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Scottish Parliament

Wednesday 9 January 2019

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

Portfolio Question Time

Finance, Economy and Fair Work

Council Tax (Single-person Discount)

1. Alexander Stewart (Mid Scotland and Fife)

(Con): To ask the First—the Scottish Government [Interruption.] I nearly called Derek Mackay the First Minister. [Laughter.] Actually, Kate Forbes will answer the question. Even better. Nearly there, but not quite. Maybe some day.

To ask the Scottish Government what plans it has to review the single-person discount for council tax. (S5O-02729)

The Presiding Officer (Ken Macintosh): I call the minister—Kate Forbes.

Alexander Stewart: At the moment.

The Minister for Public Finance and Digital Economy (Kate Forbes): I am more than delighted to answer that question. The Scottish Government has no plans to review the single-person discount for council tax.

Alexander Stewart: I am delighted that the Scottish Government has no plans to do that at present, because the single-person discount is particularly important for pensioners who are on fixed incomes. It is good to hear the minister indicate categorically that there will be no change. It is vital that we have that clarification, and I look forward to that continuing. Thank you.

The Presiding Officer: Minister?

Kate Forbes: I confirm once again that we have no plans to review the single-person discount.

Kenneth Gibson (Cunninghame North) (SNP): I wish everyone a happy new year. Will the minister confirm that when council tax benefit was devolved, the United Kingdom Tory Government devolved only 90 per cent of the funding, which left the Scottish Government and local authorities with a £42 million funding gap? Does she agree that that is typical of the bad faith that is shown by the Tories in respect of devolved powers? They take every opportunity to cut Scotland's resources, regardless of the impact on the most vulnerable people.

Kate Forbes: I confirm that it is typical of the Scottish Government's efforts that we continually

work to mitigate Tory austerity and to invest in public services.

I also confirm that when council tax benefit was abolished by the UK Government in 2013 it transferred £328 million to the Scottish budget, which corresponded to 90 per cent of the projected costs of delivering council tax support in that year. However, working in partnership with local government, we responded quickly to put in place transitional arrangements to plug the resulting £40 million funding gap.

Jackie Baillie (Dumbarton) (Lab): I asked the current First Minister to rule out any changes to the single-person water discount and the single-person council tax discount at question time on 8 November, but she refused to do so. Given that those two benefits operate in the same way, the legitimate concerns are that the Scottish Government's proposal to remove water discounts is the thin end of the wedge, and that council tax discounts for single people are next. Will the minister rule out any cuts to the single-person water discount as well as to the council tax discount?

Kate Forbes: I repeat my answer that the Scottish Government has no plans to review the single-person discount for council tax. However, we have consulted on amending the present single-person discount for water charges, which are quite different. That consultation closed on 28 September 2018, and a summary of the responses was published on 19 December 2018. Having listened to feedback from customers, we intend to undertake further research, consultation and engagement before making a decision on whether to amend the existing discounts.

Economic Growth (Forecast)

2. **Liam Kerr (North East Scotland) (Con):** To ask the Scottish Government how the Scottish Fiscal Commission's forecast for economic growth in Scotland over the next four years compares with that for the United Kingdom as a whole. (S5O-02730)

The Cabinet Secretary for Finance, Economy and Fair Work (Derek Mackay): The Scottish Fiscal Commission forecasts economic growth in Scotland to be faster than the Office for Budget Responsibility forecast for the UK in 2018. Comparing the forecasts, economic growth per person will be similar in Scotland and the UK over the next four years, but overall gross domestic product growth will be lower in Scotland as a result of slower population growth. That certainly underlines the importance of Scotland being able to develop a migration policy that is tailored to our needs, rather than to those of the UK Government.

Liam Kerr: I thank the cabinet secretary for that answer, in which he failed to make it clear that the SFC's forecast shows that Scottish economic growth will lag behind that of the UK as a whole for the next four years.

The Scottish National Party is always keen to blame its failings on the UK Government or Brexit—and sometimes even on the weather. Can the cabinet secretary tell us, in simple terms, how Scotland's growth rate being lower than that of the rest of the UK can be due to anything other than the SNP?

Derek Mackay: It is very interesting that Liam Kerr has forgotten that in some of last year's quarters, Scotland's economic growth and GDP outperformed those of the United Kingdom. Surely the same logic applies: Scotland's economic growth outperforming the UK's is because of the SNP Government. In truth, the reality is that a large part of macroeconomic policy is still in the hands of the Westminster Government, although we would like that to be changed.

The biggest threat to the economy just now, and the main reason for the subdued figures in forecast economic growth, is Brexit uncertainty. Who has caused that? It is the Conservative Party.

We are making a lot of effort to enhance and accelerate our economic growth. We have referenced only the SFC's and OBR's forecasts. As a matter of fact, the SFC economic forecasts for 2018 were wrong, because Scotland has outperformed them. What is more, the SFC had to revise upwards the economic forecast for the Scottish context.

I welcome the work of economists in forecasting economic growth. We will do everything that we can to stimulate economic growth. However, the biggest threat to that right now is Brexit mismanagement at the hand of the UK Government.

Richard Lyle (Uddingston and Bellshill) (SNP): For the record, will the cabinet secretary confirm what Scotland's GDP growth was predicted to be over the past year and what it has been?

Derek Mackay: The answer to Mr Lyle's question will add further detail to the point that I made about Scotland having already outperformed the SFC forecasts. Of course, there will be revisions and a further estimate for the final quarter, but in December 2017 the SFC forecast was that GDP would grow by 0.7 per cent in 2018. The full-year growth figure for 2018 is not yet available. However, in the first three quarters of the year, the economy has grown by 1.2 per cent, so in 2018 we have had growth that has been higher than was forecast.

Richard Lyle: Oh!

Derek Mackay: I hear that Richard Lyle is delighted by that news. Growth for 2018 is now forecast to be 1.4 per cent, which is double the original SFC forecast.

Rhoda Grant (Highlands and Islands) (Lab): We have much indigenous talent in Scotland that could well boost our economy, but financial assistance tends to be given to larger companies. What will the Scottish Government do to encourage and grow our talent, and to support small and medium-sized enterprises that are more likely to stay here?

Derek Mackay: I welcome the question and appreciate the point. We want to scale up businesses, get more businesses exporting and have more diversity in that regard. I do not think that Rhoda Grant was in any way trying to imply that we should not also rely on or encourage further migration to Scotland as a welcome addition to our economy, because population is a huge issue for economic growth.

I am directing the enterprise agencies to do even more on scaling up and supporting small and medium-sized enterprises. There are other efforts and there is the economic action plan. I take Rhoda Grant's point on board.

Even though unemployment is at a record low of 3.7 per cent, which I had thought Labour members would welcome, we can do more on reskilling and encouraging back into the workforce people who have been removed from it. Therefore, there are efforts being made around gender and reskilling.

Scottish Reserve

3. **Jeremy Balfour (Lothian) (Con):** To ask the Scottish Government what the size is of the Scottish reserve. (S5O-02731)

The Cabinet Secretary for Finance, Economy and Fair Work (Derek Mackay): The balance of the Scotland reserve that was reported in the fiscal framework outturn report in September 2018 was £192 million.

Jeremy Balfour: The cabinet secretary proposes to draw down from the Scottish reserve the maximum available sum this financial year. Given that the Scottish Fiscal Commission forecasts a deficit of £472 million in income tax receipts for the current year, would not it be wise to top up the reserve at this stage, rather than to run it down?

Derek Mackay: Jeremy Balfour puts across a legitimate view. If that is the formal view of the Conservatives, so be it. However, not drawing that money down would mean further reductions in spending on Scotland's public services in the financial year 2019-20. It is a legitimate view to

suggest putting more in the reserve for a rainy day, for reconciliation or for any other matter. My judgment is that, right now, the economy needs stability, economic stimulus, certainty and sustainable public services. Therefore, the budget that I have proposed relies on that transfer.

Other levers are available to the Government in the event of a negative reconciliation. Of course, we would use the most recent fiscal figures to do that. However, there is a choice. If I were now to follow the Conservatives on tax alone, that would mean a £500 million reduction in funding to Scotland's public services. To follow Jeremy Balfour's advice would further reduce spending on Scotland's public services in 2019-20 by not using reserves in the fashion that I have proposed in the Scottish budget.

Bruce Crawford (Stirling) (SNP): Does the cabinet secretary agree that it is utterly hypocritical for the Tories to take that position, given that we saw today in papers from the Office of Budget Responsibility that every penny that is going into the national health service, which has been mentioned by the Prime Minister, is coming from borrowing rather than from a Brexit dividend?

Derek Mackay: It is still true to say that the UK Government has short-changed Scotland's NHS by giving us £50 million-odd less resource than was previously committed. The UK Government's mishandling of the UK economy and the Brexit negotiations has meant that economic growth has been less, and that it is having to borrow more than it first thought it would. The UK Government actually had more firepower in terms of reserves that it could have used to stimulate the economy, but it chose to hold them back.

However we look at it, the Tories' economic credibility is shot to pieces—it is just gone. The Tories have no economic credibility whatsoever any more. That is what is subduing the economic forecast for the UK and—for that matter—for Scotland.

General Revenue Funding (Aberdeen City Council)

4. **Lewis Macdonald (North East Scotland) (Lab):** To ask the Scottish Government what general revenue funding it plans to provide to Aberdeen City Council in 2019-20. (S5O-02732)

The Minister for Public Finance and Digital Economy (Kate Forbes): Aberdeen City Council will receive almost £336 million of general revenue funding in 2019-20. Using its council tax powers could also generate an additional £3.7 million to support the delivery of essential local services, which would mean an extra £10.7 million or 3.2 per cent of revenue funding in 2019-20 compared with 2018-19. In addition, Aberdeen City Council

will receive its fair share of a further £233 million following agreement on the distribution methodology with the Convention of Scottish Local Authorities.

Lewis Macdonald: The minister will know that most of the sums to which she referred come not from general revenue funding, about which I asked, but from non-domestic rates. In *The Press and Journal* today, a Government spokeswoman confirmed that, this year, the council is expected to collect over £255 million in business rates compared with a target of less than £228 million—a difference of nearly £28 million. Can the minister confirm that Aberdeen City Council will be able to retain every single penny of that additional business rate income this year, as her representative also told the *The Press and Journal*? If so, will she apply the same principle to the next financial year?

Kate Forbes: I can confirm unequivocally that local councils keep every penny of revenue raised through non-domestic rates.

Mark McDonald (Aberdeen Donside) (Ind): In my constituency, Northfield has a child poverty rate of 33 per cent while Bridge of Don has a child poverty rate of less than 5 per cent. When the city is looked as a whole, the affluence of the latter community masks the poverty of the former. Does the minister agree that, as well as looking at local authority revenue-raising powers, it is time that we looked at how local authority finance is calculated and how need is calculated?

Kate Forbes: I am sorry, but I am afraid that I missed the question.

The Presiding Officer: Mark McDonald may repeat the question.

Mark McDonald: I mentioned two communities in my constituency: Northfield and Bridge of Don. One has a child poverty rate of 33 per cent; one has a child poverty rate of less than 5 per cent. When the city is looked at as a whole, the affluence masks the poverty. When looking at local government finance, as well as the debate that is taking place on local authority revenue-raising powers, is it not time that we took a long, hard look at how revenue for local authorities is calculated as part of the funding formula?

Kate Forbes: I thank Mark McDonald for repeating the question. Local authority funding is allocated using that needs-based formula, but the member raises a good point about the importance of ensuring that the funding that is raised goes to the areas of greatest need. Of course, the formula is kept under constant review and is agreed each year with COSLA to ensure that no local authority, including Aberdeen City Council, receives less than 85 per cent of the Scottish average on a per capita basis. The Scottish

Government introduced that funding floor in 2012 to ensure that there was fairness.

The Presiding Officer: We have a further supplementary question from Tom Mason.

Tom Mason (North East Scotland) (Con): I remind the chamber that I remain a councillor in Aberdeen City Council.

Despite the minister's warm words for local authorities, according to the Convention of Scottish Local Authorities, the settlement is insufficient and will send councils towards a "cliff edge". Conversely, between 2010-11 and 2019-20, rates for businesses in Aberdeen have almost tripled, going from £84 million to £258 million. That represents an increase of 207 per cent, compared with a 52 per cent increase in Glasgow, for example.

Does the minister think that it is acceptable to simply shift the responsibility for his local government shortfall to hard-pressed local businesses?

Kate Forbes: As the responsible minister, I have ensured that, for this year and for the next two years, there is a transitional cap on non-domestic rates so that offices in Aberdeen and Aberdeenshire do not see a significant increase in their business rates immediately but instead experience a transitional phasing.

The member knows fine well—particularly as he is a councillor—that it is misleading to quote the general revenue grant funding alone, because the Scottish Government guarantees every local authority, including Aberdeen City Council, the combined general revenue grant and non-domestic rates income. All of that money is spent on public services that matter to the people of Aberdeen, although, of course, the council has freedom to decide its priorities for the coming year.

Bus Services (Financial Support)

5. John Finnie (Highlands and Islands) (Green): To ask the Scottish Government for what reason its draft budget proposes a reduction in financial support for bus services. (S5O-02733)

The Minister for Public Finance and Digital Economy (Kate Forbes): Financial support for the bus industry will not be reduced. The draft budget maintains the same level of investment through the bus service operator grant of £54.2 million. Last year, the budget included a one-off allocation of £10 million of financial transaction loan facilities, which were not used, as no viable option for their use was identified with the bus industry. This year's draft budget includes an additional £3 million of capital grant funding for the bus industry.

John Finnie: It is my understanding that funding has fallen from £64.2 million to £57.2 million.

Ministers are often keen to quote Professor Philip Alston's United Nations report, which was critical of the United Kingdom Government. It said:

"Transport, especially in rural areas, should be considered an essential service, equivalent to water and electricity, and the government should regulate the sector to the extent necessary to ensure that people living in rural areas are adequately served."

The vast majority of public transport journeys are taken by bus, but patronage has fallen. How can the Government justify making a cut of £7 million to the funds that support the services that many of our communities depend on?

Kate Forbes: I recognise the importance of bus services, particularly in rural areas. As I said in my first answer, last year we worked with the bus industry to identify a use for the loan funding, but an attractive option did not emerge. Should a suitable option emerge in our 2019-20 discussions with the bus industry, we will assess the possibility of accessing a financial transaction loan. However, it is important to say that we continue to spend more than £250 million a year on supporting the bus network and funding concessionary travel, and the current programme for government commits to providing stability for bus services, which was one of the industry's requests, with funding over three years.

Inclusive Growth (Ayrshire)

6. Ruth Maguire (Cunninghame South) (SNP): To ask the Scottish Government what action it is taking to ensure inclusive growth in Ayrshire. (S5O-02734)

The Cabinet Secretary for Finance, Economy and Fair Work (Derek Mackay): The Scottish Government and its agencies continue to support significant levels of investment in Ayrshire, in key areas such as housing, transport and skills, to drive inclusive growth. An immediate priority is to press the United Kingdom Government to join us in agreeing a growth deal for Ayrshire, so that local communities there can benefit from the same transformational investment that is being made in our city regions.

Ruth Maguire: The Ayrshire growth deal, which has inclusive growth at its heart, is crucial to the economy in Ayrshire. What more can parliamentarians and the Scottish Government do to ensure that the UK Government turns its warm words into action and signs the deal to bring much-needed investment and jobs to our Ayrshire communities?

Derek Mackay: I suppose that all parties in the Parliament can unite to continue to call on the UK

Government to take that action. As the finance secretary, I have certainly done so when I have met my colleagues in the Treasury, and I know that, in December, the Cabinet Secretary for Transport, Infrastructure and Connectivity wrote to the Secretary of State for Scotland, urging the UK Government to match the ambition that has been shown by Ayrshire partners to have the heads of terms agreed by 25 January. At the moment, it appears that the UK Government will not be able to do that. We will continue to press for the heads of terms to be agreed as soon as possible, and all members across the chamber should continue to do so, too. Ayrshire has waited too long for its growth deal and we want to get on with it.

Emma Harper (South Scotland) (SNP): Yesterday, it was announced that Hourstons department store, which first opened its doors in Ayr in 1896, is to be the latest casualty in the decline of our high streets and is to officially close on 7 February, resulting in more than 80 job losses. Is the Scottish Government aware of the issue and has it been in communication with the store management to see what support—if any—can be offered to the store and its staff at this difficult time?

Derek Mackay: I will make two points on that. First, Mr Hepburn, as the business minister, will be involved and, as in any situation of redundancies, partnership action for continuing employment—PACE—will be involved. There will be Scottish Government involvement through Skills Development Scotland and PACE.

Secondly, retail is under pressure right across the United Kingdom, which is part of the reason why, in the draft budget, we propose to give relief through the poundage for business rates. That measure, along with the small business bonus and other reliefs, is important in helping retail at this point, particularly in town centres, and 90 per cent of all properties will pay less than they would if they were south of the border. That is an important point about business taxation, but we are also investing in our town centres, with a proposed £50 million town centre fund.

Specifically on Emma Harper's question, there is Government awareness and involvement through our agencies. More generally, all members should support a Scottish budget that is trying to set competitive non-domestic rates so that we can provide stability and stimulus for our economy as well as support where it is required.

Neil Bibby (West Scotland) (Lab): A fair work action plan that aims for inclusive economic growth would be welcome and could help people in Ayrshire and throughout Scotland. Ministers gave a commitment to publish such a document before the end of 2018. Will the cabinet secretary

update us on when the Scottish Government intends to publish that important document?

