneurial spirit of

Scottish people that we have built the great nation that we are today. STEM subjects are important because they cover such a far-reaching spectrum of industries and job opportunities that are so crucial to the Scottish economy's future success.

As our economy modernises, it is our duty to ensure that the Scots of tomorrow are given the opportunity to play their part in that economy. An example close to my heart is the digital economy. There is huge growth in that sector, but with the growth comes a huge demand for programmers, engineers and software developers to keep up with the demand. We know that every year there are 11,000 digital job vacancies, but we are only ever able to fill about half of them. If we are struggling to meet the industry's demands today, it will surely be even more challenging to keep up with its demands tomorrow. The need to train people has never been more paramount.

The problem does not exist just in the digital industry. We are seeing a worrying trend that exposes how underprepared our workforce is to adapt to future market changes. For example, a recent survey by Pearson and the CBI underlined that Scotland is simply not producing enough STEM graduates to keep up with the demands of the modern Scottish market. A separate survey by the CBI found that 42 per cent of STEM recruits fall short in relation to the skills that their employers expect them to have.

Stuart McMillan made some valid points. It is our duty to be ambassadors for STEM subjects. I was interested to hear members' experiences of what inspired them in the sciences. We all have a personal story of something that we saw on television, something that we did at school or someone who nurtured our interest in the sciences or technology. That is an important point, because we can talk about statistics and rises and falls in trends, but the issue is about inspiring young people to get involved in sciences. Although the consultation mentioned great projects, we could do much more as MSPs.

Analysis in the United States shows that 40 per cent of American STEM graduates do not work in a field directly related to what they studied. In other words, graduating from a STEM field offers graduates greater flexibility in their career choices.

The debate is important in Scotland because we know that physics-based sectors account for more than £12.5 billion of the Scottish economic output. We estimate that more than 180,000 people are directly employed in those sectors. Many sectors that the Scottish economy relies on for its future success, such as oil and gas, agriculture, energy and renewables are in turn reliant on STEM graduates. It was only last week that I stood in this very spot and talked about digital participation and how 17 per cent of Scottish schools lack a

specialist IT teacher. How can we expect our young to succeed in the digital world of tomorrow if we are not providing them with enough teachers today?

It is even more worrying, as other members have alluded to, that there is such a disparity in the number of female students in STEM subjects. Fewer than a third of physics higher students are women, and Skills Development Scotland points out that only 13 per cent of STEM jobs are occupied by females.

In my region, it is great to see that Ayrshire College has recognised the problem and in response has put together specific programmes to address it. The college's "This Ayrshire girl can" tag is, I hope, very successful. I would like to see that extended to "This Scottish girl can".

My colleague Liz Smith rightly pointed out, as did Tavish Scott, that this debate has happened before; there is a bit of a groundhog day feel to the chamber. The Scottish Government's agenda has been complacent to date and I hope that it listens intently to what has been said by all the parties and puts more immediate focus on STEM subjects.

The Deputy Presiding Officer: On the question of how far the groundhog travelled, $d = s \times t$. I thought that I would put you out of your misery.

16:29

Willie Coffey (Kilmarnock and Irvine Valley) (SNP): Presiding Officer,

"Somewhere, something incredible is waiting to be known."

Those were the words of astronomer Professor Carl Sagan, who inspired generations—young and old—to love science and all that it could do for mankind. He was a brilliant communicator who was behind the Pioneer plaque and the golden record in the Voyager project in 1977, which took the first messages from earth into space.

Since he died in 1998, some pretty incredible things have become known. We know that the universe is accelerating as it expands, when we thought that it was slowing down. We know something about dark energy and dark matter and how they make that process happen. We have discovered the Higgs boson particle, which is thought to be responsible for all the mass in the universe. Traces of water have been found on the moon and on Mars. Only this year, a potentially habitable planet has been discovered about 4 light years away from earth.

Today, we have Professor Brian Cox—a truly inspiring physicist whose fantastic television programmes are capturing the minds of countless numbers of youngsters and getting them hooked

on science. Inspiring our young people is the key that opens the door to more incredible discoveries and underpins the success of the strategies and systems that we put in place to enable all that to happen.

The STEM strategy that has just been published for consultation builds on achievements to date, gathers together in one place much of the work that is under way and seeks views on how we might solve the many issues that we still face, which members have recognised. The strategy talks about enthusing and inspiring our young people, asking them what they think, offering more training and skills, reaching out to females and making the vital connections with colleges, universities and employers that can be the basis for a wonderful career in STEM. All those points are positive and there is an emphasis on how we might overcome some of the problems that we face

Money helps, of course, and I am pleased that a substantial investment is being made to upskill primary and secondary science teachers, technicians and local authority champions and to give practical support for science teachers. On top of that, a further significant investment of £12 million has been targeted at retraining some of our oil and gas workers to become STEM teachers.

I particularly like the digital schools programme idea to try digital skills development in schools. I commend East Ayrshire Council's initiative to make iPads available to every pupil and teacher in a number of schools to encourage learning, no matter where the pupils may be. For me, a crucial intervention that must take place is to try to retain the enthusiasm that primary school children have for science, which they all too often lose as soon as they get to secondary school—particularly girls.

To complement the strategy, I would like to suggest a number of ideas for us to consider further. Perhaps we should establish more school science clubs and have young scientists of the year awards, with prizes and recognition events that overlap with the late primary and early secondary years. Maybe we should encourage science lectures in our primary and secondary schools, with practising scientists telling our young people about their work by using demonstrations and multimedia.

Could we have national science recognition and achievement awards in Scotland, similar to the scheme that President Obama introduced in 2008 just after he was first elected? I hope that they will not be abolished by President Trump. Could we identify youngsters with an aptitude for science and see how we can nurture that aptitude so that they do not disconnect from science as they move to secondary school? We could also do with more dedicated science TV channels that broadcast at

the right times of the day and are aimed at youngsters and adults.