Derek Mackay: We continue to engage with trade unions, and the publication is imminent. It is important that we get the document right, and we have worked closely with partners on it. I look forward to the Labour Party welcoming the action plan, because we share many of the principles on fair work that we want to extend across society in Scotland.

The Presiding Officer: Question 7 has not been lodged.

Business Leaders (Meetings)

8. Maureen Watt (Aberdeen South and North Kincardine) (SNP): To ask the Scottish Government when it last met north-east business leaders, and what matters were discussed. (S5O-02736)

The Minister for Trade, Investment and Innovation (Ivan McKee): The Scottish Government continues to engage with business partners across Scotland to ensure the best environment for business to thrive. Most recently in the north-east of Scotland, the Minister for Public Finance and Digital Economy met Scottish Council for Development and Industry members in Elgin on 22 October, I met Aberdeen and Grampian Chamber of Commerce on 29 November and, on 11 December, the Minister for Energy, Connectivity and the Islands chaired the triannual meeting of the oil and gas industry leadership group in Aberdeen.

A wide range of topics were covered during those discussions, including skills, the impact of technological changes, opportunities from the circular economy, population growth in the Highlands and Islands, exports, Brexit, innovation, investment, decommissioning, low carbon and fintech.

Maureen Watt: The minister will know of Aberdeen City Council's recently published "Aberdeen Economic Policy Panel Report", which highlights the important role played by people who come to the north-east from elsewhere in the European Union. The report highlights that Brexit may

"impact on the flow of key skills to the North East economy."

Does the minister agree that Brexit poses a serious risk to businesses in Aberdeen and that the United Kingdom Government must act to protect the flow of workers with key skills to the north-east?

Ivan McKee: I absolutely agree. The issue of Brexit and the inevitable harm that it will do to our economy reinforces the importance of all the steps

that we are taking to support businesses. We are intensifying our preparations for all EU exit possibilities, including launching on 1 November last year the prepare for Brexit multi-agency campaign, which offers free advice and tools to support businesses to be ready for Brexit. In 2016, there were 128,000 non-UK EU nationals living and working in Scotland. Those individuals and their families play a hugely important role in our economy and society and are critical to many key sectors, including the hospitality and agriculture sectors.

Budget (Support for People in Need)

9. James Dornan (Glasgow Cathcart) (SNP): To ask the Scottish Government how its draft budget aims to help people most in need. (S5O-02737)

The Cabinet Secretary for Finance, Economy and Fair Work (Derek Mackay): The draft budget includes investment of at least £351 million in the council tax reduction scheme; £64 million in discretionary housing payments to mitigate the bedroom tax in full, for example; and £38 million in the Scottish welfare fund.

In addition to those measures, the budget proposes that £826 million will be made available to support our 50,000 affordable homes target, 35,000 of which are for social rent. That is a £70 million increase on the equivalent figure for 2018-19. There will also be resources for our tackling child poverty delivery plan, which outlines a number of key investments that the budget will support in the period to 2022, including intensive employment support for parents and our new financial health check service.

James Dornan: Given that there has been a real-terms cut in the total Scottish fiscal budget by the United Kingdom Government over the past decade, what additional investment has this Government been able to generate through its tax and borrowing powers for Scotland's public services, in order to support people who are suffering from on-going politically driven Tory cuts?

Derek Mackay: UK-imposed austerity has meant that there has been a real-terms reduction in the total Scottish fiscal resource budget of £2 billion between 2010-11 and 2019-20. [*Interruption.*] I have said that before, and Murdo Fraser knows the statistics well. Our decisions on tax and borrowing have reduced the real-terms reduction to the total Scottish fiscal budget from 6 to 3.8 per cent between 2010-11 and 2019-20, which has generated an additional £712 million for investment in public services.

Patrick Harvie (Glasgow) (Green): The cabinet secretary will be aware that the Convention of

Scottish Local Authorities gave evidence on the budget to Parliament's Local Government and Communities Committee this morning. At the meeting, its representative said that councils have done all that they can to make efficiencies, but that the core is simply crumbling. When they were asked what services would be cut as a result, increases in fees and charges for leisure, culture and sport services and employability support were all mentioned. Councillor Macgregor said that, in many of those areas, the effect will directly impact on people from more disadvantaged backgrounds. Is it not clear that, if the budget is passed in its current form, the people to whom James Dornan's question refers—those who are most in need—will inevitably bear an intolerable burden of cuts to the services on which they most rely?

Derek Mackay: No—the opposite is true. If the Scottish budget is not passed, local government will have less resource in cash terms and in real terms. That is the alternative. The budget will allow a real-terms increase in resource and capital to Scotland's local authorities—£11.1 billion is at stake. If the budget is not approved, there will be less resource to Scotland's local authorities. That is what Parliament will be voting for if it does not vote for the budget. If Parliament votes for the budget, there will be a real-terms increase, which we should set in the context of the UK settlement for Scotland.

If we exclude the health consequentials—which is reasonable because we have said that we will pass on the Barnett consequentials and the UK Government short changed the national health service—Scotland would have had a reduction in all other portfolios. The consequence of the budget will be a real-terms increase for local government, as the Scottish Government is proposing. That increase is before local government even uses its powers on the council tax, which, if it is raised by 3 per cent, would generate a further £80 million for local government.

James Kelly (Glasgow) (Lab): This morning, the cabinet secretary told the Local Government and Communities Committee that councils will need to find efficiencies. The reality is that councils will need to make cuts if the budget is passed in its current form. South Lanarkshire Council, for example, faces making cuts of £17 million, which would mean cuts in jobs and services and pain being inflicted on local communities. If the cabinet secretary wants to help those who are most in need, he needs to radically rethink his local government settlement, so that the budget supports local communities rather than provides them with cuts.

Derek Mackay: I have just been asked by the Labour Party to rethink my budget; I ask the

Labour Party to think about a budget. Sources in the Labour Party have said that it is not even going to put forward a credible plan this year. That is a shambles. How am I meant to take that rhetoric from the Labour Party in any way seriously? At least other parties such as the Greens will engage constructively, but from the Labour Party, I will have a shambles; I will have nothing; I will have no alternative—[*Interruption.*] I have noise and rhetoric from the Labour Party deafening me right now, but no serious suggestions are being made.

By the way, I point out that witnesses at today's Local Government and Communities Committee meeting—in this case, the COSLA resources spokesperson—described the Scottish Government as having excellent priorities. Those were her words. We are investing in the kinds of things that the Parliament asks us to invest in, whether it be the extension of free personal care, mental health, education or social care. We have important priorities, and we are putting more into resource and capital and giving a real-terms increase to local government. The alternative is to vote against that and give local government less resource. That is the alternative to the budget that I have proposed to the Scottish people.

Productivity

10. Michelle Ballantyne (South Scotland) (Con): To ask the Scottish Government what action it will take to improve productivity growth in Scotland, after a report from the Scottish Fiscal Commission has highlighted that it is set to fall. (S5O-02738)

The Cabinet Secretary for Finance, Economy and Fair Work (Derek Mackay): The Scottish Government's economic action plan, which was published on 24 October, sets out the range of actions that we are taking to support inclusive and sustainable economic growth, including increasing productivity. Conservative members might be interested to hear that, in the latest 12-month period, Scottish productivity has increased by 1.3 per cent, compared with growth of 1 per cent for the United Kingdom.

We recognise the impact of Brexit, and the Scottish Fiscal Commission has forecast slow productivity due to a period of uncertainty. As a result, the economic action plan lays out several actions to address productivity, including the development of the Scottish national investment bank and the establishment of the national manufacturing institute for Scotland, which will make us a global leader in advanced manufacturing and support productivity improvements.

Michelle Ballantyne: Regardless of the impact of the UK leaving the European Union, the Fiscal

Commission is concerned about Scotland's long-term growth, which is predicted to be only 1 per cent per annum when we might reasonably expect it to be nearer 2 per cent. The commission says that the trend is unlikely to end in the near future, even when isolated from other factors. Is the cabinet secretary concerned about that? What actions does he feel we as a country and the Scottish Government need to take to turn that trend around?

Derek Mackay: First, I could go on at length about the detail of the economic action plan. Instead, I encourage all members to look at it online, because it contains a range of actions for supporting productivity growth in our country.

Of course, this is not just about the public sector—much of it relates to the private sector, too. Productivity growth is also about business enterprise research and development, which is at record levels; and foreign direct investment, in which we are second only to London and the south-east of England. We are doing more on investment, innovation and infrastructure, but the productivity of our people is a significant issue, too, and I note that, in addition to the issues that we are taking action on, our economy faces a population challenge, and to address that, we need more powers and flexibility over migration.

We have set out and proposed further changes and responsibilities to try to ensure that the population challenges are appropriately dealt with. For Scotland, that means having population growth and not turning migrants away; for the UK Government, it means creating a hostile environment for migrants. I encourage Michelle Ballantyne and other Conservatives to contact their own Government and to support us in having the flexibility that we require to improve productivity beyond what we have set out in the economic action plan.

Fair Start Scotland

11. Brian Whittle (South Scotland) (Con): To ask the Scottish Government how many of the 38,000 people that fair start Scotland aims to support it expects to participate in each year to 2020. (S5O-02739)

The Minister for Business, Fair Work and Skills (Jamie Hepburn): The Scottish Government published statistical information on the early performance of fair start Scotland in November last year, and it showed that we have made a strong start, with nearly 5,000 people joining since April 2018. The Scottish Government continues to manage individual providers robustly to ensure that, over the period of the service, we reach our ambition of supporting a minimum of 38,000 individuals into employment. Information on fair start Scotland will continue to be published

quarterly, and I have also committed to regularly report progress on it to Parliament.

Brian Whittle: I thank the minister for that response, but he did not actually answer my question. As the minister has pointed out, the Scottish Government has said that, in the first six months of the programme, just under 5,000 people have taken part in it, but the pace will need to be picked up if the 38,000 figure is to be hit. We therefore need to know how many people are expected to participate and when they will do so. Perhaps I can try again: how many people does the minister expect to have participated in fair start Scotland by the end of its first year?

Jamie Hepburn: I reemphasize that we will continue to update Parliament. By the end of this year, we will know precisely how many people that will be. However, I say to Brian Whittle that I did not hear one shred of welcome from him for the fact that our programme, which is voluntary—unlike the United Kingdom Government’s programme, which compels people to take part in employment—is supporting 5,000 people across the country into employment on a personalised basis and on the principles of dignity and respect. That is a significant achievement that should be welcomed by all.

Economy (No-deal Brexit)

12. **Sandra White (Glasgow Kelvin) (SNP):** To ask the Scottish Government how a no-deal Brexit could impact on Scotland’s economy. (S5O-02740)

The Cabinet Secretary for Finance, Economy and Fair Work (Derek Mackay): A hard Brexit could lead to a loss of up to 8.5 per cent of gross domestic product in Scotland by 2030, which is equivalent to £2,300 per individual.

Sandra White: The minister will be aware of the Fraser of Allander institute report from October 2018, “Brexit and the Glasgow City Region”, which states that an estimated 20,000 of the 40,000 Glasgow city region jobs that are related to exports are in the Glasgow city area. Does the minister agree that the path that the Tory Government is dragging us down will jeopardise those 20,000 jobs in Glasgow city as well as thousands more jobs across the country, and that that is completely unacceptable?

Derek Mackay: Sandra White asked me about the path that the Conservatives are dragging us down, but I do not think that even they know what path they are dragging us down at the moment. Their cack-handedness is appalling and is having a material impact on the economy. The statistics that were articulated by Sandra White are accurate.

I encourage the United Kingdom Government to engage constructively with others to find another way through this, such as the ways that the Scottish Government has repeatedly set out in its compromise positions.

Local Government Settlement 2019-20

13. **Alex Rowley (Mid Scotland and Fife) (Lab):** To ask the Scottish Government what its response is to analysis by the Convention of Scottish Local Authorities, which suggests that the 2019-20 local government settlement will result in a £237 million reduction to the core revenue budget and a decrease to the core capital budget of £17 million. (S5O-02741)

The Minister for Public Finance and Digital Economy (Kate Forbes): Despite continued United Kingdom Government cuts to Scotland’s resource budget, we have continued to treat local government very fairly. The COSLA analysis fails to take into account the total funding package, which includes an additional £210 million to deliver on our commitment to the expansion of early learning and childcare entitlement, and £160 million for investment in social care. That is real funding to support real day-to-day core services. Excluding it presents a distorted picture of the resources that are available to councils. The facts are clear: in 2019-20, the local government finance settlement of £11.1 billion will provide a cash increase of £197.5 million for local revenue services and an increase in capital funding of £207.6 million.

Alex Rowley: COSLA accepts that an additional £237 million is being made available to fund the priorities that the Scottish Government is putting forward. However, as the finance secretary said at the Local Government and Communities Committee this morning, while the Scottish Government has its priorities, councils have to look at what priorities they have to cut.

In Fife, parents, pupils and teachers cannot understand why more than £2 million is being cut from budgets in secondary schools in the current year. Fife Council says that, as a result of the finance secretary’s proposed budget, more than £11 million will be cut next year, and that schools will have to take their share of that cut. How can that be seen as a growth in budget?

Kate Forbes: It can be seen as a growth in budget because the analysis from the Scottish Parliament information centre is clear that the total allocation from the Scottish Government to local authorities in 2019-20 has gone up in real terms. That is real money to be spent on real day-to-day services such as schools, nurseries, the extension of free personal care, the expansion of early learning and childcare, and health and social care. During the budget negotiations, COSLA identified

those as areas of pressure for local authorities. The Scottish Government has recognised the partnership approach and provided additional funding. Real people will benefit from that real investment in real day-to-day services across this country.

Murdo Fraser (Mid Scotland and Fife) (Con): The Scottish Government has been given an increase in its block grant from Westminster in real terms from last year to this but, in its draft budget to Parliament, it proposes not only an increase in the tax gap between Scotland and the rest of the United Kingdom for income tax payers who earn above £27,000 but severe cuts in the core grant to local authorities throughout Scotland, which will mean real cuts to the services that our constituents get. We are being asked to pay more money, but we will get less in return. Why would anyone vote for that budget?

Kate Forbes: That is in sharp contrast to the comments made this morning by Graham Simpson, who conceded that more money is going to local authorities.

As I said in my previous answer, the analysis from SPICe is clear that the total allocation from the Scottish Government to local authorities in 2019-20 has gone up in real terms. That is in a context in which our block grant for 2019-20 will be almost £2 billion lower in real terms than the block grant for 2010-11. We have reversed a real-terms cut in our budget to ensure that we protect the public services that are enjoyed by the people of Scotland across the country.

John Mason (Glasgow Shettleston) (SNP): Can the minister clarify for the Parliament whether either the Labour Party or the Conservative Party, both of which appear to want more money for local government, has suggested where that money should come from? In particular, have they suggested that it might come from the national health service? Do they want cuts to the NHS?

Kate Forbes: I believe that the only suggestion that we have from the Tories is to cut £500 million from the budget. However, they have not indicated where they would cut that money from.

Animal Welfare

The Presiding Officer (Ken Macintosh): The next item of business is a statement by Mairi Gougeon on improving animal welfare. The minister will take questions at the end of her statement.

14:42

The Minister for Rural Affairs and the Natural Environment (Mairi Gougeon): I want to update the Parliament on the Scottish Government's work to improve animal welfare.

The Scottish Government is absolutely committed to the highest possible standards of welfare for all our animals, whether they are domesticated, farmed or wild. Since becoming the minister with responsibility for animal health and welfare, I have met a range of key organisations and individuals, and I am heartened and impressed by their commitment to that. On a personal level, I care passionately about the issue.

That is why we invest £20 million annually in supporting animal health and welfare and employ a highly skilled and qualified workforce, led by Scotland's chief veterinary officer. Our work is supported by expert independent advice on farmed animals through the United Kingdom Farm Animal Welfare Committee.

We recognise the need for similar independent, impartial expert advice on issues relating to domestic and wild animal welfare, which is why we committed in the programme for government to establish a Scottish animal welfare commission. Work is now under way to establish that commission. It is necessary that secondary legislation be developed to describe the precise remit and function of the new body. While that work is on-going, we will soon begin a process to recruit members to an interim commission, given the need and importance of that expert advice.

We will shortly launch a consultation on a bill to amend our overarching legislation for animals under human control: the Animal Health and Welfare (Scotland) Act 2006. Our proposals for amendment will include increasing the maximum available penalties for the most serious animal cruelty offences, including offences against police and other service animals, which quite rightly attract public concern. That is also known as Finn's law, which I know that Liam Kerr has raised previously. That would allow for imprisonment of up to five years rather than the maximum 12 months that is currently available. We will also create fixed-penalty notices for lesser offences in future secondary legislation, which will free local authority inspectors' time to focus on the most serious cases.

We will consult on permitting inspection bodies to rehome or sell on animals that they have taken into their possession to protect their welfare much more quickly and efficiently than they are able to at present. That would allow them to make the best use of their resources and avoid animals being held in limbo while the outcomes of court cases are awaited. Such cases can often last for many months. I know that that is a very significant problem for local authorities and the Scottish Society for the Prevention of Cruelty to Animals, which discourages them from using their power to take animals into their possession. That was one of the key new features of the 2006 act and it is crucial that they are able to use that power effectively.

Although 86 per cent of abattoirs already deploy closed-circuit television in some form to record the treatment of live animals and in excess of 99 per cent of all animals slaughtered in 2016-17 were covered by some configuration of CCTV, we want to explore the potential to make that mandatory. I am publishing today the responses to our consultation, which show that 94.9 per cent of respondents support moving to mandatory CCTV recording and more than 90 per cent support the retention of CCTV images for 90 days, with unrestricted access to be given to properly authorised officers. Those majorities were supported by abattoir operators, vets and the livestock industry. I can confirm that, this year, we will introduce legislation to aid those enforcing welfare legislation that will require that CCTV records all areas of slaughterhouses where live animals are present.