I hope that some of those ideas might be taken up and might see the light of day if we are to make Scotland a special place for science and technology. Scotland has a wonderful history of achievement in science that we should all be proud of. The strategies and systems that we devise certainly need to be correct, but they will work only if we enthuse and excite the next generation of young scientists in Scotland to make incredible discoveries that are unknown to us at the moment.

I am certain that we have the youngsters in Scotland right now who will make those incredible discoveries if we excite them enough about science and make it possible for them to achieve great things. Somewhere in Scotland, something incredible is waiting to be known by our young scientists-to-be, so let us back the strategy, excite and encourage our youngsters to embrace science and watch the next generation of incredible discoveries unfold here in Scotland.

16:34

Sandra White (Glasgow Kelvin) (SNP): We have heard some interesting and knowledgeable speeches—they were certainly more knowledgeable than any speech that I could give, and I am not talking only about Stewart Stevenson's speech.

I welcome the opportunity to discuss the importance of science, technology, engineering and mathematics, particularly as we celebrate world science centre day. Scotland has a strong reputation in the STEM subjects and we must continue to build on that and put in place a strong foundation for those who want to follow a career in STEM. We are going about that and moving forward in the right way.

I will highlight a number of organisations whose actions enthuse me and others about science, mathematics and all the other areas that we have discussed. Those subjects can be exciting not just career-wise but in all respects. The three organisations are FemEng in Rwanda, Glasgow Science Centre and Kidney Research UK. I have visited them and hosted events for them in Parliament.

Last night, I hosted an event for Kidney Research UK, which pioneers renal research. All the contributors who spoke at the event said that the reason why £9.5 million of investment in renal research is coming to Scotland is that we have excellent universities, scientists and research facilities. The Kidney Research UK report "Pioneering renal research in Scotland" states:

"The representation of Scotland's scientists, clinicians and kidney patients has been vital to two of Kidney Research UK's biggest ever initiatives."

That tells us something about how well Scotland does in that field.

FemEng is a student network that was established in 2013 by Ellen Simmons, who is a biomedical engineering student at the University of Glasgow. FemEng students have been running programmes, activities and workshops for schools to promote science and engineering. That is a new and revolutionary method of reaching out in which young people are very interested.

FemEng students went to Rwanda to set up an innovative scientific programme, led by University of Glasgow engineering and science students, to work with female students from Rwanda. It was fantastic: the team worked with 500 Rwandan schoolgirls and encouraged them to take up further subjects in science and engineering. That is a unique and progressive way of learning. It involved everyone—the groups of young women in Rwanda and the students from Glasgow university—and gave them the opportunities that science can offer. I hope that such work will continue.

Members may have seen the BodyWorks on tour project on display in Parliament last week. It was created by the Glasgow Science Centre and is full of fun, interactive and—most important—educational work stations, and it has been touring schools throughout the country. It inspires children to interact with the exhibits and speaks to them about the body, health and wellbeing. It takes science to the masses, including schoolchildren from primary school onwards. It was amazing—I thoroughly enjoyed it and it gave me more insight into how mathematics and stem cells all link together.

Glasgow Science Centre has embraced the challenge of getting our kids excited about and interested in science. As I said when I intervened on Iain Gray, the centre has an extensive education programme that is linked to curriculum for excellence and a large collection of resources for teachers to access and use in the classroom. We should aspire to that provision in all areas, and I congratulate the centre on its work.

Just this week, to mark world science centre day, schoolchildren attended the centre to plant a tree that will grow from pips from the apple tree that inspired Sir Isaac Newton's theories about gravity. The centre presents science in such a way that young kids thoroughly enjoy it, and that is how we move forward.

The projects that I mentioned encapsulate the key priorities that are mentioned in the Scottish Government's motion, which are

"excellence, equality, inspiration and connection",

and I look forward to further projects.

The Deputy Presiding Officer: I call Daniel Johnson to close for Labour. You have five minutes.

16:39

Daniel Johnson (Edinburgh Southern) (Lab): We have had much discussion in Parliament about and with good reason. Science. technology, engineering and maths are the foundations of our country's future and economy. We have had discussions about enterprise agencies, innovation and modern apprenticeships, and if we are to embrace the changes that our economy is facing, STEM is critical. Both Mark Griffin and Jamie Greene did a good job this afternoon of laying the context for that. Mark Griffin outlined that by 2030 there will be 7 million jobs in the UK that are dependent on science, and Jamie Greene highlighted the opportunities and challenges that the digital economy will bring.

As much as STEM is important for new jobs, it is also important for doing old jobs in new ways. As much as we will have geneticists using robots to carry out their genetics work, we will also find that builders are only too aware that technology is coming their way, too, with three-dimensional printing technologies and off-site prefabrication. Every single one of our jobs will be touched by technology: from doctors to teachers shopkeepers to civil servants and chefs-maybe even politicians. We will all need to understand how to use science and technology to do our daily jobs.

As we look at the debate and try to embrace those changes, it is important that we understand the status quo. We have to understand where we are so that we can make a plan. I know that the minister was a little unwilling to go straight into statistics, so I will talk about the experience of a physics teachers from my constituency, who came to talk to me about the challenge of teaching national 4 and national 5 together. Part of both those curricula is teaching about waves. The problem is that she has to teach in a single class the concept of sound waves for national 4 along with electromagnetic waves for national 5, which is deeply challenging. It means that one of those subjects will be taught in an unsatisfactory way.

Furthermore, she told me that her school's resource budget is stretched by buying new stop clocks for the labs. Perhaps one can teach English with tatty books, but science needs resources. As Mark Griffin pointed out, resourcing in Scotland lags behind that in the rest of the UK, with £7.33 being spent per pupil in Scotland compared with £10.12 in England.

I almost wanted to laugh when Shirley-Anne Somerville brought up Pringles tubes as a serious alternative to spending in classrooms. Frankly, science needs to be resourced; it needs support. When one couples suggestions such as that with the facts that we have been losing two science teachers a week in Scotland, and that our technicians have been cut by a quarter and lab assistants by half since 2007, one can see the very serious situation that we face in science laboratories in our schools. We need support, we need resource and we need a curriculum that works.