In 2017, research that we commissioned indicated how we could alert potential buyers to the serious animal welfare and health problems associated with illegally sourced puppies. Last year, we funded an innovative and hard-hitting public awareness campaign on social media, cinema screens and local radio to reach potential buyers who we know are difficult to reach by other media platforms and channels. We worked closely with all the main dog welfare charities in designing the campaign, which aimed to direct anyone thinking about buying a puppy to a website hosted by the Scottish SPCA for more detailed advice.

The campaign attracted wide coverage in the run-up to the Christmas holiday period. Further data on the success of the campaign will be made available after it has been collected, but we already know that it has been highly effective in increasing the number of visits to the Scottish SPCA website and increasing calls to its helpline by 130 per cent. Because of the success of the campaign so far, we are already making plans for a follow-up campaign later this year to reinforce the message even further, and we expect that to have a significant effect on changing the

behaviour of buyers that drives the illegal trade. I take this opportunity to thank Emma Harper MSP for her tireless work in campaigning on the issue.

In November, we consulted on the registration and licensing of animal sanctuaries and rehoming agencies, and we now intend to introduce legislation on that. It will introduce a modern licensing scheme to protect animals that will also benefit those caring for them, some of whom might unfortunately take on too many animals to be able to provide the right care. As with other animal-related activities, local authorities will be the licensing authority for premises in their areas. However, we recognise the additional burden that that will place on them, so we will seek to reduce the burden by establishing a role for independent inspection and accreditation from nationally recognised bodies.

The public consultation on dog, cat and rabbit breeding closed at the end of November and I can tell Parliament that the responses will be published by the end of this month. As with the regulation of animal sanctuaries, we aim to reduce the burden on the regulators and find a role for independently accredited bodies in inspection, and we hope to introduce legislation later this year. We will also use that legislation to discourage the breeding of dogs, cats and rabbits with a predisposition for genetic conditions that lead to health complications and poor on-going welfare. I would also like to mention Jeremy Balfour MSP's proposed member's bill on improving the licensing of pet shops. We are committed to giving effect to his proposals in this parliamentary session and I thank him for his work to date on the matter, which we will build on as we develop our detailed proposals.

On fox hunting, we consulted on Lord Bonomy's recommendations last year and published the independent consultation analysis report before the summer recess. Since then, I have made it a priority to not only make sure that I am familiar with all aspects of this complex issue, but have spoken to all the key stakeholders on all sides of the debate. Consequently, despite the ban on hunting introduced by the Protection of Wild Mammals (Scotland) Act 2002, it is clear to me that there remains considerable public concern about fox hunting in Scotland and doubts about the operability of the legislation as it currently stands. I believe that Parliament should therefore be given the opportunity to consider reform of the 2002 act in the interests of furthering the welfare of wild mammals. I plan to bring forward a bill to deal with that and other wildlife welfare issues during the course of the current parliamentary session.

In addition to progressing the majority of Lord Bonomy's recommendations, the bill will, as has

already happened in England and Wales, seek to limit to two the number of dogs that can be deployed against wild mammals. It is important that we do not undermine the need for legitimate pest control, particularly in upland areas, so I intend to explore the possibility of a new licensing scheme that could enable the use of more than two dogs where that is deemed necessary.

The bill will also contain provision to discourage the establishment in Scotland of the practice known as trail hunting, as that poses significant risks for wild mammals. Even with the best of intentions, there appears to be too high a risk that hounds following a trail will be diverted by the scent of a live fox and will pursue and possibly kill that animal.

We will, of course, consult on the draft bill in due course. I am aware that many members across the chamber take a keen interest in the matter and have campaigned strongly on it, raising it a number of times in the chamber, including Colin Smyth, Christine Grahame and Alison Johnstone, who is, I know, working on a member's bill in relation to fox hunting. We stand ready to cooperate and work constructively on that important issue.

In the meantime, for those recommendations from the Bonomy review that do not require primary legislation, members will wish to be aware that we intend to press forward with the code of practice on hunting and the hunt-monitoring arrangements that were proposed by Lord Bonomy, and to introduce those measures as soon as we can. We have already agreed a code of practice with stakeholders. It is important that we assure the public that we are doing everything that we can to ensure the highest standards of animal welfare and adherence to the law.

There is, rightly, always strong cross-party interest and public concern about animal welfare matters. I reassure members that I take this aspect of my portfolio interests seriously. They are issues I care deeply about, and I am determined that we will continue not only to maintain but to improve animal welfare standards.

I have set out this Government's commitment to a range of measures, including updating existing legislation and introducing new legislation where it is needed. That will ensure that we provide strong foundations and clear and serious powers and responsibilities regarding all who breed, keep and care for animals.

I look forward to engaging with members and parties across the chamber and to listening to different perspectives to help shape and frame legislative proposals that command confidence and achieve consensus, where it can be found. We have a strong track record in Scotland of

caring for animals that we keep in all circumstances, and of caring for our wild fauna too, but where there is more to do to challenge and change attitudes and behaviour we must do that.

Most people respect and value animals in their homes and businesses and in the wild. I want to do all that I can, with members' support, to ensure that the expectations on people are clear and, where necessary, enforceable. My aim is for everyone to uphold the highest possible standards of welfare for all animals.

The Presiding Officer: We move now to questions.

Maurice Golden (West Scotland) (Con): I thank the minister for early sight of her statement. The Scottish Conservatives are committed to the highest standards of animal welfare and I welcome the substantive points made in the statement. We are committed to protecting animals and clear that those who abuse and inflict cruelty on animals should be punished in accordance with the law.

As the minister recognised in her statement, Scottish Conservative MSPs have worked tirelessly to promote animal welfare through actions such as the introduction of Finn's law, increasing sentences for the worst forms of animal cruelty to five years, improving the licensing of pet shops and the compulsory use of CCTV in abattoirs.

We are pleased that the Scottish Government has agreed to implement those Scottish Conservative proposals and will work with the Government to ensure they are delivered. We will continue to campaign in areas on which we wish the Scottish Government to go further, such as introducing an effective ban on the use of electric shock collars for dogs.

Will the minister commit to producing an implementation plan for the proposals outlined in her statement by Easter recess, so that our animals receive the protection that they deserve as soon as possible?

Mairi Gougeon: I thank Maurice Golden for his comments. I am keen to work with him, as well as with other parties across the chamber, because I see the issues as being about animal welfare, not party politics, and I am keen to implement the proposals. I outlined a number of measures today, many of which we hope to implement this year. I do not know whether there are specific proposals that the member would like to see in an implementation plan.

Our introduction of legislation is heavily dependent on the outcome of Brexit. As many members in the chamber will know, particularly those who sit on the environment and rural

economy committees, those two areas in particular are heavily affected by Brexit legislation, and of course we have to deal with that. That is why I cannot give definitive timescales, but I hope to introduce a lot of the legislation this year.

I would be more than happy to arrange a meeting with the member, in which we could discuss the matter in more detail.

Colin Smyth (South Scotland) (Lab): I thank Mairi Gougeon for advance sight of her statement. I refer members to the voluntary part of my entry in the register of members' interests, which says that I am a member of the League Against Cruel Sports.

There is much in Mairi Gougeon's statement that Labour warmly welcomes, from the intention to press ahead with tougher sentencing for animal cruelty offences to the proposed proper regulation of pet shops, animal sanctuaries and rehoming agencies.

On the specific issue of fox hunting, however, it is clear that there are loopholes in the existing legislation and hunts have gone out of their way to ride roughshod over the law in both spirit and letter. The measures to progress Lord Bonyon's recommendations that the Government prevents trail hunting from being established and limits to two the number of dogs that can be deployed against wild animals are therefore a welcome step forward. However, we must not license cruelty, so I would be concerned about any proposal to introduce a licensing scheme that would enable more than two dogs to be used in hunting, and I am concerned about the lack of proposals on the use of mounted hunts.

Does the minister agree that, three years after the Bonyon review was announced, it is time for the Government to get on with consigning the barbaric practice of fox hunting to the history books once and for all by introducing legislation that ensures that the boxing day hunt in 2018 was the last one that we will ever see?

Mairi Gougeon: On the timescales, as I outlined in my answer to the previous question, I realise how important the issue is, which is why I specifically took the time to consider it carefully, so that we make sure that we get the proposals right when they are introduced. The pieces of legislation will all be vital and I want to introduce them as soon as is practically possible. Given where we are with Brexit, I cannot give a definitive timescale yet, but the matter is a priority for me and I want it to be addressed.

The member mentioned mounted hunts in particular. The issue is not about whether someone who takes part in hunting activities is on a horse, because we are concerned with the welfare of the hunted species. In any event, a ban

on the use of horses during hunts would be likely to raise European convention on human rights issues.

The member also raised concerns about potential loopholes, inferring that licensing could be a loophole. I categorically assure everyone that the reason why we have produced the proposals is that we are specifically trying to tackle any potential loopholes that are perceived in the current legislation. On the introduction of the two-dog limit, we have seen how that has been implemented in England and Wales and what has happened as a result with the growth of trail hunting, and that is why we are proposing the actions that I mentioned in my statement. We want to close any potential loopholes.

Licensing will potentially be considered where there is a legitimate pest control issue. We are at the very early stages and we do not know what that scheme might look like, but I know that there are specific issues, particularly in the uplands of Scotland. However, I emphasise again that this is about closing loopholes and not about creating any new ones.

Mark Ruskell (Mid Scotland and Fife) (Green): I declare an interest as an honorary member of the British Veterinary Association.

There is much to welcome in the statement and it shows that the Government has learned from the debacle over tail docking. It is clear that the Government has listened to the Greens and other members of this Parliament in deciding to bring forward primary legislation. However, there are gaps in the statement. In particular, I refer to the licensing of performance animals, the poor conditions that we see in both the horse racing and greyhound racing industries, the need to update farm animal welfare codes and the urgent need for a new definition of animal sentience. Is the Government open to dealing with those issues as part of what could be a landmark piece of primary legislation if we get it right?

Mairi Gougeon: Absolutely. I give that assurance to Mark Ruskell. Given the scale and incredible number of the issues that I have had to look at and deal with since I assumed my portfolio, I hope that he and other members will appreciate and understand that I have wanted to take the time to make sure that I do that as well as I possibly can and to properly inform myself on all the issues, because that is vital, too.

As I have said a number of times in the chamber, I am more than happy to work with any member on any of our proposals, because this is not about party politics; it is about doing the right thing and improving animal welfare. Wherever such issues come up, I am more than happy to

discuss them with Mr Ruskell and any member of this Parliament.

Mike Rumbles (North East Scotland) (LD): The Liberal Democrats want to see a ban on the third-party sale of dogs and a ban on the sale of dogs under eight weeks of age. Will those measures be included in the forthcoming legislation?

Mairi Gougeon: I recently held a meeting with vet Marc Abraham, who has been leading the campaign for a ban on third-party sale of puppies—also known as Lucy’s law. I am aware that such a proposal is being considered elsewhere in the UK.

I am looking at the issue here, too. My officials recently contacted all local authorities in Scotland to ascertain how big an issue it is for us and to find out how many licences have been issued for the sale of animals in this regard; two thirds of local authorities responded, and none reported having issued licences. I do not think that this is as big an issue for us as it might be across the rest of the UK. However, I do not want Mr Rumbles or any other member to think that I am not actively considering the issue as one on which we could take action; I assure Mr Rumbles that I am doing that.

Rona Mackay (Strathkelvin and Bearsden) (SNP): I welcome the minister’s announcement on introducing legislation on fox hunting and I acknowledge the minister’s point that action on fox hunting should not undermine legitimate pest control. Will the minister expand a bit on that?

Mairi Gougeon: I want to emphasise the point that I made in my response to Colin Smyth. This is not about creating a loophole; rather, it is about the possibility of regulating an exemption. Through the new code of practice on hunting, in tandem with the hunt monitoring arrangements, we aim to ensure compliance and encourage transparency.

It is important to say that licensing might prove to be an important protection, to ensure that legitimate pest control is not inadvertently caught by legal restrictions. That, we recognise, is important to farmers, particularly in the upland areas of Scotland, and is a matter that we will potentially consider, because there are particular circumstances in that regard. As I said, licensing is about not creating a loophole but tightening up our legislation in Scotland and ensuring that there are no loopholes in it.

Finlay Carson (Galloway and West Dumfries) (Con): I welcome the minister’s announcement that current legislation will be amended, in particular to increase maximum sentences and to permit inspection bodies to rehome and sell on animals.

We recognise the need to get the Scottish animal welfare commission right, but will the minister assure the Parliament that its establishment will not prolong the process of introducing much-needed legislation?

In relation to livestock worrying, in particular, will the minister urgently look at how current legislative powers could be used to reduce the alarming rate of sheep worrying?

Mairi Gougeon: Livestock worrying is being carefully considered by Emma Harper, who is considering introducing a member’s bill on the matter. It is an important issue, on which the Government is looking to launch a survey in the coming months.

Work that we do on that will not be affected by the establishment of the animal welfare commission. I completely understand the need for urgency, and the Scottish Government is keen to establish the commission as soon as is feasible. That is why we want to consider setting up an interim commission, while we wait for changes to be made to secondary legislation. It is vital that we have independent expert advice to hand when it comes to issues to do with domestic and wild animals.

I emphasise that we also seek and rely on advice from the Farm Animal Welfare Committee, which operates across the UK. We do not want to duplicate the advice that it offers; we would want what we create in Scotland to supplement it. There is a need for expert, independent advice, so we are keen to establish the commission as soon as possible.

Gail Ross (Caithness, Sutherland and Ross) (SNP): I thank the minister for this very welcome statement. I note from the “Introduction of Compulsory Closed Circuit TV Recording of Slaughter at Abattoirs in Scotland: Summary Report” that veterinary and animal welfare groups see the use of CCTV as being additional to having vets on site, while some abattoirs would find such regulation quite restrictive. That will get worse after Brexit, given that so many vets are European Union nationals. Would it be possible for the CCTV to be used to allow vets to monitor proceedings remotely instead of having to be physically present, to enable more premises to stay open and so reduce the distances that animals have to travel?

Mairi Gougeon: Gail Ross’s question highlights a very particular problem that we could well face if there is a problem with regard to EU citizens’ rights to live and work in Scotland in light of Brexit. That issue would be particularly acute when it comes to the vets who work in our abattoirs, because 98 per cent of them are EU citizens, so we could face a huge problem. The Scottish

Government is taking as much action as it can. We welcome EU citizens to live and work here.

On the impact that CCTV would have, we would not want it to be seen as meaning that we do not need vets in abattoirs or as replacing their role. We want it to be something that improves animal welfare and supplements the presence of vets on site; we would see it as being complementary to current physical monitoring and controls. However, we will keep the matter under review.

Claudia Beamish (South Scotland) (Lab): Although the statement is welcome, will the minister tell the chamber what the Scottish Government intends to do about consulting on banning snaring, hare culls and trophy hunting, as well as shock collars? Also, following on from the previous question, how will the Scottish Government ensure that there are more abattoir facilities and assist CCTV installation in micro-abattoirs?

Mairi Gougeon: There were quite a few questions within that question. If I miss answering any of them, I would be happy to write to Claudia Beamish with more information or to arrange a meeting with her to discuss the issues in more detail.

The issue of mountain hares is subject to the grouse moor management review, which is due to report in the spring, so we will see the outcome of that in the coming few months.

I have not looked at the issue of snaring as part of this statement; we have had a lot of issues to look at within the portfolio and I wanted to update the chamber on those today, so I have not considered snaring so far. However, there is a review of snaring every five years, as required under section 11F of the Wildlife and Countryside Act 1981, and the most recent Scottish Natural Heritage review confirmed that the legislative changes made to snaring in 2011 have reduced the number of reported snaring-related offences and the administration procedure seems to be working satisfactorily.

If there are more issues, I would be more than happy to engage with the member on those.

Stuart McMillan (Greenock and Inverclyde) (SNP): I welcome the commitment to consult on the Animal Health and Welfare (Scotland) Act 2006. Will the minister consider proposals that would open up the possibility of retrospectively considering new evidence, irrespective of the length of time that has lapsed since a crime was committed, as was asked for in the *Greenock Telegraph* justice for pets petition submitted in 2015?

Mairi Gougeon: I thank Stuart McMillan for that question and I would be happy to consider the

matter, discuss it with my officials and keep Mr McMillan informed.

Peter Chapman (North East Scotland) (Con): I remind members of my entry in the register of members' interests, as a farmer.

I welcome the introduction of mandatory CCTV coverage in abattoirs. Many slaughterhouses already have some CCTV coverage, but is it the minister's expectation that it will need to be more extensive and cover more areas within abattoirs in future? Given that we on the Conservative benches have supported mobile abattoirs for the islands, will the minister advise whether the Government will provide any financial support for the installation of CCTV in micro and mobile abattoirs?

Mairi Gougeon: I thank Peter Chapman for that question. He is right that we have encouraged abattoirs to install CCTV voluntarily and that 86 per cent currently have it installed. As I also said in my statement, in 2016-17, the slaughter of 99 per cent of animals was covered by some sort of CCTV; that shows that we are almost there.

On the issue of any support that would be available, we are investigating that at the moment, but it will be compulsory for all abattoirs to have CCTV coverage. The issue of mobile abattoirs has been raised a number of times in the chamber, for example when we discussed live animal exportation and the opportunities that could exist in relation to that. There could well be opportunities there, and that is something that could be explored.