I agree with much of what the Scottish Government says in its strategy, and a strategy is important and urgent, but the question is this: what is the Government doing? We need more teachers, but all we have in the strategy is discussion of a "pipeline". I used to be a management consultant, so I can management jargon when it is put in front of me: one talks about pipelines when one does not want to talk about the complexities or challenges of what one has to deliver. Talking about a pipeline in order to make people imagine that it is as simple as bolting something together and turning on a tap is not good enough. The reality is that we have only a trickle of teachers coming through; we are barely replacing the teachers who are exiting the profession.

We need a strategy, but what we have is a consultation. Iain Gray was right to point out that the strategy needs resources behind it and a plan with a specific timetable, because there is urgency. Liz Smith was absolutely right to point out that it is not a new set of challenges, and that this is not a new Government. It is a Government that has had 10 years to deal with the issues, but time after time in Parliament we come back to the subject, and we have had consultation after consultation. The challenges are not new, so we need action now.

The paucity of the plan comes under real scrutiny when we look at gender—Jenny Gilruth and Ross Thomson were absolutely right to raise the challenges of gender. However, all we have in the plan is warm words about what is already happening, vague promises of funding for external organisations and support for existing work. Quite simply, that is not good enough—it does not deal with the underlying challenges that need to be dealt with.

The Deputy Presiding Officer: Thank you, Mr Johnson. You must conclude.

Daniel Johnson: The reality is-

The Deputy Presiding Officer: No—you must conclude. That is a good place to stop. You have done your five minutes.

Edward Mountain has seven minutes.

16:45

Edward Mountain (Highlands and Islands) (Con): Thank you, Presiding Officer. I was rather nervous when I was asked to speak in the debate because I remembered what I was always told at school—that I could have done better. However, it appears that I am in good company this afternoon and that we could all do better.

There is agreement across the chamber that STEM subjects provide a broad spectrum of valuable and versatile skills, from analysis to problem solving. Those skills are vital as pupils progress through school, further education, higher education and apprenticeships, and on to their chosen careers.

We have also heard that one of the most serious issues that we need to address, which should cause us all concern, is the low number of girls taking up STEM subjects at secondary school and the consequent fall in the number of girls in STEM subjects at higher level. Higher maths is down by 2 per cent, physics by 7 per cent and biology by 21 per cent. Not enough is being done to encourage girls to take up those vital subjects—subjects that are becoming increasingly attractive and sought after in this technologically advancing economy.

The Government cannot claim that it has made progress if it accepts that, as the figures show, the number of STEM teachers has fallen. As my colleague Liz Smith and Daniel Johnson said, there is a major problem with recruitment of teachers. Since 2007, more than 100 STEM teachers have been cut every year. That is 410 fewer maths teachers, 187 fewer computing teachers and 105 fewer chemistry teachers. We need to replace those teachers. I agree with Tavish Scott and Stewart Stevenson that the teachers need to be inspirational in order to encourage people into STEM subjects. If the Government is to seize upon the opportunities and possibilities that STEM subjects can offer, surely it will accept that a strong foundation can be built only if there are sufficient teachers.

In a nutshell, Ross Thomson made it clear that if we do not encourage girls to have an active interest in STEM subjects at a young age—by which I mean primary school age—there is less chance of encouraging them to have an interest in STEM subjects in further and higher education. When I looked at the figures, it appeared that of the female students who graduate in STEM subjects the vast majority—73 per cent—do not go on to a STEM occupation. Quite frankly, that is not good enough. We must all accept that huge improvements need to be made there. It falls on

the Government, which rightly champions gender equality, to accept that it needs to work on that, and that, in the past seven years, it has failed to do so.

I turn to the role that UK businesses can play in relation to STEM. As Jamie Greene mentioned, we need to do more work on apprenticeships. In 2015, the UK Government announced that it was introducing an apprenticeship levy, which could fund up to 3 million apprenticeships. We need to ensure that some of those are STEM apprenticeships so that we encourage people into that area.

I do not have sufficient time to go into major detail, but I will give two examples that I believe work: the club TechFuture Girls that is run by Hewlett Packard Enterprise, and CDI Apps for Good. Those are excellent industry examples in which apprenticeships are encouraged. The Scottish Government must step up to the mark and do more to encourage businesses to grow apprenticeships.

I thought that it would be interesting before I conclude to highlight what is being achieved by two countries. First, in Germany, the federal Ministry of Education and Research has developed a long-term strategic partnership between science and business and has launched two initiatives to further that aim: one is its leadingedge cluster competition, and the other is a publicprivate partnership to foster innovation. Important components of those initiatives collaborative research and development and the development of innovative academic training and degree programmes. The German federal Government promotes the system of vocational education and training as a key factor in maintaining a low rate of youth unemployment. The fact that it maintains a rate of 8.2 per cent, which is the lowest in Europe, must make that approach worthy of consideration.

Secondly, in the Netherlands, the Government and education and business sectors have commissioned Bèta Techniek. I am acutely aware that I could run out of time, so I will not explain that initiative. If the Government would like further information on that, I will be happy to supply it.

It is clear to me that it will take an holistic approach to solve the problem. We need to make scientific careers more attractive to young people while being innovative in education to ensure that we engage young people at the earliest possible age. We should target industry, schools and universities, policymakers and specific regional and economic sectors to help us with that. We also need to target girls and women specifically, as well as ethnic minorities.

In conclusion, Scotland has had an excellent reputation over the centuries for performing well and being a world leader in STEM subjects. As Ross Thomson has said, Scotland has proved itself as an entrepreneurial and innovative centre of Europe. From the discovery of antibiotics and tropical medicine to the invention of the steam engine and the television, we recognise our history of great achievement in science, which we must build on. We must aim to channel that success into the promotion of STEM education in the future.

It is therefore with great sadness that I note that the Government has not taken positive action on 63 of the recommendations in the second science and engineering education advisory group report, which was published in 2012. To me, that is more than disappointing. The Government has let itself down and it has let Scotland down. Perhaps we should concentrate more on our future and what we can do for our children than on harping on about what has gone on in the past.

16:52

The Deputy First Minister and Cabinet Secretary for Education and Skills (John Swinney): I point out to Mr Mountain that he concluded by talking about the need to focus on the future rather than harping on about the past, even though he had just delivered a speech in which he harped on about the past. That is an interesting contradiction in the Conservatives' line of argument.

The highlight of the debate for me was undoubtedly the speech by Stewart Stevenson. I think that I speak for all members in that regard. It does not take much imagination to conceive of Mr Stevenson as a school pupil searching for infinity in his classroom with energy and enthusiasm. It is quite an endearing picture for us all to contemplate.

I will set out the Government's purpose in taking forward the STEM strategy and the consultation that has been the subject of debate this afternoon. The process has been led by the Minister for Further Education, Higher Education and Science, and Shirley-Anne Somerville, has significantly informed by the contribution of our chief scientific adviser, Professor Sheila Rowan. It is important that those who have been entrusted with taking forward the science agenda in the Government are given our support in advancing what is an important subject. However, it is not lost on me that the people to whom leadership of our agenda on science is entrusted—our science minister and our chief scientific adviser-are women. That is indicative of the Government's determination to tackle the gender imbalance in the pursuit of science in our country.

However, the Government acknowledges that there is much more that needs to be done to advance all these arguments. We will disagree on many points that have been mentioned this afternoon, but it is clear that we are all agreed on the question of strengthening the relationship between addressing the gender imbalance in STEM and increasing participation in STEM. I am happy to confirm to Parliament today that the Government will, in a focused way, consider the aims of the strategy to ensure that the fundamental issue of addressing the gender imbalance is at the heart of all that we do in taking forward the next steps of the strategy.

Jamie Greene: If the Government is so committed to increasing the number of females studying in Scotland, why has there been a 41 per cent decrease in the number of women in colleges in Scotland in eight years?

John Swinney: As the data will show, the level of female participation in full-time equivalent college places is on the increase. That is because the Government has concentrated on college places that will support the journey into work for individuals, which is the purpose of college education.

A number of colleagues across the political spectrum have paid tribute to my candour yesterday at the Royal Society of Chemistry. I appreciate that, because the Government goes into this debate determined to strengthen the delivery of STEM in Scotland and maximise its effectiveness. Of course, the Government should be challenged on such questions. However, it is equally valid for the Opposition to look carefully at what it is being asked to vote for in the Opposition amendments, and I want to spend a little bit of time going through them.

The first part of the Conservative amendment laments the fact that

"there has been no response from the Scottish Government to the call for fully trained science teachers in primary schools".

despite my answering that question myself—and I have been in office for only a few months—at yesterday's Royal Society of Chemistry event. Moreover, the Opposition knows full well that curriculum for excellence is founded on the principle of our primary school teachers being generalists who are supported to deliver the education that young people require. That is why the Government is investing in the Scottish schools education research centre: to upskill primary and secondary teachers and technicians so that they can make that contribution.

Liz Smith: Does the cabinet secretary not accept that, in the calls being made by the learned societies and the groups made up of specialists in

physics, chemistry, biology and so on, they are making the very point that they want those specialisms? They feel that the evidence that has been alluded to in many speeches this afternoon highlights a severe problem in the STEM area, which is not delivering the goods that the Scottish Government set out in 2012.

John Swinney: We will not always be able to do what all the learned societies want us to do. Curriculum for excellence is based on the delivery of a broad general education; indeed, Mr Scott made that point in what I thought was a very thoughtful contribution to the debate.

Liz Smith cannot dodge the point that I made in my earlier intervention. She regularly comes to the chamber demanding that we focus on literacy and numeracy, but today she comes demanding that we focus on science.

Liz Smith: Will the cabinet secretary give way?

John Swinney: No. I have given way already, and I have more ground to cover.

The contradiction at the heart of the Conservative amendment is laid bare on that question, but the contradiction goes further. In the second part of her amendment, Liz Smith laments that there has been

"no reversal of the recent and damaging cuts to the numbers of Scottish secondary school teachers in key STEM subjects".

Again, this takes us to some of the dilemmas at the heart of education. I do not choose—and I have no ability to choose—the teachers in individual schools in the country. That is properly the preserve of local authorities. However, Liz Smith and others come here and complain about my trying to ensure that local authorities can take forward some of the Government's priorities on teacher numbers. I have put money into the financial settlement to enable that.

Liz Smith: It is not the Conservatives who are making these points but the teaching profession, colleges, universities and businesses. Does the cabinet secretary not accept that?

John Swinney: I do not know how it is not the Conservatives who are making these points; after all, they are in the Conservative amendment that members of the Parliament are being asked to vote on.

My point is that Liz Smith is at the front of the queue, trying to protect local authorities' rights to take decisions on education, but the burden of her amendment is that, somehow, I should be telling local authorities how many science teachers they should have in their schools. The number of teachers in our schools today is higher than it would have been had I not put in place constraints

on local authorities' ability to reduce teacher numbers, which is what the local authorities wanted to do. Teacher numbers in Scotland are at their current level because we put money in to ensure that that would be the case.

Daniel Johnson: If the cabinet secretary wants to talk about constraints, how about the constraint of an 11 per cent fall in local authority budgets? Given that education is one of the largest items in those budgets, does he not think that that somewhat constrains their ability to employ science teachers? [Interruption.]