Ruth Maguire (Cunninghame South) (SNP): I thank the minister for all her work in this area. I particularly welcome the increased sentencing options for those who abuse animals. The minister may have seen footage from an infamous boxing day hunt of a huntsman abusing his own horse. Does she agree with me that the authorities should be vigilant? Anyone who takes pleasure or sees sport in the torture of an animal is for the watching—such abusive behaviour might not be confined to one species.

Mairi Gougeon: The Scottish Government is grateful for the animal welfare work carried out by local authority and Scottish SPCA inspectors under the Animal Health and Welfare (Scotland) Act 2006 and, of course, by Police Scotland. I emphasise that all forms of animal abuse are wrong. I encourage anyone who witnesses any torture or abuse of an animal to report it to the relevant authorities.

Pauline McNeill (Glasgow) (Lab): I remain convinced that we should have a ban on electric shock collars for dogs and other animals and I welcome the minister's statement in that regard. What level of priority does the minister intend to

give that issue? I press her on that, because her answer in response to Maurice Golden was a little bit vague.

Mairi Gougeon: On the timing of the proposals that I mentioned in my statement, as I have mentioned in previous responses, Brexit is the overhanging issue; it has a huge impact on this portfolio and will affect the timing of any legislation that we plan to introduce. However, these issues are my job—animal health and welfare are part of my portfolio and, as I said in my statement, I care deeply and passionately about them. I want all the measures that I have talked about today to be implemented as soon as possible, but a lot of that will depend on what happens over the next months and how big an impact we see in Scotland from Brexit.

Christine Grahame (Midlothian South, Tweeddale and Lauderdale) (SNP): There is much to welcome in the statement and I know that the minister means what she says about animal welfare. However, on fox hunting, she referred to

“pest control”

and

“the use of more than two dogs”.

Will the minister advise the chamber whether she considers the Buccleuch hunt to be one of the vestiges of a privileged class pursuing a cruel sport or an example of a voluntary pest control organisation that may apply for a pest control licence?

Mairi Gougeon: I simply reiterate what I have already talked about: this is not about creating potential loopholes. I am willing to work with anybody, across the chamber, to ensure that we get the proposals right and that we have a law in Scotland that is strong and tightens up what we already have. The Bonomy review made a number of recommendations and we intend to implement the vast majority of them, which would see the strengthening and tightening of the laws that we have.

As I said in response to a previous question, we have seen what has happened in England and Wales and the measures that have been introduced there. We plan to go further than the legislation that exists across the UK. As I said, this is not about creating loopholes.

Liam Kerr (North East Scotland) (Con): I am delighted to hear the minister confirm that Finn’s law is progressing. Can she give me any firm indication of the timescales? It is vital to get that on the statute book without delay.

Mairi Gougeon: I know that the member has campaigned on that issue and that it is very

important to him; it is, of course, important to the Government, too.

We will be launching a consultation over the coming weeks on Finn’s law and the amendments that we propose to make to the Animal Health and Welfare (Scotland) Act 2006. I imagine that the consultation will have been published by the end of this month; we will aim to progress from there. Again, I cannot disclose definite timescales at this time.

Alison Johnstone (Lothian) (Green): I welcome the minister’s intention to improve the Protection of Wild Mammals (Scotland) Act 2002 and I look forward to working with her to deliver a real ban on fox hunting in Scotland. Will she consider the removal of the multiple exceptions to the offence, which provide opportunities for exploitation for those who continually and deliberately offend, as noted in the Bonomy review?

I appreciate the minister’s comments about the grouse management review, but does she agree that the legislation could provide much-needed protection for Scotland’s mountain hares and brown hares?

Mairi Gougeon: I will really have to wait and see what comes out of the grouse moor management review before I can make any further comment on that. We are absolutely committed to implementing the vast majority of the recommendations that Lord Bonomy made. I know that Alison Johnstone has done a lot of work on preparing her member’s bill on fox hunting and I fully intend to work closely with her and others across the chamber. If we are going to have a piece of legislation, I want us to do it right and to put in place proposals that will strengthen and improve animal welfare legislation in Scotland.

Life Sciences Sector

The Deputy Presiding Officer (Christine Grahame): The next item of business is a debate on motion S5M-15261, in the name of Ivan McKee, on recognising the life sciences sector in Scotland. I call Ivan McKee to speak to and move the motion. Minister—you have 12 minutes, or thereabouts.

15:16

The Minister for Trade, Investment and Innovation (Ivan McKee): Next month marks the second anniversary of the publication of “Life Sciences Strategy for Scotland 2025 Vision”. I am delighted to have life sciences included in my portfolio. Not only is the sector extremely important to trade, investment and innovation, but it is a key part of Scotland’s economy. I am glad to have secured the debate and to have the opportunity to update Parliament on progress in those key areas and more broadly across the sector.

The life sciences sector strategy has been developed by the industry in collaboration with academia and Government, through the life sciences Scotland industry leadership group. The aims of the strategy are to grow the sector, to create an environment to enable companies to access new markets, and to make sure that Scotland remains a location of choice for business investment and research in the sector.

The strategy is clear and focused. Its four strands cover the following: innovation and commercialisation, through leveraging our academic excellence and growing the entrepreneurial mindset in the sector; sustainable production, through building manufacturing excellence and enabling reshoring; internationalisation, through driving up inward investment and boosting exports; and the business environment, through ensuring, in particular, the supply of skills and finance that the sector needs in order to grow and flourish.

The evidence shows that the strategy is making a difference. Latest figures show that the sector’s turnover was almost £5.2 billion in 2016, which was a 39 per cent increase over five years. We are well on course to hit the industry target of £8 billion by 2025. Gross value added for the sector was £2.4 billion in 2016, which was a 27 per cent increase in a single year.

The sector is the largest contributor to Scotland’s business research and development investment. The 2017 figure reached £293 million, which is almost a quarter of the total for the whole Scottish economy. The sector boasts R and D spend of more than £17,000 per job, which is 36

times the Scottish average. The life sciences sector’s reported exports were £1.2 billion in 2016. They form a key part of our plans to ramp up Scotland’s international trade through our export plan.

The sector now has more than 700 companies employing almost 40,000 people. Many of the jobs are high-value jobs, with median weekly full-time earnings in the sector of £723 in 2017, which is 32 per cent higher than the Scottish average.

It is a sector in which there are real growth opportunities. Recent data from Deloitte shows that global healthcare spending is projected to increase at an annual rate of 4.1 per cent over the period 2017 to 2021. That is an increase from the previous rate of 1.3 per cent over the 2012 to 2016 period. The ageing and growing population, the expansion of developing markets, advances in medical treatments and rising employment costs all drive health spending growth. More than that, the sector has the opportunity to benefit the lives of millions of people through innovations that increase health and literally save lives.

The life sciences cover much more than just human health, and Scotland is recognised internationally as a leading player in animal health, particularly in genetics, genomics, endemic diseases and parasitology. In agritech, the James Hutton Institute is developing and commercialising new smart energy and LED light systems for indoor growing of high-value crops.

Scotland’s historical place at the forefront of medical innovation is a matter of record. From the world-leading work of Joseph Lister, Alexander Fleming and Professor John Macleod, through to Dolly the sheep and the bionic hand, there are countless examples of innovations and of the academic excellence that underpins our life sciences sector.

The research work of our universities continues to lead the sector globally. The University of Dundee was ranked as the world’s most influential pharmaceutical research institution in 2016, according to the Clarivate Analytics report, “The Relentless Desire to Advance: The State of Innovation 2017”. The University of Edinburgh is the only other United Kingdom institution in that report’s top 10, which includes the likes of the Massachusetts Institute of Technology and the University of California at Berkeley. Glasgow is home to the new £15.8 million artificial intelligence health research centre, which will support research not just in Glasgow but in Aberdeen, St Andrews and Edinburgh, to enable joined-up academic and commercial technology development.

Six of our eight innovation centres support the sector, including the stratified medicine innovation

centre at the University of Glasgow, centres for sensor technology, digital health and biotechnology at the University of Strathclyde, the aquaculture innovation centre at the University of Stirling, and the University of Edinburgh's data lab. Between 2009 and 2015, Scotland created 170 life sciences start-ups and 60 university spin-out companies.

Since my appointment, I have had the pleasure of visiting more than a dozen life sciences businesses—large and small—around Scotland. They cover the wide breadth of subsectors in the industry, from high-tech start-ups in the incubator at the University of Dundee to established manufacturing businesses in Inverness and businesses that provide truly global clinical trial services from their base in Glasgow.

Brexit is a key concern of many businesses. That is a subject that I will return to in detail in my closing remarks.

Just this morning, I spent time with Ken Sutherland and his team at Canon Medical Research Europe Ltd here in Edinburgh. I was hugely impressed by the work that they are doing on software development and artificial intelligence. One of the issues that I discussed at Canon was skills. The life sciences community employs a significant number of people in Scotland and creates high-value and highly skilled employment opportunities for school leavers, graduates and experienced personnel from around Scotland and beyond. That is why the skills agenda is at the heart of our life sciences strategy, with skills investment plans and leadership master-classes for the life and chemical sciences sectors. Availability of skills and talent has a huge influence on where businesses choose to locate.

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

The minister mentioned the necessary skills for the sector. Does he agree with the Scottish Lifesciences Association that his Government's policy of making Scotland the highest-taxed part of the UK will make it more difficult to recruit the necessary skills?

Ivan McKee: That issue has not been raised with me by any of the life sciences businesses—more than a dozen—that I have spoken to in the past six months. The issues that concern them are availability of skills for their sector and the damage that a hard Brexit will do to that, which I will come to later. As Dean Lockhart well knows, across the piece Scotland is the fairest-taxed and, for the vast majority of people, the lowest-taxed part of the UK.

Scotland has a highly skilled workforce, with the highest proportion of tertiary-educated graduates aged between 25 and 64 in the European Union. We have a fantastic pipeline of highly qualified individuals who are job ready for roles in the

sector, and we are working hard to keep it that way. That is why we have committed to establishing a national retraining partnership together with unions and business, and to publish a future skills action plan.

Life sciences businesses have a key role to play in increasing Scotland's exports, which is a huge focus of mine. Supported by £20 million-worth of investment over three years, our export plan will be published this spring. The plan will identify key sectors and markets on which to focus our efforts, and will provide support here in Scotland and in markets for businesses to position themselves in, in order to take advantage of international trade opportunities.

Attracting foreign direct investment is equally important to the sector. Last September, I visited BioCity Scotland Ltd in Newhouse to hear from life sciences companies that are continuing to expand in Scotland and are creating high-value jobs. It is vital that we continue to promote globally Scottish excellence in services, innovation, products and people. Scottish Development International has been successfully delivering in that respect for a number of years, and we are seeing the benefits of that work in record levels of inward investment, projects and jobs.

In October, my colleague Derek Mackay launched the "Invest in Scotland" capital investment portfolio, which includes investment opportunities such as the BioQuarter in Edinburgh and the advanced manufacturing innovation district Scotland in Renfrewshire. Through our innovation and investment hubs and the global network of SDI offices, we are working to deliver compelling messages to promote Scotland as a place of choice for investment. All six of my international trips since I took up my role have focused on targeting more life science businesses and persuading them to come to Scotland. Investors bring high-value jobs, new business opportunities and, crucially, the development of supply chains that reinforce our reputation as a fantastic place in which to invest.

Scotland's national health service is a key partner in the development of our life sciences sector. There is the opportunity for the NHS to use the sector to bring advanced technology and innovative processes to the table, for example through the work of the Groupe SEB tech challenge, and to use the sector to operationalise innovative ideas from clinicians and others in the NHS, as is done by SHOW—Scotland's health on the web—and through the health improvement partnerships, which benefit the sector and, importantly, improve patient care, with the potential to reduce costs and waiting times. Those are relationships that I value highly, so I work alongside my colleagues, the Cabinet Secretary

for Health and Sport and the health ministers, to strengthen and develop them, while ensuring at all times that we prioritise the needs of patients.

I will comment on the amendments that have been lodged by the Opposition parties. The Government will accept the Labour amendment. We are always keen to work with trade unions—we recognise the value and perspectives that they bring to all our work with the economy. That extends to our partnership work to grow and develop the life sciences sector. The creation of high-value jobs is in everyone's interests.

With regard to the Conservative amendment, I and the industry are keen that the time that we have today is focused on the sector—on its strengths and challenges; on the work that has been done and the work that we still have to do; and on collaboration with our partners in industry and our excellent academic institutions and other stakeholders, including trade unions, to drive the sector forward. The amendment's assertion that the Scottish Government will receive an extra £2 billion is unsubstantiated and, based on past performance and previous UK Government promises, is somewhat detached from reality. For that reason, we will not support the Conservative amendment.

The sector has gone from strength to strength in recent years and has bold, ambitious and achievable plans for the future. The sector strategy has been instrumental in focusing effort to deliver what has been achieved so far. We are only two years into the strategy and there has been real improvement in that short time. As co-chair of Life Sciences Scotland, it is encouraging to me to see that. I am excited for the sector's future and look forward to working with the industry to develop its potential further.

I move,

That the Parliament recognises the importance of the life sciences sector to the Scottish economy; notes that February 2019 is the second anniversary of the publication of the industry-led Life Sciences Strategy; understands that the development of the strategy has seen the sector increase its turnover from £4 billion in 2015 to £5.2 billion in 2016 and that it is on track to meet its target to double sectoral turnover to £8 billion by 2025, and notes that this has been achieved through the strengthening of partnerships across industry, academia and with the NHS.

15:28

Dean Lockhart (Mid Scotland and Fife) (Con): Scotland has a long and distinguished history in life sciences: from Alexander Fleming discovering penicillin through to Sir James Black developing beta blockers, Scotland has led the world in the fields of medicine and biology.

Today, Scotland has one of the most dynamic life sciences sectors in Europe, employing more

than 37,000 people across 700 organisations. Turnover in the sector exceeds £4 billion, contributing more than £2.4 billion of gross value added to the Scottish economy. Today's debate is a good opportunity to recognise the efforts of everyone involved in the success of the sector and the collaboration that has been involved.

Ivan McKee rose—

Dean Lockhart: Does the minister want to intervene?

The Deputy Presiding Officer: You have anticipated that he is poised to pounce.

Ivan McKee: I will update the stats: the turnover for the sector is now more than £5 billion.

Dean Lockhart: As I suggested, it is a fast-moving sector. That is good news.

One of the key strengths of the sector is its diversity. It is comprised of a wide range of multinationals, small and medium-sized enterprises and start-ups, and spans areas such as human healthcare, pharmaceuticals and biotechnology. However, it is important to realise that it is not just the private sector that is driving progress in the area. Key to the success has been the on-going partnership between the industry, universities and charities. Further, the NHS continues to play a critically important role in research and development and in delivering pioneering new treatments and global advances in medicine.

The critically important role that is played by the NHS will be further strengthened by the announcement this week by the Prime Minister of the UK Government's long-term plan for the NHS, which will result in a £2 billion funding boost for the NHS in Scotland, as highlighted in our amendment. That extra funding will not only support front-line services but can be used to finance significant additional research and development in life sciences to support the future success of the sector. I must say that I am slightly disappointed that the SNP will not support our amendment and that it does not recognise the benefit that will come to Scotland as a result of the UK Government's long-term plan.

With that background, it is clear that Scotland has a strong foundation for future success in the sector. The Scottish Government's life sciences strategy is a welcome step in the right direction, and it identifies a number of opportunities. However, the reality is that more needs to be done to realise the enormous potential and ambition in the sector. By its own admission, the Scottish Government failed to meet its original target, set in 2011, to double the turnover in the life sciences sector to £6.2 billion by 2020. I understand that the

timetable for that target has been extended to 2025.

Ivan McKee: Again, to correct the member's numbers, the original aim was to increase the turnover from just over £3 billion, which it was in 2011, to £6.5 billion by 2020, as the member said. At the moment, we are at £5.2 billion. If we continue the 7 per cent annualised growth rate that we have seen over the past five years, we shall certainly exceed the original target and hit almost £7 billion by 2020. The target for 2025 is actually £8 billion, and, at the moment, we are on course to exceed that, as well.

The Deputy Presiding Officer: There you go, Mr Lockhart. I was trying hard to follow that.

Dean Lockhart: I thank the minister for that intervention, but I believe that the original target that was set in 2011 was for £6.2 billion by 2020, and that we are still quite a way behind that. However, I recognise the progress that has been made and the contribution that is made by everyone in the sector.

I want to talk about some policy measures and actions that we believe the Scottish Government should be taking in addition to the life sciences strategy. First, the Scottish Government needs to actively engage in the UK industrial strategy and, in particular, in the UK life sciences sector deal. Having spoken to a number of companies in the past few days, I know that they realise the real opportunities that are available in the UK life sciences market and under the UK sector deal. The UK has the largest biotechnology cluster in the world outside the US; it is the fastest-growing market in Europe; it is worth more than £70 billion; and it employs more than 250,000 people across the UK.

Significant investments are coming through under the sector deal, including £500 million of UK Government support for research and more than £1 billion of new industry investment over the past couple of years. Funding under the UK sector deal includes the plan to increase total public sector R and D to £12.5 billion by 2021. For the avoidance of doubt, that is a UK-wide investment. There has been an investment of £85 million in the world-leading UK Biobank and the sector deal recently delivered an investment of £13 million in the UK medicines manufacturing innovation centre, which is based in Renfrewshire. It is clear that there are significant opportunities in the UK sector deal, which is why we encourage the minister and the Scottish Government to do more to ensure that everyone who is involved in the life sciences sector in Scotland can capitalise on those UK sector deal opportunities.

The second action that the Scottish Government can take to help the sector is to reduce the tax gap

with the rest of the UK. I mentioned earlier that the Scottish Lifesciences Association has written to the First Minister to express its concerns about the policy of making Scotland the highest income-taxed part of the UK. The letter talks about the direct and indirect impact on recruitment of a situation in which the after-tax remuneration of recruits will be lower in Scotland than it is elsewhere in the UK. With stage 1 of the budget coming up in the next few weeks, ministers should listen to the warnings from people in the sector and reverse the policy of increasing the tax gap between Scotland and the rest of the UK.

Another issue that the industry has expressed concerns about is the growing shortage of science teachers in primary and secondary schools. We need to ensure that children get the education that they need for a career in life sciences. It is clear that an increasing science skills gap is emerging in schools, colleges and universities. Since 2008, the number of secondary school science teachers has declined by 15 per cent and there is a record number of vacancies for such teachers. We need to address that underinvestment and the science skills gap.

The minister referred in his opening remarks to the impact of Brexit. We recognise the potential impact of a no-deal Brexit. One simple thing that the minister can do is encourage his colleagues at Westminster to support the Brexit deal that the Prime Minister has negotiated. The deal, which is supported by all major business organisations in Scotland, will provide stability and certainty for businesses by keeping the UK in the customs union until we reach a free-trade agreement. That is why I ask the minister to encourage his colleagues at Westminster to support the Prime Minister's deal.

We have outlined a series of policy measures that the Scottish Government can take to further advance the life sciences sector in Scotland, all of which are within the SNP's control. I look forward to hearing in the minister's closing remarks which of those necessary actions and policy measures he will take to realise the potential and ambitions of this vital sector for Scotland.

I move amendment S5M-15261.1, to insert at end:

“; recognises the importance of the UK-wide domestic market to the life sciences sector in Scotland; notes the announcement that the UK Medicines Manufacturing Innovation Centre will be based in Renfrewshire and will receive £13 million from the UK Government's Industrial Strategy Fund; further notes that the life sciences sector is a key pillar of the UK Government's Industrial Strategy, and welcomes the announcement of the UK Government's long-term plan for the NHS, which will result in a £2 billion funding boost for the Scottish Government.”

The Deputy Presiding Officer: When members take interventions, I can give them extra time, because we have a little time in hand.

15:36

Richard Leonard (Central Scotland) (Lab): I am pleased to open the debate on behalf of the Scottish Labour Party. There is little doubt about the vast economic contribution that the life sciences industry makes to the Scottish economy. Just this morning, Rhoda Grant and I visited the world-renowned Roslin institute, which is a world leader in life sciences research and development. The visit reminded me of a number of important lessons: that it is and always should be the primary goal of public research and development to solve wider societal and technological problems; that such research should be international in outlook; that it must be long term and not just short term in its horizons; and that it should never simply be reduced to commercialisation and the price of economics alone. At its best, the right combination of good science, the best brains—of women as well as men—in the science, technology, engineering and mathematics, or STEM, areas and innovative public investment can pave the way for wider social as well as economic benefit.

We were also struck by just how enormous the potential is for continued significant economic and employment growth in life sciences in Scotland. Institutes such as the Roslin are giving a lead in this important scientific revolution of our age and are already creating valuable and innovative business spin-offs and good-quality jobs. However, we need to get the design of the commercialisation pipeline right—it cannot be left to chance or the invisible hand of the market. We need a planned approach instead of a purely market-driven approach to economic development. We need an industrial strategy that is led not just by the United Kingdom Government but by a Scottish Government with vision if we are to win the jobs benefit here and not to see the re-emergence of the all-too-familiar pattern of research here, development there and full production and commercial gain overseas.

If Scotland is to continue to compete on a global scale in the sector, it is absolutely essential, particularly for small and medium-sized enterprises, that we have continued access to the expertise, intelligence, people and markets that have fuelled that rapid growth in Scotland over the past 20 years. In other words, failure to secure a trade deal with the EU could result in a risk to medicines and clinical trials, which in turn would have a negative impact on investment and employment and would put at risk the ability of our

universities to conduct pioneering research in Scotland.

However, it is not just research that is at risk; it is also public health and safety and the processes and practices that protect consumers under current EU law. For example, genetically modified food and plants currently need to pass safety checks before they are used in the European Union, which is a point that was reinforced in last year's ruling by the European Court of Justice on synthetic biology—or GMO 2.0. That point is important to consumers, which is why all those safety checks, authorisations and processes, including labelling, must be mirrored and continued post-Brexit.

Labour's amendment to the Scottish Government's motion highlights the important role of trade unions as part of future work across the life sciences sector and as part of a wider industrial strategy. We must face up to the fact that some major corporations in Scotland's life sciences industry have, at times, obstructed their workers' pursuit of the fundamental human right to trade union membership and organisation. Best practice in industrial relations should be a prerequisite for companies that wish to be considered for public contracts and Government funding, including NHS funding.

Scottish Labour's industrial strategy sets out how we would drive up productivity, including through investment in science research and collaboration and in education and skills. We would do that by setting up new strategic sectoral forums that cover strategically important sectors, including the life sciences. Such a forum would bring together private companies, universities, Government, trade unions and other stakeholders, because, in the end, only by working together will we improve productivity, target procurement, direct investment, boost competitiveness, drive up skills and deliver apprenticeships and good jobs. We need to inspire the next generation of Scottish scientists, researchers and innovators.

Ivan McKee: Will Richard Leonard clarify the difference between the forums that he is talking about and the current industry leadership group?

Richard Leonard: The difference between the forums that we have set out and existing groups is that there would be much more involvement from trade unions, which currently do not have a big role to play. We would also like there to be a bigger role for the public sector in the groups. The Government's strategy paper includes a foreword by the minister and by the vice president of GlaxoSmithKline, so we would like there to be more of a public sector steer on the work of the forums.

We also want to remove the barriers to young people—particularly young women and girls, as I mentioned—getting involved in careers in the industry.

We need a strategic public sector intervention because, in the life sciences sector, above all others, we need to adopt the working assumption that the needs of all must count for more than the profits of the few. There must be a proper balance of interests between mega corporations and democratic accountability. We must put in place a new model for innovation that puts investment in long-term research and development before spending boosts to short-term share prices. If we do that, Parliament will serve well the people whom we are elected here to represent.

I move S5M-15261.2, to insert at end:

“, and believes that future work across the sector must be in partnership with trades unions, as part of a wider industrial strategy.”

15:44

Willie Rennie (North East Fife) (LD): Listening to Richard Leonard, one would think that he is in favour of remaining in the European Union, given all the credit that he gives the EU for the progress that we have made in this country. It is disappointing that that is not the Labour Party's policy.

There is a growing group of people in this country called “Bob”—bored of Brexit—but I am afraid that I will talk about Brexit this afternoon, despite the fact that the minister did not want to focus on it for the commendable reason that he wanted to focus on the sector. It is evident from the sector briefings that we have received for the debate that the life sciences sector will be directly affected by Brexit. The motions and amendments do not refer to the issue, but I will major on it this afternoon because the life sciences sector is deeply worried about what Brexit will do to it.

Other members have talked significantly about the ways in which life sciences have been a major success story for Scotland, but it is worth rehearsing some of the numbers. As the minister has said, the financial value of the sector rose from £4 billion in 2015 to £5.2 billion in 2016, with a target of £8 billion by 2025. It is also worth rehearsing some of the distinct advantages that the sector brings to Scotland, such as patient identification from cradle to grave; strong collaboration involving the NHS, academia, Government and industry; globally competitive trial, recruitment and start-up times; a biobank resource that is unrivalled in Europe; and globally recognised electronic health systems. We are also home to the world's top medical schools, with a focus on translational medicine; we have phase I,

II and III clinical trials, post-market surveillance, biostatistics, regulatory compliance and data management and study monitoring; and we have fast performance turnaround times of three weeks for commercial projects and just under two weeks for non-commercial projects. That is quite remarkable. It is no surprise that there is so much interest in the sector in Scotland and that it is growing so much.

We have the £56 million UK medicines manufacturing innovation centre in Renfrewshire, which will revolutionise how medicines are manufactured and speed up the process of bringing new drugs to market. I also highlight the biocluster sites in Scotland, which include the Edinburgh BioQuarter, BioCity, the drug discovery unit in Dundee, the Inverness campus and Queen Elizabeth university hospital. In addition, we have innovation centres covering stratified medicine, sensors, digital health, industrial biotechnology and aquaculture. Why on earth, then, are we undermining this growing sector with Brexit? As we have seen from the briefings that we have received this afternoon, Brexit will undermine a global and outward-looking sector that is connected to the rest of the world and to Europe. Why on earth are we pursuing a Brexit process that will undermine all of that?

The life sciences sector relies on being able to access the best staff across Europe and the world and on the smooth and easy transfer of life-science-related supplies and human biological species, so erecting any barriers between this country and Europe with regard to people and materials will damage its prospects. As we have seen, the uncertainty alone is causing damage; it is leading to hesitation in investment and workers thinking about whether they want to come and work in this country. The sector is already working across the globe, but that is partly because we are in the European Union, working in partnership and taking an outward-looking approach. Anything that undermines that approach will diminish the sector. The best people come to work here partly because our country is in the European Union, and Brexit has put in their minds a question mark over whether this is a location that will continue to grow and thrive.

At the Beatson in Glasgow, for example, 70 per cent of the research assistants are non-UK citizens. People of more than 30 nationalities work there, half of the graduate students and 45 per cent of the postdoctoral students come from Europe and not a single junior group leader is British. The Beatson is an international institution that is proudly housed in Glasgow because we are an outward-looking country that works in partnership with the European Union and has not decided to pull up the drawbridge and do things by itself. Our success comes from all of that, so why

on earth are we putting doubts into the minds of all those workers at the Beatson and at all the other centres that I have mentioned in Inverness and Dundee, at the Queen Elizabeth university hospital in Glasgow, at the Edinburgh BioQuarter and at the BioCity? Why are we putting doubts into their minds with Brexit?

The IQVIA and Q2 Solutions briefing is blunt. It is Scotland's largest life sciences employer, and it says:

"In the event of a no-deal Brexit, the availability of investigational medicines and equipment used in our globally sponsored ongoing clinical trials ... could be disrupted."

It also says that

"UK clinical research in the UK will be at a medium-term risk"

and that

"it is crucial ... that both tariff and non-tariff barriers are avoided."

The mutual recognition between the UK and the European Medicines Agency is essential. However, it is just one of the agreements that will be required. We will need a host of agreements right across the board. It looks as though we are trying to recreate the European Union. Why on earth are we trying to recreate the European Union? Because it is of so much value. Why are we causing all this uncertainty? Why are we causing all this doubt in people's minds? Why on earth are we pursuing this Brexit? Let us support the life sciences sector—let us reject Brexit.

15:50

Ruth Maguire (Cunninghame South) (SNP): With more than 700 life sciences organisations employing more than 37,000 people in high-quality jobs, Scotland is one of the largest life sciences clusters in Europe. The importance of the sector to Scotland as a whole is clear, and I welcome our SNP Government's continued commitment to growing the industry. The most recent programme for government sets out an ambitious package of measures to promote the life sciences sector's research institutions, international reputation and potential for significant growth and the creation of high-value jobs that goes with that.

The Fraser of Allander institute report "The economic contribution of the pharmaceutical industry in Scotland" states that,

"for every 100 FTE employees working in the wider pharmaceutical sector, an additional 240 jobs are supported elsewhere in the Scottish economy."

The industry is also a key employer in towns and more rural communities outside the major cities. My Cunninghame South constituency is home to two well-established companies, Merck and

GlaxoSmithKline, which contribute to our local and national economies both through the spending of wages and salaries and through complex supply chains.

Merck describes Scotland as "a powerhouse" for its business and the Irvine site as a key contributor to its Scottish success. The company's Scottish sites, with more than 680 employees, supply the global pharmaceutical industry, biotechnology companies and the research institutes and academic centres of the world with the tools, chemicals, reagents and testing services that make scientific breakthrough possible. The Irvine site has been there since 1976 and manufactures critical components for some of the world's highest-profile treatments. These are shipped to vaccine and pharmaceutical companies across the world. More than 170 highly skilled employees produce liquid and powder cell culture media and reagents that are used in biomedical research and production globally.

The Irvine site has recently expanded and there has been investment in the area. My most recent visit was to the life sciences cell culture media plant, where I was accompanied by students from Irvine royal academy and staff from across Merck's Scottish sites. We were there to see the performance materials smart house. The smart house is a 24m² pod that features cutting-edge technologies that have been created by the Merck life sciences experts. It includes everything from organic solar cells on the outside windows, which generate electricity, to intelligent lighting systems made from LED products that alter automatically when natural light changes and a television so thin that it can be curved without breaking. It was enormous, and many of us coveted it because it would be ideal for watching the football on with friends round.

Merck says that the smart house was created to help everyone to understand how the life sciences industry will change how we live in the coming decades. For me, though, the real value was in seeing how it could engage people—particularly the young people who were with me—with science and technology. It is important that young men and women know that there are challenging, exciting and interesting work opportunities for them in our local community and that there are different routes into those jobs: university, college and modern apprenticeships.

Another significant employer in my constituency is GSK. It employs more than 1,000 people across its two Scottish sites, in Irvine and Montrose, and is critical to the medicines supply chain. GSK states that investment in our young people is one of its priorities, and that is illustrated through its apprenticeships, its STEM ambassador work with

local schools and its sponsorship of BodyWorks at the Glasgow science centre.

In August, I took part in the “apprentice for the day” challenge and had the chance to spend time with some young people at the GSK plant in Irvine. During my visit, I had the pleasure of meeting Shannon, who had just started to train as an apprentice, and Matthew, who had recently completed his training and now works full time for the firm. Shannon noted that she had always wanted to do something practical on leaving school and that her apprenticeship provides her with the perfect opportunity to learn a range of skills in the trade. Matthew added that the chance to experience different roles in the organisation through his apprenticeship had helped to make him work ready on its completion.

More recently, I was honoured to present the GSK apprentice of the year award. The Irvine site has apprentices across four key disciplines: engineering; manufacturing; environment, health and safety adviser; and supply chain. The overall winner was an engineering apprentice, Rachel McGivern, who was awarded first place by her peers and leaders for her proactive approach and her impressive analytical and practical skills; for completing her Scottish vocational qualification ahead of schedule and with excellent grades; and for contributing positively to the site as a whole. Rachel undoubtedly has a great career in engineering ahead of her.

The life sciences sector is important for the Ayrshire economy—there are opportunities there for our young people—and to Scotland’s economy. I welcome the Scottish Government’s continued investment in this important sector and look forward to Scotland’s continued success as a powerhouse in life sciences.

15:56

Gordon Lindhurst (Lothian) (Con): The life sciences sector is an area in which the reputation of Scotland and the UK spans the globe. Much of that is down to the famous sheep Dolly, which was, of course, cloned at the University of Edinburgh’s Roslin institute.

Twenty years on, the Lothian region, which I represent, goes from strength to strength in the field of life sciences. It benefits from, among other initiatives, the UK Government and the Scottish Government working together on the Edinburgh and south-east city region deal. Investment is brought to projects such as the Roslin institute to bring together life scientists, clinicians and data scientists to develop innovative and financially sustainable models of health and social care that improve lives.

It is not just our universities that make the Lothian region such an important place for the sector. Earlier today, I met the director of IQVIA, which is Scotland’s biggest life sciences employer. It is a global data human sciences company with a laboratory in Livingston that processes 4 million biological samples from clinical trials across the world each year. Investment at that laboratory will also allow pharmaceutical and biotech companies from around the world to understand better how genes affect people’s health and risk of disease so that personalised medicines can be created. The company decided to base some operations in Livingston because of the rich life sciences ecosystem that exists here.

Indeed, the UK health and life sciences sector is, as we have heard, the fastest growing in Europe. It is important that Governments work together across the UK to maintain and grow that reputation as well as attract inward investment from across the world.

Scotland can benefit from initiatives such as the life sciences sector deals as part of the industrial strategy, which are fundamental to supporting the sector and boosting R and D funding to £12.5 billion by 2021-22, as well as funding from the industrial strategy challenge fund and Scottish Enterprise that will be used for one of the new UK medicines manufacturing innovation centres to be based in Renfrewshire.

Ivan McKee: Is the business that Gordon Lindhurst visited today the same one that produced the document that I have in my hand, which highlights in graphic detail the extreme damage that Brexit will cause to the sector?

Gordon Lindhurst: It is the same business, but what that document says is, of course, quite nuanced and fairly carefully worded. Like other businesses and other people involved in the sector, that business would be surprised by the minister and the Scottish Government not supporting Dean Lockhart’s amendment, which encourages the Scottish Government and the UK Government to look towards a positive working relationship together.

To return to what I was talking about, that centre will support small and multinational companies to manufacture medicines for a global market that is said to be worth around £98 billion. On the interesting point raised by the minister, one should bear in mind that we export more products to the EU than the EU exports to us, so it is in the interests of both the European Union and the United Kingdom to come to agreement in terms of looking to the future and going forward post-Brexit. That is really what we on the Conservative benches want to do; we want to work towards a positive future.

Fundamental to the sector and to the stakeholders involved in it is, of course, their relationship with the NHS and the opportunities that can be provided for improving care pathways and patient services as a result. The UK Government has invested in the long-term future of the NHS, with consequent benefits for the Scottish Government's budget, which is a welcome step that will be of benefit to the life sciences sector and the health of our nation. As I have said, building and maintaining those relationships is important not just within the domestic market, but internationally too.