John Swinney: I do not know why the Conservatives are applauding, because they have been savaging public expenditure in the United Kingdom since 2010. That is the explanation for the reductions in budgets in Scotland. It is because of the austerity agenda of the United Kingdom Government.

lain Gray's amendment raises points about levels of participation in the STEM subjects. I am the first to accept that there are challenges in encouraging young people to become involved in those subjects. However, at the heart of the strategy is the determination to inspire and motivate young people to undertake that pursuit and to ensure that they are given the insight, energy and enthusiasm to make that contribution. That is at the heart of the Government's strategy on STEM, and it is what we want to ensure is the case in classrooms in Scotland. It is what we will focus on in taking forward an agenda that has the ambition of ensuring that Scotland is equipped with the STEM potential and capability to meet the economic challenges of the future. That lies at the heart of the Government's agenda.

Decision Time

17:00

The Presiding Officer (Ken Macintosh): There are three questions to be put as a result of today's business. The first question is, that amendment S5M-02418.1.1, in the name of lain Gray, which seeks to amend amendment S5M-02418.1, in the name of Liz Smith, be agreed to. Are we agreed?

Members: No.

The Presiding Officer: There will be a division.

For

Baker, Claire (Mid Scotland and Fife) (Lab)

Balfour, Jeremy (Lothian) (Con)

Beamish, Claudia (South Scotland) (Lab)

Bibby, Neil (West Scotland) (Lab)

Briggs, Miles (Lothian) (Con)

Burnett, Alexander (Aberdeenshire West) (Con)

Cameron, Donald (Highlands and Islands) (Con)

Carlaw, Jackson (Eastwood) (Con)

Carson, Finlay (Galloway and West Dumfries) (Con)

Chapman, Peter (North East Scotland) (Con)

Cole-Hamilton, Alex (Edinburgh Western) (LD)

Corry, Maurice (West Scotland) (Con)

Davidson, Ruth (Edinburgh Central) (Con)

Dugdale, Kezia (Lothian) (Lab)

Fee, Mary (West Scotland) (Lab)

Findlay, Neil (Lothian) (Lab)

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

Golden, Maurice (West Scotland) (Con)

Grant, Rhoda (Highlands and Islands) (Lab)

Gray, lain (East Lothian) (Lab)

Greene, Jamie (West Scotland) (Con)

Griffin, Mark (Central Scotland) (Lab)

Hamilton, Rachael (South Scotland) (Con)

Harris, Alison (Central Scotland) (Con)

Johnson, Daniel (Edinburgh Southern) (Lab)

Kelly, James (Glasgow) (Lab)

Kerr, Liam (North East Scotland) (Con)

Lamont, Johann (Glasgow) (Lab)

Lamont, John (Ettrick, Roxburgh and Berwickshire) (Con)

Lennon, Monica (Central Scotland) (Lab)

Leonard, Richard (Central Scotland) (Lab)

Lindhurst, Gordon (Lothian) (Con)

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

Macdonald, Lewis (North East Scotland) (Lab)

Marra, Jenny (North East Scotland) (Lab)

McNeill, Pauline (Glasgow) (Lab)

Mitchell, Margaret (Central Scotland) (Con)

Mountain, Edward (Highlands and Islands) (Con)

Mundell, Oliver (Dumfriesshire) (Con)

Rennie, Willie (North East Fife) (LD)

Ross, Douglas (Highlands and Islands) (Con)

Rumbles, Mike (North East Scotland) (LD)

Sarwar, Anas (Glasgow) (Lab)

Scott, John (Ayr) (Con)

Scott, Tavish (Shetland Islands) (LD)

Simpson, Graham (Central Scotland) (Con)

Smith, Liz (Mid Scotland and Fife) (Con)

Smyth, Colin (South Scotland) (Lab)

Stewart, Alexander (Mid Scotland and Fife) (Con)

Stewart, David (Highlands and Islands) (Lab)

Thomson, Ross (North East Scotland) (Con)

Tomkins, Adam (Glasgow) (Con)

Wells, Annie (Glasgow) (Con)

Whittle, Brian (South Scotland) (Con)

Against

Adam, George (Paisley) (SNP)

Adamson, Clare (Motherwell and Wishaw) (SNP)

Allan, Dr Alasdair (Na h-Eileanan an Iar) (SNP)

Arthur, Tom (Renfrewshire South) (SNP)

Beattie, Colin (Midlothian North and Musselburgh) (SNP)

Brown, Keith (Clackmannanshire and Dunblane) (SNP)

Campbell, Aileen (Clydesdale) (SNP)

Coffey, Willie (Kilmarnock and Irvine Valley) (SNP)

Constance, Angela (Almond Valley) (SNP)

Crawford, Bruce (Stirling) (SNP)

Cunningham, Roseanna (Perthshire South and Kinross-

shire) (SNP)

Denham, Ash (Edinburgh Eastern) (SNP)

Dey, Graeme (Angus South) (SNP)

Doris, Bob (Glasgow Maryhill and Springburn) (SNP)

Dornan, James (Glasgow Cathcart) (SNP)

Evans, Mairi (Angus North and Mearns) (SNP)

Ewing, Annabelle (Cowdenbeath) (SNP)

Ewing, Fergus (Inverness and Nairn) (SNP)

Fabiani, Linda (East Kilbride) (SNP)

FitzPatrick, Joe (Dundee City West) (SNP)

Freeman, Jeane (Carrick, Cumnock and Doon Valley)

Gibson, Kenneth (Cunninghame North) (SNP)

Gilruth, Jenny (Mid Fife and Glenrothes) (SNP)

Grahame, Christine (Midlothian South, Tweeddale and

Lauderdale) (SNP)

Harper, Emma (South Scotland) (SNP)

Haughey, Clare (Rutherglen) (SNP)

Hepburn, Jamie (Cumbernauld and Kilsyth) (SNP)

Hyslop, Fiona (Linlithgow) (SNP)

Kidd, Bill (Glasgow Anniesland) (SNP)

Lochhead, Richard (Moray) (SNP)

Lyle, Richard (Uddingston and Bellshill) (SNP)

MacDonald, Angus (Falkirk East) (SNP)

MacDonald, Gordon (Edinburgh Pentlands) (SNP)

MacGregor, Fulton (Coatbridge and Chryston) (SNP)

Mackay, Derek (Renfrewshire North and West) (SNP)