As the life sciences strategy for Scotland highlights, having such a good international reputation as its foundation means that Scottish companies and organisations can utilise the networks that they already have, which are worldwide and not simply restricted to that small part of the world that we are in, in the EU, to develop further their international mindset. Government has a role to play here, of course, in helping and encouraging the sector to think globally as well as in promoting the life sciences sector in Scotland as somewhere to invest through the likes of Scottish Development International. However, as we reach out to other parts of the world, we must ensure that the investment opportunities that are available to us already are being used to their fullest extent.

The Economy, Energy and Fair Work Committee found that that has not always been the case. The specific item that I refer to is the issue of the investment of up to £10 million from Scottish Enterprise within a wider £200 million package. The committee found that only £500,000 of that money had been spent by Scottish Enterprise by the end of October 2018. Scottish Investment Bank director Kerry Sharp noted, in an attempt to encourage businesses to come forward, that the life sciences sector is an excellent fit for the programme. Although it is disappointing that such efforts have been slow to get going, I hope that the life sciences sector can now fully benefit from those investment opportunities and, equally, I hope that the minister would encourage them to do so. The life sciences sector in Scotland is one that we can be proud of, but there is much more that we can do.

16:02

Kenneth Gibson (Cunninghame North) (SNP): As convener of the cross-party group in the Scottish Parliament on life sciences, I am pleased to participate in the debate and heartened to hear about the progress that has already been made towards meeting the ambitious targets set out in the 2017 "Life Sciences Strategy for Scotland 2025 Vision" to build on the existing strength of

this vital and highly productive sector of our economy. The life sciences sector has not been immune to the impact of Brexit, and the process has put at risk both access to medicines and workforce planning. It is therefore more essential than ever that we continue the Government's proactive approach to growth.

Scotland has a long and illustrious history of invention, discovery and innovation in the field of medicine, and today's modern life sciences sector reflects that tradition. The excellent work of the life sciences Scotland industry leadership group, which has played a crucial role in strengthening collaboration between industry, academia and the public sector, has been supported by the reconvening of the CPG on life sciences. Since November 2017, the CPG has taken a proactive role in creating a forum for the sector to share its ambitions with the Parliament and foster better working relationships with colleagues across the sector. I thank Ivan McKee and his ministerial predecessor, Paul Wheelhouse, for attending CPG meetings and supporting the group since its inception; I also thank members who have participated in the group, such as Graham Simpson and Tom Mason.

In a little over a year, we have been successful in achieving our aim of identifying and discussing policy areas of particular relevance to Scottish life sciences, particularly those that support the delivery of the 2017 strategy. A specific focus has been looking at how to ensure that Scotland's workforce has the skill set required to deliver the strategy, and there has been much discussion on how to address positively the challenge of bringing more women into the life sciences sector.

The impact of those efforts has been tangible. Last March, as a direct result of concerns raised during CPG discussions that not enough is being done to showcase Scotland as a destination for global pharmaceutical company investors, the Association of the British Pharmaceutical Industry, the medicines trade body, arranged a series of three international webinars. Those webinars looked at the joined-up network of life science departments in Scotland's universities; opportunities to test ideas in medicines manufacturing through the forthcoming medicines manufacturing innovation centre, which is under development in Renfrewshire; and the unique data opportunities for Scotland when looking at the outcomes for patients from different treatments and clinical pathways. That has raised Scotland's profile as a destination for investment, supporting the attract element of the anchor, build and attract mission that was outlined in the strategy.

Of course, a strategy can be effective only if it takes a holistic and well-rounded view, and that has been reflected in the breadth of discussions

that have taken place at meetings of the cross-party group. Topics have ranged from collaborations in life sciences to the economic impact of the sector, women in STEM, waste, the single national formulary, diagnostics and beyond.

The most recent meeting of the group focused on data, because, as the strategy highlights, Scotland has an invaluable resource for the data-driven approach to healthcare of the future, with all patients in NHS Scotland having a unique identifier and an electronic health record. The publication of Scotland's digital health and care strategy in April 2018 and the more recent report from the data scoping task force were both largely welcomed, particularly the aims of capturing medicines use for patients in all clinical settings and including medicines indication in all prescribing systems.

As convener of the cross-party group, I have let the Government know of people's desire to see the delivery of the commitments in that strategy to join up data silos and acknowledge the link between the income for the NHS from properly governed access to anonymised cohort-level data and the wider Scottish economy.

The group is seeking an update on the Government's response to the report of the data scoping task force that, in September, called on the NHS in Scotland to take forward the Montgomery recommendations on medicines by capturing medicines use for patients in all clinical settings, creating a national laboratory data resource, improving the recording of patient outcomes and creating a Scottish medicines intelligence unit, which the cabinet secretary might perhaps touch on in closing.

As we approach the two-year anniversary of the publication of the life sciences strategy, there is much to celebrate. Sector turnover has already increased from £4 billion in 2015 to £5.2 billion in 2016 and we are on track to meet our target to double sectoral turnover to £8 billion by 2025. That is good news for the Scottish economy, as the sector directly supports more than 5,130 jobs and every 100 of those jobs supports an additional 240 elsewhere in our economy, as Ruth Maguire pointed out.

In addition, the jobs that are created by this growth sector tend to be high value, with the median weekly full-time earnings standing at £723 in 2017, up 6.2 per cent on the year before, which was the largest increase in earnings among all the growth sectors and compares favourably with the Scottish average wage.

Not only has the Government been proactive in fostering the right business environment for the life sciences sector to thrive, but it has directly supported innovative and growing companies

through its enterprise agencies. Just this week, Glasgow-based Collagen Solutions was awarded a grant of £1.54 million, which will cover more than a third of its expected R and D costs over the next four years. Supporting businesses such as Collagen Solutions, which is a leader in the development and manufacturing of biomaterials and regenerative medicines for the enhancement and extension of human life, is key to fulfilling the targets that are laid out in our ambitious strategy.

If members wish to engage with leaders of growing life sciences companies to further discuss Parliament's role in realising the sector's potential, I extend an invitation for them to attend the event that I will host on Wednesday 30 January, which jointly involves Scottish Enterprise and the life and chemical sciences industry leadership group. I am confident that by continuing its collaboration with industry, academia and the NHS, the Government will overcome sectoral challenges and the uncertainty of Brexit to develop a life sciences sector that is sustainable, innovative and competitive.

16:08

Iain Gray (East Lothian) (Lab): I think that we all agree on the importance of life sciences to Scotland and the sector's historical importance, of which we have heard many examples, from James Black to Dolly the sheep and, of course, Alexander Fleming and the discovery of penicillin—although Mr Lockhart missed a trick in not pointing out that Fleming had to go to St Mary's hospital in Paddington to work, which is where he made that discovery.

We have also heard, correctly, about the sector's potential. The numbers demonstrate that. The minister has given us the correct number of £5.2 billion turnover in the life sciences sector now and some 40,000 people employed in as many as 800 different organisations and enterprises. That is very significant. Indeed, it is particularly significant for me as the MSP for East Lothian because, as the Scottish Government's chief economic adviser's briefing on the life sciences centre points out, East Lothian has the greatest density of employment in the life sciences sector of any local authority area in Scotland, with some 3.2 per cent of employment being in the sector, so I have a particular local interest in it.

However, we should not fool ourselves, because the competition in growing the industry is huge. I remember, as many as 17 years ago, when I was enterprise minister, going to Uppsala during a visit to Sweden and finding there an ancient, 15th century university, the oldest in Scandinavia, that also has a strong history in the life sciences. For example, Carl Linnaeus was a professor there when he did his work. What took me aback was

finding that, in Uppsala, the whole city seemed to be not much more than an extension of the university and its attempt to build and grow a life sciences cluster, which included its own internationally renowned commercialisation model. It was clear to me then that many places in the world are competing for the laurels in life sciences that we hope to achieve here in Scotland.

This is not something that will happen by accident like when Alexander Fleming discovered penicillin. It will require a concerted effort, so the strategy is both necessary and welcome, as is the leadership of the industry leadership group. However, our effort has to be even stronger and more national if we are to achieve the leading international role that we crave.

Not so long ago, at a life sciences sector conference, Pete Downes, the recently retired principal of the University of Dundee, which is a key player in academia and life sciences, said:

“One third of business enterprise research and development spending in Scotland is in life sciences. The biggest threat to its continuing growth is parochialism driven by internal competition for limited resources. To remain competitive, the sector must operate as a Scotland-wide cluster with the confidence to build relationships nationally.”

At the same conference, Dave Tudor, the co-chair of the industry leadership group, gave the current level of collaboration across the Scottish life sciences community only five marks out of 10.

Richard Leonard is right to argue for a more planned and strategic approach. We need to broaden the strategic leadership of our approach to the life sciences in order to achieve the growth that we all want to see, and that means having the right investment pipeline. The minister talked about Touch Bionics. Back in 2002, when I was enterprise minister, I awarded Touch Bionics a small firms merit award for research and technology—SMART—funding, and it has gone from strength to strength, but it is now owned by Össur, which is an Icelandic company. That says to me that the pipeline for supporting companies as they grow might need some work.

We need to have the right people at every level in every discipline. Key skills in the life sciences sector as it grows include cutting-edge lab techniques and skills in data handling and artificial intelligence, both of which have been mentioned by members in their speeches. We need to be sure that we have the people with those skills coming through in order to see the sector grow, and that means going right back into our schools and ensuring that enough young people are pursuing studies and then careers in STEM. We have real problems there. We have falls not just in the numbers of science teachers but in the numbers of the science technicians who are so

necessary for the practical science that leads to those lab techniques. In recent years, we have seen a 25 per cent drop in computer science teachers, who are exactly the teachers that we need to have teaching young people the necessary skills for the sectors of big data and artificial intelligence.

If we are to pull together in Scotland around a national goal or challenge to build the sector and be a world-leading nation in life sciences, perhaps we should think about having a different focus for the strategy, on something that seizes the imagination rather more than the minister's 7 per cent annualised growth rate does. For example, we should be looking at multiple sclerosis, a disease with which Scotland has a particular problem, and trying to commit ourselves to support, over a reasonable period, people who are looking for a cure for the disease, or we could focus on motor neurone disease, on which significant research is taking place in Scotland.

Let us ensure that the life sciences sector does not just grow but seizes the imagination, and let us mobilise not just the people who are involved in the sector but the whole of Scotland, so that we can look forward to innovations that are equivalent to penicillin or Dolly the sheep, rather than always looking back and being pleased about what we did in the past.

16:15

Shona Robison (Dundee City East) (SNP): As we have heard, Scotland has had the highest number of life sciences start-ups per capita in the UK. It is estimated that the sector in Scotland employs just under 40,000 people, and the sector accounts for 55 per cent of university funding. There is a lot to celebrate.

Investment in research and development shows that the life sciences are a key growth industry, which has rightly been identified by the Scottish Government in its economic strategy, in recognition of the sector's high growth potential and capacity to boost productivity.

Dundee is one of the leading locations for life sciences, with around 20 per cent of Scotland's life sciences companies based in and around the city. Employment in life sciences companies rose from 700 to 900 between 2009 and 2017 in Dundee city—an increase of 28.6 per cent, compared with an increase of 22.3 per cent at Scottish level for the same period.

Companies that are based in the city are expanding their operations, which will have a positive knock-on effect on employment in the city's other businesses and industries. For example, as a result of the continued growth in life sciences, as well as the opening of the V&A,

Dundee is experiencing a resurgence in the hospitality industry, with a wide variety of hospitality outlets opening.

The city offers a wide range of expertise from all over the world—indeed, from more than 60 countries—with international academics and leading life sciences companies working closely to turn research into drug discovery and environmental biotechnology into commercial enterprises. The sector is advancing the field of precision medicine, where the therapy is targeted to the individual patient.

Currently, there are around 20 core life sciences enterprises and a similar number of supporting organisations in Dundee. There are also, of course, the internationally renowned University of Dundee and Abertay University and, close by, there is the James Hutton Institute.

The total turnover of life sciences enterprises in Dundee city rose from £62.7 million in 2008 to £94.6 million in 2017—an increase of 51 per cent, compared with an increase at Scottish level of 15 per cent over the same period. The gross value added—the measure of the value of goods and services provided for life sciences enterprises in Dundee—rose from £28.4 million in 2008 to £51.3 million in 2016, which is an increase of 81 per cent.

However, the employment figures from the life sciences enterprises do not include the large input from institutions, including the University of Dundee, Abertay University and the James Hutton Institute, which employ a great number of scientists. It is estimated that the number of academic and support staff and research students at the University of Dundee alone has increased by an average of 5 per cent each year since 2001. The university has confirmed that it currently has 685 substantive staff in the sector.

One of the university's leading professors in life sciences, Professor Mike Ferguson, received a knighthood in the new year's honours list. Professor Ferguson is one of the UK's most eminent life scientists. He helped to build the drug discovery unit in the university's school of life sciences, which has attracted investment of more than £75 million.

As the minister said, the University of Dundee has world-class modern laboratory and technological facilities. In the QS world university rankings in 2017, Dundee was placed in the top five universities in the UK for biological sciences and was eighth in Europe. In the Clarivate Analytics 2017 state of innovation report, Dundee was ranked as the most influential scientific research institution in the world for pharmaceuticals in the period 2006 to 2016.

Essential to Dundee's continued success as one of the key locations in the life sciences industry is the close relationship between the city's universities, private companies and NHS Tayside. One example of the working relationship is the establishment of the academic health science partnership in Tayside, between NHS Tayside and the University of Dundee. The AHSP acts as a single point of contact for collaborations and strategic partnerships and to identify, support and develop new relationships and facilitate knowledge exchange and opportunities with both industry and major research funders.

However, continued investment is vital to maintain Dundee's position as one of the leading life sciences hubs, ensuring highly skilled, high waged employment in the city. I am delighted that, as part of the Tay cities deal, £25 million of investment to grow the Tayside biomedical cluster was announced late last year. That investment will help to maintain the continued success of Dundee and surrounding areas as an attractive, world-leading centre of excellence and a sought-after biomedical location in the UK that will create jobs and boost the local economy.

However, with less than two months remaining, the industry remains unclear exactly how Brexit will affect legal and regulatory requirements for the life sciences industry in the UK and Europe, and is expressing huge concern about this uncertainty. Dundee has proven itself as a leading hub for life sciences, but with deep concerns being expressed by researchers and industry leaders as to how Brexit will affect research collaborations and development and the ability of companies in the UK to continue working with their continental partners, the UK Government urgently needs to provide that much-needed clarity to the life sciences sector, for Dundee's sake and for Scotland's. That needs to happen now.

16:21

Bill Bowman (North East Scotland) (Con): I welcome the opportunity to speak in this Scottish Government debate recognising the life sciences sector in Scotland. The life sciences sector can be defined as including human health, biology and biotechnology, and animal health. Scotland's life sciences community is one of the largest in Europe.

Scotland is home to over 700 companies specialising in life sciences and is a global centre of research and development in key sectors, including digital healthcare, animal bioscience, regenerative medicine, industrial biotechnology, medical technology and pharmaceutical science. Scotland's formidable legacy in life sciences includes, as we have already heard, Sir Alexander Fleming's discovery of penicillin in the location

mentioned by Iain Gray, Ian Donald's utilisation of ultrasound for obstetrics and the Roslin Institute's cloning of Dolly the sheep, the world's first mammal cloned from an adult sheep cell.

The latest figures that I have show that the sector employs over 37,000 people across some 700 organisations, which add about £2.4 billion to the Scottish economy. Scotland is already a leading global life sciences cluster and in the past few years has seen many positive developments.

Scotland also has the highest number of life sciences start-ups per capita in the UK, while life sciences account for about 55 per cent of total Scottish university research funding. We also have the largest concentration of animal health and aquaculture researchers in Europe. In the UK, Scotland is second only to London in terms of life sciences companies receiving venture finance.

The 2017 "Life Sciences Strategy for Scotland 2025 Vision" aims to grow the industrial turnover of the life sciences sector to £8 billion, while also making Scotland the location of choice for the life sciences community. The strategy themes of the vision are innovation and commercialisation, sustainable production, internationalisation and business environment.

Life sciences is a key sector of the Scottish economy and we have one of the largest and fastest growing life sciences communities in Europe. The sector is particularly important to the region that I represent, North East Scotland, as it accounts for a large part of north-east Scotland's economy with more than 2,500 people employed within its companies and research base.

The region accounts for more than one fifth of employment in Scottish life sciences research and development, and Aberdeen has one of the highest concentrations of life scientists in the UK outside of Cambridge. For example, Aberdeen's health campus is Europe's largest integrated medical, research and teaching location, and provides a collaborative environment for clinical, commercial and academic researchers.

There are numerous examples of the north-east and, in particular, Dundee, being leading areas in life sciences. A key regulator of cell growth and survival called protein kinase B, or PKB, is the focus of numerous anti-cancer drug clinical trials. The role of the protein and how it works was uncovered by researchers at the University of Dundee, and has stimulated pharmaceutical companies to undertake drug development campaigns focused on PKB as a target molecule. Moreover, the research has led several life sciences companies to generate research tools to accelerate academic and industry research in that area.

Another success in the life sciences sector originating from the University of Dundee was the pioneering automated drug-design methodologies developed by researchers there, which led in 2012 to the spin out of Exscientia Ltd, a leading British drugs design company. The company provides technologies to enhance the efficacy and the efficiency of drug discovery for the pharmaceutical industry using artificial intelligence.