Mackay, Rona (Strathkelvin and Bearsden) (SNP) Macpherson, Ben (Edinburgh Northern and Leith) (SNP)

Maguire, Ruth (Cunninghame South) (SNP)

Martin, Gillian (Aberdeenshire East) (SNP)

Mason, John (Glasgow Shettleston) (SNP)

Matheson, Michael (Falkirk West) (SNP)

McAlpine, Joan (South Scotland) (SNP)

McDonald, Mark (Aberdeen Donside) (SNP)

McKee, Ivan (Glasgow Provan) (SNP)

McKelvie, Christina (Hamilton, Larkhall and Stonehouse) (SNP)

McMillan, Stuart (Greenock and Inverclyde) (SNP)

Neil, Alex (Airdrie and Shotts) (SNP)

Paterson, Gil (Clydebank and Milngavie) (SNP)

Robison, Shona (Dundee City East) (SNP)

Ross, Gail (Caithness, Sutherland and Ross) (SNP)

Russell, Michael (Argyll and Bute) (SNP)

Somerville, Shirley-Anne (Dunfermline) (SNP) Stevenson, Stewart (Banffshire and Buchan Coast) (SNP)

Stewart, Kevin (Aberdeen Central) (SNP)

Sturgeon, Nicola (Glasgow Southside) (SNP)

Swinney, John (Perthshire North) (SNP)

Todd, Maree (Highlands and Islands) (SNP)

Watt, Maureen (Aberdeen South and North Kincardine) (SNP)

Wheelhouse, Paul (South Scotland) (SNP)

White, Sandra (Glasgow Kelvin) (SNP)

Yousaf, Humza (Glasgow Pollok) (SNP)

Abstentions

Finnie, John (Highlands and Islands) (Green)

Greer, Ross (West Scotland) (Green)

Harvie, Patrick (Glasgow) (Green)

Johnstone, Alison (Lothian) (Green) Ruskell, Mark (Mid Scotland and Fife) (Green) Wightman, Andy (Lothian) (Green)

The Presiding Officer: The result of the division is: For 54, Against 61, Abstentions 6.

Amendment disagreed to.

The Presiding Officer: The next question is, that amendment S5M-02418.1, in the name of Liz Smith, which seeks to amend motion S5M-02418, in the name of Shirley-Anne Somerville, on the Government's consultation on a strategy for science, technology, engineering and mathematics education and training, be agreed to. Are we agreed?

Members: No.

The Presiding Officer: There will be a division.

For

Baker, Claire (Mid Scotland and Fife) (Lab) Balfour, Jeremy (Lothian) (Con)

Beamish, Claudia (South Scotland) (Lab)

Bibby, Neil (West Scotland) (Lab)

Briggs, Miles (Lothian) (Con)

Burnett, Alexander (Aberdeenshire West) (Con)

Cameron, Donald (Highlands and Islands) (Con)

Carlaw, Jackson (Eastwood) (Con)

Carson, Finlay (Galloway and West Dumfries) (Con)

Chapman, Peter (North East Scotland) (Con)

Cole-Hamilton, Alex (Edinburgh Western) (LD)

Corry, Maurice (West Scotland) (Con)

Davidson, Ruth (Edinburgh Central) (Con)

Dugdale, Kezia (Lothian) (Lab)

Fee, Mary (West Scotland) (Lab)

Findlay, Neil (Lothian) (Lab)

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

Golden, Maurice (West Scotland) (Con)

Grant, Rhoda (Highlands and Islands) (Lab)

Gray, Iain (East Lothian) (Lab)

Greene, Jamie (West Scotland) (Con)

Griffin, Mark (Central Scotland) (Lab)

Hamilton, Rachael (South Scotland) (Con)

Harris, Alison (Central Scotland) (Con)

Johnson, Daniel (Edinburgh Southern) (Lab)

Kelly, James (Glasgow) (Lab)

Kerr, Liam (North East Scotland) (Con)

Lamont, Johann (Glasgow) (Lab)

Lamont, John (Ettrick, Roxburgh and Berwickshire) (Con)

Lennon, Monica (Central Scotland) (Lab)

Leonard, Richard (Central Scotland) (Lab)

Lindhurst, Gordon (Lothian) (Con)

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

Macdonald, Lewis (North East Scotland) (Lab)

Marra, Jenny (North East Scotland) (Lab)

McNeill, Pauline (Glasgow) (Lab)

Mitchell, Margaret (Central Scotland) (Con)

Mountain, Edward (Highlands and Islands) (Con)

Mundell, Oliver (Dumfriesshire) (Con)

Rennie, Willie (North East Fife) (LD)

Ross, Douglas (Highlands and Islands) (Con)

Rumbles, Mike (North East Scotland) (LD)

Sarwar, Anas (Glasgow) (Lab)

Scott, John (Ayr) (Con)

Scott, Tavish (Shetland Islands) (LD)

Simpson, Graham (Central Scotland) (Con)

Smith, Liz (Mid Scotland and Fife) (Con)

Smyth, Colin (South Scotland) (Lab)

Stewart, Alexander (Mid Scotland and Fife) (Con)

Stewart, David (Highlands and Islands) (Lab)

Thomson, Ross (North East Scotland) (Con)

Tomkins, Adam (Glasgow) (Con)

Wells, Annie (Glasgow) (Con)

Whittle, Brian (South Scotland) (Con)

Against

Adam, George (Paisley) (SNP)

Adamson, Clare (Motherwell and Wishaw) (SNP)

Allan, Dr Alasdair (Na h-Eileanan an Iar) (SNP)

Arthur, Tom (Renfrewshire South) (SNP)

Beattie, Colin (Midlothian North and Musselburgh) (SNP)

Brown, Keith (Clackmannanshire and Dunblane) (SNP)

Campbell, Aileen (Clydesdale) (SNP)

Coffey, Willie (Kilmarnock and Irvine Valley) (SNP)

Constance, Angela (Almond Valley) (SNP)

Crawford, Bruce (Stirling) (SNP)

Cunningham, Roseanna (Perthshire South and Kinross-

shire) (SNP)

Denham, Ash (Edinburgh Eastern) (SNP)

Dey, Graeme (Angus South) (SNP)

Doris, Bob (Glasgow Maryhill and Śpringburn) (SNP)

Dornan, James (Glasgow Cathcart) (SNP)

Evans, Mairi (Angus North and Mearns) (SNP)

Ewing, Annabelle (Cowdenbeath) (SNP

Ewing, Fergus (Inverness and Nairn) (SNP)

Fabiani, Linda (East Kilbride) (SNP)

FitzPatrick, Joe (Dundee City West) (SNP)

Freeman, Jeane (Carrick, Cumnock and Doon Valley)

(SNP)

Gibson, Kenneth (Cunninghame North) (SNP)

Gilruth, Jenny (Mid Fife and Glenrothes) (SNP)

Grahame, Christine (Midlothian South, Tweeddale and

Lauderdale) (SNP)

Harper, Emma (South Scotland) (SNP)

Haughey, Clare (Rutherglen) (SNP)

Hepburn, Jamie (Cumbernauld and Kilsyth) (SNP)

Hyslop, Fiona (Linlithgow) (SNP)

Kidd, Bill (Glasgow Anniesland) (SNP)

Lochhead, Richard (Moray) (SNP)

Lyle, Richard (Uddingston and Bellshill) (SNP)

MacDonald, Angus (Falkirk East) (SNP)

MacDonald, Gordon (Edinburgh Pentlands) (SNP)

MacGregor, Fulton (Coatbridge and Chryston) (SNP)

Mackay, Derek (Renfrewshire North and West) (SNP)

Mackay, Rona (Strathkelvin and Bearsden) (SNP)

Macpherson, Ben (Edinburgh Northern and Leith) (SNP)

Maguire, Ruth (Cunninghame South) (SNP)

Martin, Gillian (Aberdeenshire East) (SNP)

Mason, John (Glasgow Shettleston) (SNP)

Matheson, Michael (Falkirk West) (SNP)

McAlpine, Joan (South Scotland) (SNP) McDonald, Mark (Aberdeen Donside) (SNP)

McKee, Ivan (Glasgow Provan) (SNP)

McKelvie, Christina (Hamilton, Larkhall and Stonehouse)

McMillan, Stuart (Greenock and Inverclyde) (SNP)

Neil, Alex (Airdrie and Shotts) (SNP)

Paterson, Gil (Clydebank and Milngavie) (SNP)

Robison, Shona (Dundee City East) (SNP)

Ross, Gail (Caithness, Sutherland and Ross) (SNP)

Russell, Michael (Argyll and Bute) (SNP)

Somerville, Shirley-Anne (Dunfermline) (SNP)

Stevenson, Stewart (Banffshire and Buchan Coast) (SNP)

Stewart, Kevin (Aberdeen Central) (SNP)

Sturgeon, Nicola (Glasgow Southside) (SNP)

Swinney, John (Perthshire North) (SNP)

Todd, Maree (Highlands and Islands) (SNP)

Watt, Maureen (Aberdeen South and North Kincardine)

Wheelhouse, Paul (South Scotland) (SNP)

White, Sandra (Glasgow Kelvin) (SNP) Yousaf, Humza (Glasgow Pollok) (SNP)

Abstentions

Finnie, John (Highlands and Islands) (Green) Greer, Ross (West Scotland) (Green) Harvie, Patrick (Glasgow) (Green) Johnstone, Alison (Lothian) (Green) Ruskell, Mark (Mid Scotland and Fife) (Green) Wightman, Andy (Lothian) (Green)

The Presiding Officer: The result of the division is: For 54, Against 61, Abstentions 6.

Amendment disagreed to.

The Presiding Officer: The final question is, that motion S5M-02418, in the name of Shirley-Anne Somerville, on the Scottish Government's consultation on a strategy for STEM education and training, be agreed to. Are we agreed?

Members: No.

The Presiding Officer: There will be a division.

Adam, George (Paisley) (SNP)

Adamson, Clare (Motherwell and Wishaw) (SNP)

Allan, Dr Alasdair (Na h-Eileanan an Iar) (SNP)

Arthur, Tom (Renfrewshire South) (SNP)

Baker, Claire (Mid Scotland and Fife) (Lab)

Beamish, Claudia (South Scotland) (Lab)

Beattie, Colin (Midlothian North and Musselburgh) (SNP)

Bibby, Neil (West Scotland) (Lab)

Brown, Keith (Clackmannanshire and Dunblane) (SNP)

Campbell, Aileen (Clydesdale) (SNP)

Coffey, Willie (Kilmarnock and Irvine Valley) (SNP)

Cole-Hamilton, Alex (Edinburgh Western) (LD)

Constance, Angela (Almond Valley) (SNP)

Crawford, Bruce (Stirling) (SNP)

Cunningham, Roseanna (Perthshire South and Kinrossshire) (SNP)

Denham, Ash (Edinburgh Eastern) (SNP)

Dey, Graeme (Angus South) (SNP)

Doris, Bob (Glasgow Maryhill and Springburn) (SNP)

Dornan, James (Glasgow Cathcart) (SNP)

Dugdale, Kezia (Lothian) (Lab)

Evans, Mairi (Angus North and Mearns) (SNP)

Ewing, Annabelle (Cowdenbeath) (SNP)

Ewing, Fergus (Inverness and Nairn) (SNP)

Fabiani, Linda (East Kilbride) (SNP)

Fee, Mary (West Scotland) (Lab)

Findlay, Neil (Lothian) (Lab)

Finnie, John (Highlands and Islands) (Green)

FitzPatrick, Joe (Dundee City West) (SNP)

Freeman, Jeane (Carrick, Cumnock and Doon Valley) (SNP)

Gibson, Kenneth (Cunninghame North) (SNP)

Gilruth, Jenny (Mid Fife and Glenrothes) (SNP)