As the life sciences sector continues to grow, the role of leadership in it has come increasingly to the fore. Research has isolated "five critical leadership" areas, which are believed to be the battleground of the corporate life sciences future. One of those is the "adaptive mind set". That can be shown through the University of Dundee's collaboration with Boehringer Ingelheim, a global, research-driven pharmaceutical company, to provide free access on public markets to proteolysis targeting chimeras, or PROTACs, which are compounds that are used to fight diseased cells.

I believe that the Scottish Government recognises the important role that the life sciences sector plays in improving Scotland's economic performance and its potential for growth. However, more can be done, and the only way to grow the life sciences industry is to create a business-friendly environment that will attract talent and inward investment.

I encourage closer ties between the biosciences industry and Scotland's universities to provide the necessary skills base in business and science for the sector to continue to prosper, duly supported by the Scottish Government.

16:27

Maureen Watt (Aberdeen South and North Kincardine) (SNP): I, too, am pleased to be taking part in this debate on such an important part of the Scottish economy. I recall that, in 2007, when I was a Government minister, there was much debate about how Scottish Enterprise would concentrate its efforts on particular sectors of the economy, to help growth in the economy overall. There was some criticism of that, but I think that we have seen the benefits of that, despite the severe impacts of the banking crisis, the UK being in its second decade of austerity, which is an economic choice by the Westminster Government, and, more recently—the next choice of this shambolic Westminster Government—Brexit. The choices made back then by this Scottish Government were correct.

It is to this SNP Government's credit that the Scottish economy is performing so well in the face of such adverse events. We should never forget the significance of that. I have been around long

enough to remember that, when there have been recessions in the past, Scotland has ended up being very badly hit. As they used to say, when England gets a cold, Scotland gets the flu. Those opponents of devolution and the further devolution of powers would do well to remember that.

In among all the external economic shocks to the Scottish economy, there has also been the most recent downturn in the oil and gas industry, which is probably longer and deeper than any previous ones. That has led leaders in the north-east, across business, local councils, higher and further education and the health sectors, to come together to see what can be done to encourage growth in other sectors, such as the food and drink and life sciences sectors. Opportunity North East was set up as a consequence.

The north-east has always had a very big footprint in the life sciences sector, through the Rowett institute and the James Hutton Institute, which used to be the Macaulay Land Use Research Institute. Their importance in many fields is well documented. In order to build on that, on 21 November last year, the bio-therapeutics hub for innovation was launched in Aberdeen specifically to drive health innovation and life sciences company growth. It is a £40 million project that is set to deliver an innovation hub to double the number of life sciences companies in the north-east of Scotland and support the national ambitions of the sector to collaborate, innovate and commercialise the next generation of therapies and healthcare solutions.

The hub will be a focal point for the sector's ambition of growth. Some £20 million of capital funding has already been secured through the Aberdeen city deal. Opportunity North East itself has committed an additional £3.6 million over seven years to operate the hub and deliver the bespoke support activity that is designed to create one of the most dynamic environments and grow life sciences businesses. Brexit permitting, it will hopefully be a catalyst for international collaboration and investment.

It will be located on the Foresterhill health campus, a 69,000 square foot new-build facility, which will include accommodation for spin-outs, start-ups and established businesses, collaboration space and shared facilities for events, small conferences and networking. Sector-specific support programmes in the hub will include incubation, acceleration, mentoring, commercialisation and growth planning.

As Bill Bowman said, the Foresterhill campus is already one of Europe's largest integrated clinical research, teaching and commercial health sites. This project, which has a delivery date of 2020, will only add to its importance and influence, which

will make sure that the targets that the minister mentioned are met.

I am grateful to Sir Ian Wood, chair of Opportunity North East, for his role in that. I am also grateful to Professor Stephen Logan, chair of ONE's life sciences sector board, who has driven this. He has just completed his term as chair of NHS Grampian and we should thank him for all that he did in that role—Shona Robison and I are very grateful for what he did in that role. Professor Logan said that the hub will

“realise the opportunity to collaborate and innovate to bring forward the next generation of medical therapies and products and our target is to double the size of the company base by 2027. This is a transformational project of national significance that supports the regional economic role of diversification and will contribute to the national ambitions of life sciences as a driver of health and wealth.”

Those are his words, not mine.

In welcoming the launch of the hub, the principal and vice-chancellor of the University of Aberdeen, Professor Boyne, said:

“Bringing academics, clinicians and industry together onto one site on the Foresterhill Health Campus is good news for patients and it will speed up the translation of research from bench to bedside and improve the diagnosis, management and treatment of disease.”

The University of Aberdeen already has an excellent track record of producing pioneering spin-outs tackling serious health concerns that include antibiotic resistance, autoimmune disease and gut health and Alzheimer's disease. Indeed, in December, the Rowett institute announced a new Aberdeen-led study to look at the gut health of people with Alzheimer's to see whether diet can play a role in managing the behavioural and psychological systems of the disease. There is increasing evidence that the gut microbiota are a key link between specific nutrients and brain function.

The study will recruit participants from local care homes. If successful, it could act as the first step towards establishing a link between diet and behaviour and could possibly lead to future research teasing out the complex relationship between diet, gut microbiota and challenging behaviour in Alzheimer's disease. As the minister said, with an ageing population, that is precisely what our life sciences sector can do to grow.

Although I enjoyed the first part of Iain Gray's speech, he cannot help being a glass-half-empty guy. At the previous members' business debate on MND research, Kezia Dugdale praised MND research in Scotland and she said, if I remember correctly—

Iain Gray *rose*—

The Deputy Presiding Officer (Linda Fabiani): Excuse me, both of you. We are way

over time, so please come to a conclusion, Mrs Watt.

Maureen Watt: For Iain Gray's benefit, I will just note that Kezia Dugdale said that, if a cure were to be found, it would be either in Scotland, Australia or Israel.

Today's debate has been useful in highlighting what is going on in Scotland's life sciences sector.

The Deputy Presiding Officer: We move to the closing speeches. I am glad to see that everybody is back in the chamber, courtesy of Mrs Watt being allowed to talk on for a while.

16:35

Rhoda Grant (Highlands and Islands) (Lab): The debate has highlighted the potential of the life sciences sector, in which Scotland is a world leader. As Richard Leonard said, this morning we visited the Roslin institute, which is a world leader in agriculture, aquaculture and animal health. Not only is it a world leader in those areas, it spends time inspiring young people and encouraging businesses to grow in its area of expertise.

Iain Gray spoke about the contribution that the life sciences sector makes to the Scottish economy, as a £5.2 billion sector that employs 40,000 people. With the right strategy, we could grow that by Scottish companies bringing research and development to market. We need to do more to encourage that and create the conditions for it to happen—it will not happen by accident and we need a strategy to do it.

To grow the sector, we need to start by inspiring a new generation of scientists and removing the barriers that hold them back. Ruth Maguire talked about having different routes into the sector from colleges and schools. We need to encourage more girls to study STEM subjects, too. I first visited the Roslin institute some years ago when it was awarded the Athena SWAN award that recognised its commitment to women's career development, which again came across strongly during this morning's visit.

Today, we also saw the institute's commitment to young people, as it has well-equipped labs for visits from schools—not only Scottish schools, but schools from across Europe and the rest of the world—whetting the interest of young people in STEM subjects.

Dean Lockhart and Iain Gray mentioned an issue for encouraging young people into STEM subjects, which is the lack of STEM subject teachers. Young people cannot be enthused if we do not have the teachers in place to achieve that. As mentioned in the debate, we need science teachers, lab technicians and computer science

teachers if we are to encourage young people to get involved in STEM.

Richard Leonard said that Scottish Labour would set up strategic sectoral forums covering strategically important sectors, which would of course include life sciences. The forums would bring together employers, the Government, the public sector, trade unions and other stakeholders. They could work together to improve productivity in the sector and ensure that we invest, are competitive and deliver the right skills for the industry. The forums would feed into an industrial strategy that recognised the worth of life sciences to the Scottish economy and brought developments to market, keeping the benefit in Scotland.

Iain Gray talked about collaboration and how it is not working properly in Scotland. That would also be a job for the strategic sectoral forums, or for the life sciences Scotland group, which surely has a role in bringing together what is good in Scotland and making sure that people work together.

Our amendment talks about trade union involvement. The people who staff life sciences industries and businesses need to be involved in driving the sector forward, because they have the knowledge to do that. Richard Leonard made the point that some businesses do not have a good record of trade union recognition. We need to change that and make sure that public funding for research and development and for contracts addresses the issue, driving up standards and trade union involvement by using the tools that are at our disposal.

Shona Robison spoke about NHS Tayside's work with the University of Dundee, and I will mention a part of that. A constituent of mine has been campaigning for magnetic resonance-guided focused ultrasound, which those organisations are working together to try to bring to Scotland. I have been in contact with the Scottish Government and I hope that the minister will look at the matter again, because it has seemed unable to help. That technology would be a huge step forward for Scotland; the only place where it is available is London, and it is important that we bring it to Scotland.

We have to work with other parts of the UK, as Dean Lockhart said. It is clear that UK-wide funding and collaboration are very important in the sector, but we also have to make sure that we do not fall behind. We need to continue to work together to be a world leader in life sciences. This morning, the Roslin institute spoke about a lot of its funding coming from the Biotechnology and Biological Sciences Research Council, which is a UK-wide organisation that the institute works closely with, as it does with other institutes

throughout the UK. The Roslin institute sees that partnership as incredibly important to its future.

Iain Gray spoke about research and investment and how we should look for the cures for such things as MS and MND, and I sincerely hope that we will continue to aspire to do that.

Life sciences are an important part of our economy and we need to develop the sector and capitalise on research and development to ensure that Scottish companies are at the forefront of bringing that innovation to market. If the Scottish Government were to develop an industrial strategy, surely life sciences would be at the very heart of it, allowing those opportunities and that growth to happen in our country and in our industry.

16:42

Graham Simpson (Central Scotland) (Con):

This has been an interesting debate, which has demonstrated that the life sciences sector is important to Scotland and the rest of the UK. I will close for the Conservatives this afternoon by speaking about my interest in the sector, highlighting contributions in the debate and asking questions of the Government.

As we have heard,

“The life sciences sector is an important contributor to Scotland's economy, providing more than 37,000 jobs across more than 700 life sciences organisations.”

That sentence comes from the Government's life sciences strategy, and it is good that there is one.

My interest in the sector is personal: one of my daughters gained a masters degree in biochemistry at Glasgow and is now doing a PhD at Cambridge on a project about Parkinson's disease. I ask members not to intervene here, because that is as much as I know or understand about it.

Despite my scientific shortcomings, I am the vice-convenor of the Parliament's cross-party group on life sciences. The group has met fascinating people who are doing amazing work and I have seen at first hand the impact that the sector has on our job market and economy.

We have a lot to be proud of in our life sciences sector. In my Central Scotland region is the Scottish universities environmental research centre in East Kilbride, which used to house a nuclear reactor—the Presiding Officer will know it well. Great work is going on there in conjunction with our higher education sector, but it is largely unsung and not known about.

The hub of research and innovation is at BioCity in North Lanarkshire, which is funded through the city deal. Based there is CuanTec, which is a

stand-out small company that I find very exciting. As a result of its research, passion and dedication to creating food packaging from marine life by-products—shells—I hope that we will see its compostable food packaging in supermarkets soon. Not only can that product reduce plastic waste, it can increase the shelf life of fresh food and reduce food waste. It is very positive. CuanTec is headed by Dr Cait Murray-Green. I mention that because one of the biggest mountains that the sector needs to climb is attracting more female talent. We need to inspire females at a young age and show them that—much like politics—science is not the male-dominated sector that it used to be and should not be. Dr Barbara Blaney at BioCity works hard to bring local schools into the site, and I hope that enabling people to see important and successful scientists in that environment will encourage growth in the numbers of female graduates.

We also need to attract talented children from disadvantaged backgrounds. That group is underrepresented in the sector.

Iain Gray: Perhaps the member will allow me this opportunity to correct Maureen Watt's misunderstanding of the point that I made at the end of my speech. If we want to inspire young women to enter this industry, we should be articulating the potential for things such as finding a cure for conditions such as MS or MND—work on which is already on-going—rather than simply talking about economic growth.

Graham Simpson: I have to say to Mr Gray that I found his earlier contribution quite upbeat, in fact.

One way to support some aspiring young scientists would be to increase life sciences apprenticeships. On a recent visit to New College Lanarkshire, I was told that there are only 62 life sciences apprentices in the whole of Scotland. That is clearly not good enough. Apprenticeships are a fantastic way to train up the next generation of scientists. We need to build on the current networks between academia and industry in order to increase that number. One of my questions to the Government is what can be done about that. If the minister does not have an answer today, I urge him not to make one up but to go away and think it through.

There have been some excellent contributions to the debate today. I will just fly through them. Dean Lockhart spoke about the need for UK collaboration. He also mentioned the skills gap. Richard Leonard spoke of the need for a trade deal with the EU and called for more joint working. Willie Rennie mentioned somebody called Bob who is bored of Brexit, and then he banged on about Brexit. Ruth Maguire talked about jobs in her constituency and mentioned a smart house

that she had visited—there is a smart house in my constituency, at South Lanarkshire College in East Kilbride. Gordon Lindhurst spoke about Governments working together. Kenny Gibson, who used to work in the sector, spoke about the work of the cross-party group that I mentioned and also addressed the issues of skills and getting women into science, which I have already touched on. The upbeat Iain Gray spoke about international competition and the lack of science teachers. Shona Robison and Bill Bowman both mentioned the life sciences sector in Dundee, which is doing very well. Maureen Watt appeared to forget what debate she was in before she turned to the issue of life sciences and talked about the north-east.

Why is the life sciences sector so successful? We have more than 700 companies operating here and the highest number of life sciences start-ups per capita in the UK. Those companies support more than 37,000 jobs in the sector.

I will stick to time, Presiding Officer—I know that you like that—by dropping a whole bit out of my speech.

Members: Aw.

Graham Simpson: I am really very sorry, but I took an intervention from Iain Gray.

The life sciences strategy sets an ambition to grow the sector by 7 per cent a year to reach a turnover of £8 billion by 2025. Is that ambitious enough? Forecast annual increases of 6 per cent in R and D spending by the pharmaceutical industry on its own could meet that target. That is one question that I would ask the Government, and I have a few more.

It costs staggering sums to bring a new medicine to market, but medicines keep people out of hospital. Is the Scottish Government serious about NHS Scotland being a partner in the delivery of the strategy? Where can we scrutinise the figures that illustrate that we are on course to meet the life sciences target? Do NHS boards still have a network of innovation champions, and what metrics are being used to allow the NHS to demonstrate its working?

I apologise for going over time, Presiding Officer. I will sit down.

The Deputy Presiding Officer: Apologies are always welcome.

16:50

Ivan McKee: It has been an informative, interesting and at times entertaining debate. I apologise in advance in case I do not mention every contribution. A number of issues have been

raised and I will try to touch on the most critical ones.

I first want to clear up some issues about the Scottish Government's attitude to the UK Government and co-operation in the sector. I say clearly for the record that we are keen to work with the UK Government to secure funding. The industry leadership group recognises the huge value of the funding that is available through the industrial strategy, and I continue to advise organisations to put together collaborations and apply for money. Clearly, we have been successful, given the money that has come forward for the medicines manufacturing innovation centre and the significant money for the James Hutton Institute and for iCAIRD, the industrial centre for artificial intelligence research in digital diagnostics, which I mentioned. There are many other examples. In my brief six months in office, I have met Iain Campbell, the head of Innovate UK, on two occasions, and on both those occasions the conversation centred largely around the life sciences sector and what Scotland can get from UK Government opportunities in the sector.

I am on first-name terms with my UK Government counterpart, Lord Henley—Oliver—and we have met several times to talk about the co-operation. Indeed, Oliver was at the most recent ILG meeting. We do that not least because it is our money—Scotland pays her taxes, which go to Westminster, and the UK Government uses that money to fund all manner of things, including the industrial strategy. It is only right that we should get our fair share of it, and we continue to push for that.

Graham Simpson: I am encouraged to hear that. Might the minister and his friend Oliver like to come together to the CPG on life sciences at some point?

Ivan McKee: The member will need to ask Oliver that question.

One important point is that I have written twice to the UK Government to ask for Scottish representation on the UK Life Sciences Council and the life sciences industrial strategy implementation board, but we have not been given that yet. If the member could add some weight to that appeal, that would be hugely beneficial and appreciated.

Labour members kept talking about the need for a strategy, but we have a strategy. Constructive comments about what else could be in the strategy would be welcome, but it is not helpful to continue to say in parrot fashion that we need a strategy when there is one in front of us. Richard Leonard mentioned two things that are wrong with the strategy. First, he said that it does not include the trade unions. I take that point on board, and I

shall take that up as an action. Secondly, he said that it has a picture of Dave Tudor in it. Now that Dave has left GSK to do something else, we could maybe take his picture out. I do not know whether that will make Richard Leonard happy and allow him to sign up to the strategy. It has been developed in a bottom-up way by the sector, which is a far more effective approach than one in which the Government sits in an ivory tower and pushes something down on to the sector. That is why the strategy works, is robust and is delivering results.

Richard Leonard: I am not calling for the displacement of industry; I am calling for a broader approach that includes the trade unions but is Government led because, in the end, individual companies will represent individual company interests, and there needs to be a broader view that is led by Government.

Ivan McKee: The member misunderstands the purpose of the ILG. The Government has a huge role to play in it. The agencies are all there, and it works in collaboration with industry from all parts of the sector, including small and big companies. If Richard Leonard had been to at least one of the meetings, he would understand that that collaboration works very strongly. The ILG includes the national health service, universities and many other relevant stakeholders.