Grahame, Christine (Midlothian South, Tweeddale and

Lauderdale) (SNP)

Grant, Rhoda (Highlands and Islands) (Lab)

Gray, Iain (East Lothian) (Lab)

Greer, Ross (West Scotland) (Green)

Griffin, Mark (Central Scotland) (Lab)

Harper, Emma (South Scotland) (SNP)

Harvie, Patrick (Glasgow) (Green)

Haughey, Clare (Rutherglen) (SNP)

Hepburn, Jamie (Cumbernauld and Kilsyth) (SNP)

Hyslop, Fiona (Linlithgow) (SNP)

Johnson, Daniel (Edinburgh Southern) (Lab)

Johnstone, Alison (Lothian) (Green)

Kelly, James (Glasgow) (Lab)

Kidd, Bill (Glasgow Anniesland) (SNP)

Lamont, Johann (Glasgow) (Lab)

Lennon, Monica (Central Scotland) (Lab)

Leonard, Richard (Central Scotland) (Lab)

Lochhead, Richard (Moray) (SNP)

Lyle, Richard (Uddingston and Bellshill) (SNP)

MacDonald, Angus (Falkirk East) (SNP)

MacDonald, Gordon (Edinburgh Pentlands) (SNP)

Macdonald, Lewis (North East Scotland) (Lab)

MacGregor, Fulton (Coatbridge and Chryston) (SNP)

Mackay, Derek (Renfrewshire North and West) (SNP)

Mackay, Rona (Strathkelvin and Bearsden) (SNP)

Macpherson, Ben (Edinburgh Northern and Leith) (SNP)

Maguire, Ruth (Cunninghame South) (SNP) Marra, Jenny (North East Scotland) (Lab)

Martin, Gillian (Aberdeenshire East) (SNP)

Mason, John (Glasgow Shettleston) (SNP)

Matheson, Michael (Falkirk West) (SNP)

McAlpine, Joan (South Scotland) (SNP)

McDonald, Mark (Aberdeen Donside) (SNP)

McKee, Ivan (Glasgow Provan) (SNP)

McKelvie, Christina (Hamilton, Larkhall and Stonehouse) (SNP)

McMillan, Stuart (Greenock and Inverciyde) (SNP)

McNeill, Pauline (Glasgow) (Lab)

Neil, Alex (Airdrie and Shotts) (SNP)

Paterson, Gil (Clydebank and Milngavie) (SNP)

Rennie, Willie (North East Fife) (LD)

Robison, Shona (Dundee City East) (SNP)

Ross, Gail (Caithness, Sutherland and Ross) (SNP)

Rumbles, Mike (North East Scotland) (LD)

Ruskell, Mark (Mid Scotland and Fife) (Green)

Russell, Michael (Argyll and Bute) (SNP)

Sarwar, Anas (Glasgow) (Lab)

Scott, Tavish (Shetland Islands) (LD)

Smyth, Colin (South Scotland) (Lab)

Somerville, Shirley-Anne (Dunfermline) (SNP)

Stevenson, Stewart (Banffshire and Buchan Coast) (SNP)

Stewart, David (Highlands and Islands) (Lab)

Stewart, Kevin (Aberdeen Central) (SNP)

Sturgeon, Nicola (Glasgow Southside) (SNP)

Swinney, John (Perthshire North) (SNP)

Todd, Maree (Highlands and Islands) (SNP)

Watt, Maureen (Aberdeen South and North Kincardine)

(SNP)

Wheelhouse, Paul (South Scotland) (SNP)

White, Sandra (Glasgow Kelvin) (SNP)

Wightman, Andy (Lothian) (Green)

Yousaf, Humza (Glasgow Pollok) (SNP)

Against

Balfour, Jeremy (Lothian) (Con)

Briggs, Miles (Lothian) (Con)

Burnett, Alexander (Aberdeenshire West) (Con)

Cameron, Donald (Highlands and Islands) (Con)

Carlaw, Jackson (Eastwood) (Con)

Carson, Finlay (Galloway and West Dumfries) (Con)

Chapman, Peter (North East Scotland) (Con)

Corry, Maurice (West Scotland) (Con)

Davidson, Ruth (Edinburgh Central) (Con)

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

Golden, Maurice (West Scotland) (Con)

Greene, Jamie (West Scotland) (Con) Hamilton, Rachael (South Scotland) (Con)

Harris, Alison (Central Scotland) (Con)

Kerr, Liam (North East Scotland) (Con)

Lamont, John (Ettrick, Roxburgh and Berwickshire) (Con)

Lindhurst, Gordon (Lothian) (Con)

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

Mitchell, Margaret (Central Scotland) (Con)

Mountain, Edward (Highlands and Islands) (Con) Mundell, Oliver (Dumfriesshire) (Con) Ross, Douglas (Highlands and Islands) (Con) Scott, John (Ayr) (Con) Simpson, Graham (Central Scotland) (Con) Smith, Liz (Mid Scotland and Fife) (Con) Stewart, Alexander (Mid Scotland and Fife) (Con) Thomson, Ross (North East Scotland) (Con) Tomkins, Adam (Glasgow) (Con) Wells, Annie (Glasgow) (Con) Whittle, Brian (South Scotland) (Con)

The Presiding Officer: The result of the division is: For 91, Against 30, Abstentions 0.

Motion agreed to,

That the Parliament welcomes the publication of the Scottish Government consultation, A STEM Education and Training Strategy for Scotland, and its four key priority areas for action, which are excellence, equality, inspiration and connection; acknowledges the importance of STEM to increasing economic competitiveness, tackling inequality and raising educational attainment, and recognises that there is more to do to develop STEM skills, knowledge and capability if the demands and challenges of the economy are to be met and build the society that Scotland wants to see now and in the future.

Meeting closed at 17:04.

This is the final edition of the <i>Official Report</i> for this meeting and has been se	g. It is part of the Scottish Parliament <i>Official Report</i> archive ent for legal deposit.
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