Graham Simpson made some interesting points. I take on board the issue of gender balance, and we continue to push for that. I will investigate the point that he made about apprenticeships. I will be very surprised if the number that he gave is correct, given the tens of thousands of apprenticeships that the Government is supporting, but I will get back to him. I have commented on the issues with the NHS, and I will do so again, because that relationship is key to driving the sector forward.

I found Iain Gray's speech extremely thoughtful and helpful. I recently visited Zurich and other cities in which life sciences are core to what they are doing. We should learn from such cities so that we can do our very best. It is great to hear Pete Downes talk about collaboration. Universities, because of their nature, can often be more competitive and collaborative. From my conversations with Pete Downes and Iain Gray, I know that they, and many others, clearly understand that universities working with other stakeholders is the way forward. There have been 170 start-ups in the sector over the six-year period to 2015 and, on top of that, there have been 60 university spin-outs. Therefore, we are continuing to fill the pipeline. Perhaps we could do better, but we have had some results.

Iain Gray: I accept that. I was making the point that the pipeline needs to support medium-sized

companies as they grow, as an alternative to the Government selling out to overseas investors.

Ivan McKee: There is always a balance between bringing in foreign direct investment, which is critical to the economy, and growing businesses as fast as we can through whatever investment is available. However, I take Iain Gray's point on board.

I will move on to cover the important points that Willie Rennie made. I said that I would come back to Brexit and communicate the sector's concerns about the impending developments. Although businesses across many sectors are concerned about the damage that Brexit will do, the life sciences sector stands to be particularly impacted. As well as skills shortages being exacerbated and complex international supply chains being disrupted, the risk of regulatory divergence is a particular concern for the life sciences sector. The close relationship between the sector and academia means that the risk to research funds, co-operation and the free flow of academic talent will significantly harm the sector.

Life sciences businesses never miss an opportunity to remind me of the damage that Brexit will do to their ability to trade. Yesterday, I met Merck, which expressed concerns about the risk to its supply chains, and, during my visit to Canon Medical Systems Ltd this morning, I found out that more than 30 per cent of the firm's employees who are working on artificial intelligence are EU nationals. Such workers are highly skilled, highly mobile and critical to the business's success in Scotland, and they are hugely concerned about their future.

In my opening speech, I highlighted Scotland's long history in the life sciences, our long-standing and on-going global academic excellence in medical research and technology, the breadth and range of our life sciences businesses and the ambitious plans that the sector has for growth in turnover and exports. In November, I had the privilege of speaking at the largest ever Scottish life sciences conference. A community of hundreds of companies, academics and NHS representatives got together to consider the future of the sector and to celebrate what has been achieved through the development of a strong life sciences community in Scotland. Life sciences is one of the many sectors in which Scotland demonstrates true global excellence and the potential to continue to excel.

I have covered the challenges that face the sector. For those that are in our control, including those that relate to skills and investment, I have detailed the work that the Government is doing to support the sector. For the challenges on which we have to do our best to mitigate the misguided policies of others, such as the mistake of Brexit, I

have made clear our determination, through working with my colleagues, the cabinet secretary and the minister for health, to maximise the contribution that our Scottish NHS can make to develop the sector. We will take all due care and attention to ensure that patient care is paramount and that data protection is sacrosanct. The two-way street enables our NHS to access the best technology and innovation and to apply them to the benefit of patients, which drives up safety and drives down waiting times and costs. The sector needs to be able to take the best innovations from our clinicians and other health service workers and to commercialise and apply them not just in Scotland but around the world, in order to benefit Scotland's economy and jobs, our public sector finances and our patients.

The life sciences sector is more than just another industrial sector in Scotland's range of world-class industries. The work that businesses do is truly life saving—it literally saves lives through innovation. The work makes us healthier and wealthier, which makes it such a key part of Scotland's economic strategy. We are proud to be standing on the shoulders of giants—Lister, Fleming and, of course, Dolly the sheep. I am proud to be working with an excellent team in the industry leadership group and across the wider sector. I will continue to work with people to drive forward plans to grow the sector, to maximise its potential and to contribute to Scotland's economy and wider society.

Business Motion

17:00

The Presiding Officer (Ken Macintosh): The next item of business is consideration of business motion S5M-15280, in the name of Graeme Dey, on behalf of the Parliamentary Bureau, setting out a business programme.

Motion moved,

That the Parliament agrees—

(a) the following programme of business—

Tuesday 15 January 2019

2.00 pm Time for Reflection

followed by Parliamentary Bureau Motions

followed by Topical Questions (if selected)

followed by Scottish Government Debate: Securing a Just Transition to a Carbon-neutral Economy

followed by Committee Announcements

followed by Business Motions

followed by Parliamentary Bureau Motions

5.00 pm Decision Time

followed by Members' Business

Wednesday 16 January 2019

1.30 pm Parliamentary Bureau Motions

1.30 pm Ministerial Statement: Protecting Scotland's Interests: Response to the Outcome of the Meaningful Vote in Westminster

followed by Portfolio Questions: Environment, Climate Change and Land Reform; Rural Economy

followed by Scottish Labour Party Business

followed by Healthcare (International Arrangements) Bill – UK Legislation

followed by Business Motions

followed by Parliamentary Bureau Motions

5.15 pm Decision Time

followed by Members' Business

Thursday 17 January 2019

11.40 am Parliamentary Bureau Motions

11.40 am General Questions

12.00 pm First Minister's Questions

followed by Members' Business

2.30 pm Parliamentary Bureau Motions

2.30 pm Scottish Government Debate: Celebrating the Role of Credit Unions in Scotland's Communities

<i>followed by</i>	Parliamentary Bureau Motions
5.00 pm	Decision Time
Tuesday 22 January 2019	
2.00 pm	Time for Reflection
<i>followed by</i>	Parliamentary Bureau Motions
<i>followed by</i>	Topical Questions (if selected)
<i>followed by</i>	Scottish Government Business
<i>followed by</i>	Committee Announcements
<i>followed by</i>	Business Motions
<i>followed by</i>	Parliamentary Bureau Motions
5.00 pm	Decision Time
<i>followed by</i>	Members' Business
Wednesday 23 January 2019	
2.00 pm	Parliamentary Bureau Motions
2.00 pm	Portfolio Questions: Transport, Infrastructure and Connectivity; Justice and the Law Officers
<i>followed by</i>	Scottish Government Business
<i>followed by</i>	Business Motions
<i>followed by</i>	Parliamentary Bureau Motions
5.00 pm	Decision Time
<i>followed by</i>	Members' Business
Thursday 24 January 2019	
11.40 am	Parliamentary Bureau Motions
11.40 am	General Questions
12.00 pm	First Minister's Questions
<i>followed by</i>	Members' Business
2.30 pm	Parliamentary Bureau Motions
2.30 pm	Finance and Constitution Committee Debate: Committees Budget Scrutiny
<i>followed by</i>	Parliamentary Bureau Motions
5.00 pm	Decision Time

(b) that, in relation to any debate on a business motion setting out a business programme taken on Wednesday 16 January 2019, the second sentence of rule 8.11.3 is suspended and replaced with "Any Member may speak on the motion at the discretion of the Presiding Officer"

and

(c) that, in relation to First Minister's Questions on Thursday 17 January 2019, in rule 13.6.2, insert at end "and may provide an opportunity for Party Leaders or their representatives to question the First Minister".—[*Graeme Dey*]

Motion agreed to.

Decision Time

17:00

The Presiding Officer (Ken Macintosh): The first question is, that amendment S5M-15261.1, in the name of Dean Lockhart, which seeks to amend motion S5M-15261, in the name of Ivan McKee, on recognising the life sciences sector in Scotland, be agreed to. Are we agreed?

Members: No.

The Presiding Officer: There will be a division.

For

Balfour, Jeremy (Lothian) (Con)
Ballantyne, Michelle (South Scotland) (Con)
Bowman, Bill (North East Scotland) (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)
Fraser, Murdo (Mid Scotland and Fife) (Con)
Golden, Maurice (West Scotland) (Con)
Greene, Jamie (West Scotland) (Con)
Halcro Johnston, Jamie (Highlands and Islands) (Con)
Hamilton, Rachael (Ettrick, Roxburgh and Berwickshire) (Con)
Kerr, Liam (North East Scotland) (Con)
Lindhurst, Gordon (Lothian) (Con)
Lockhart, Dean (Mid Scotland and Fife) (Con)
Mason, Tom (North East Scotland) (Con)
Mitchell, Margaret (Central Scotland) (Con)
Mountain, Edward (Highlands and Islands) (Con)
Mundell, Oliver (Dumfriesshire) (Con)
Scott, John (Ayr) (Con)
Simpson, Graham (Central Scotland) (Con)
Smith, Liz (Mid Scotland and Fife) (Con)
Stewart, Alexander (Mid Scotland and Fife) (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, Alasdair (Na h-Eileanan an Iar) (SNP)
Arthur, Tom (Renfrewshire South) (SNP)
Baillie, Jackie (Dumbarton) (Lab)
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 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)
Dugdale, Kezia (Lothian) (Lab)

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)
 Forbes, Kate (Skye, Lochaber and Badenoch) (SNP)
 Freeman, Jeane (Carrick, Cumnock and Doon Valley) (SNP)
 Gibson, Kenneth (Cunninghame North) (SNP)
 Gilruth, Jenny (Mid Fife and Glenrothes) (SNP)
 Gougeon, Mairi (Angus North and Mearns) (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)
 Johnstone, Alison (Lothian) (Green)
 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)
 McArthur, Liam (Orkney Islands) (LD)
 McDonald, Mark (Aberdeen Donside) (Ind)
 McKee, Ivan (Glasgow Provan) (SNP)
 McKelvie, Christina (Hamilton, Larkhall and Stonehouse) (SNP)
 McMillan, Stuart (Greenock and Inverclyde) (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)
 Swinney, John (Perthshire North) (SNP)
 Todd, Maree (Highlands and Islands) (SNP)
 Torrance, David (Kirkcaldy) (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)

The Presiding Officer: The result of the division is: For 29, Against 92, Abstentions 0.

Amendment disagreed to.

The Presiding Officer: The next question is, that amendment S5M-15261.2, in the name of Richard Leonard, which seeks to amend the motion in the name of Ivan McKee, be agreed to.

Amendment agreed to.

The Presiding Officer: The final question is, that motion S5M-15261, in the name of Ivan McKee, on recognising the life sciences sector in Scotland, as amended, be agreed to.

Motion, as amended, agreed to.

That the Parliament recognises the importance of the life sciences sector to the Scottish economy; notes that February 2019 is the second anniversary of the publication of the industry-led Life Sciences Strategy; understands that the development of the strategy has seen the sector increase its turnover from £4 billion in 2015 to £5.2 billion in 2016 and that it is on track to meet its target to double sectoral turnover to £8 billion by 2025; notes that this has been achieved through the strengthening of partnerships across industry, academia and with the NHS, and believes that future work across the sector must be in partnership with trades unions, as part of a wider industrial strategy.

Rotary Club of Currie Balerno (Recycling Computers)

The Deputy Presiding Officer (Christine Grahame): The final item of business is a members' business debate on motion S5M-15094, in the name of Gordon MacDonald, on Rotary Club of Currie Balerno recycling personal computers. The debate will be concluded without any question being put.

Motion debated,

That the Parliament thanks the Rotary Club of Currie Balerno, which has recycled and provided used computers for schools in Africa for over six years with its partners, the Turing Trust; recognises that over 4,000 PCs have been wiped, refurbished, installed with educational materials and shipped to schools in Ghana, Malawi and other African countries; considers that there are not only social benefits from reusing old PCs but also environmental benefits from the offsetting of 2,058 tonnes of CO₂ emissions so far, which is the equivalent of planting 5,145 trees; acknowledges that many of the project volunteers learned IT refurbishment skills and that four trainees have used their training and work experience as an opportunity to end long-term unemployment and get full-time jobs; understands that the club's most recent project, under the Scottish Government's small grants programme, is to provide computers for classrooms in Malawi over a three-year period and that, to date, it has helped 41,067 students to gain vital digital literacy skills; encourages potential donors to provide old computers, and notes the calls on the Scottish Government to give greater consideration to smaller charities such as these to develop their projects and expertise.

17:03

Gordon MacDonald (Edinburgh Pentlands) (SNP): Last November, I attended a Rotary Club of Currie Balerno event at which I had the opportunity to discuss with members the club's work in the community. During the evening, after hearing about the valuable work that the group carries out locally, I heard from Lindsay Craig, the Rotary's past district governor, about the innovative work that this small Rotary club that is based in my Edinburgh Pentlands constituency is involved in 8,000 miles away, in Malawi. At this point, I take the opportunity to welcome to the Scottish Parliament members of the Rotary Club of Currie Balerno, who are in the gallery tonight.

Rotary International, through the Rotary Club of Currie Balerno, has collaborated with the Turing Trust, which is based here in Edinburgh. Run by the family of Alan Turing, the wartime code breaker and founder of modern computer science, the trust ensures that his name continues, and its mission is to empower disadvantaged communities through information technology enabled learning. Since its establishment in 2009, the charity has been delivering information and communications technology resources to selected

primary and junior high schools in Ghana. Since 2015, it has also been working to provide technology-enabled education in schools in the northern region of Malawi. Supported by the Rotary club, over the past six years the trust has shipped more than 4,200 second-hand PCs to schools in Ghana, Malawi and other African countries.

Every PC that it puts into a school in Africa has been wiped, repaired and loaded with offline educational resources. That work is done by a fantastic team of dedicated volunteers in Edinburgh. The project has been supported by the Scottish Government's small grants programme, which awarded the Turing Trust £60,000 to support its work to get essential learning resources to rural communities across sub-Saharan Africa.

Each PC that can be reused has a tremendous impact in a Malawian classroom. So far, the project has assisted more than 41,000 students to gain vital digital literacy skills. In addition, more than 450 teachers have gained skills in basic computer maintenance and are using computers to support their teaching.

On top of that, there is an environmental benefit. None of the ICT equipment ends up in landfill; it is appropriately recycled at the end of its life here in Scotland and in Africa. By reusing old PCs, the trust has had a tremendous environmental impact. To date, it has offset 2,058 tonnes of CO₂ emissions, which is the equivalent of planting more than 5,000 trees.

Not all communities in Malawi are connected to the electricity grid, however, so providing computing facilities for those schools required an innovative solution. The Turing Trust design team, which comprised four retired professionals—Ian Campbell, Andrew Clark, Jim Douglas and John Wilson, all of whom are members of the Rotary Club of Currie Balerno—found a solution in the SolarBerry. The SolarBerry is a solar-powered computer lab and classroom that uses low-energy Raspberry Pi computers. It is designed for off-grid communities and is housed in a repurposed shipping container. The prototype was delivered to Choma in April last year, and a formal ceremony took place when it was officially handed over to the community in June.

The lab is designed for use by the whole community—not just the school. It can be used for a wide range of activities, from hosting movie nights to adult IT classes. The SolarBerry can also be used to generate income through selling its excess energy. It uses the energy that it generates to recharge small electrical goods such as phones and lamps at a fraction of the cost and environmental damage of petrol generators. That has had a huge impact on the day-to-day life of

the community, whose members no longer have to walk 10 miles to charge their phones.

The SolarBerry journey starts in Scotland, where the shipping container is filled with computer equipment for distribution to schools in Malawi. Once it is empty, the shipping container is converted into a classroom, with new windows being cut into the sides to allow air to flow through the space, and a shade cloth to prevent direct sunlight from heating up the inside of the SolarBerry. Each unit is equipped with 11 Raspberry Pi computers and powered by solar panels on the roof of the container. The SolarBerry is having a huge impact in Choma, where it is allowing the local schools to offer computer studies and to support their young people in gaining the digital skills that they need for the 21st century.

I congratulate everyone who is involved in the innovative project—from the Turing Trust and from the Rotary Club of Currie Balerno—on facilitating the teaching of digital skills to some of the poorest and most remote communities in Africa. In order for those bodies to continue the project, it is clear that more companies and organisations need to donate their old computer equipment. The Turing Trust is located in Simpson Loan on the site of the old Royal infirmary of Edinburgh, which is less than two miles from Parliament. Surely it would be better use of the computer equipment that is disposed of by Parliament to donate it to the Turing Trust to be wiped, repaired and loaded with offline educational resources for use in Africa, as opposed to the current practice of sending it for destruction. I intend to raise that idea with the Scottish Parliamentary Corporate Body in the coming weeks.

In closing, I want to highlight a point about funding. As I stated earlier, I am delighted that the Turing Trust has been a recipient in the Scottish Government's small grants programme. The charity has ambitions to get computers into every Malawian secondary school by 2025, but in order to achieve that goal, more international development funding will be critical. The reality is that there are few opportunities for small Scottish charities to scale up in order to compete at full development programme level. The Scottish Government has led the way through the small grants programme and has inspired many charities to scale up their ambitions and activities.

However, in order to continue that journey and encourage small Scottish charities to grow, could there be a funding round for up to £250,000, or £500,000, for projects over three years that would help to build Scottish expertise and develop our small charities to help them to make the transition into fully fledged agents for international development? I hope that the minister will be

happy to discuss that with me and those involved in the near future. *[Applause.]*

The Deputy Presiding Officer: I, too, welcome members of the Rotary Club of Currie Balerno, but say gently that there should be no applause from the gallery, please. I know that people feel like applauding, but it is not permitted.

I call Gordon MacDonald—*[Interruption.]* I will need to start putting sugar in my tea. I call Gordon Lindhurst, to be followed by Stewart Stevenson. I am sorry about that, Mr Lindhurst.

17:11

Gordon Lindhurst (Lothian) (Con): Thank you, Presiding Officer.

I thank Gordon MacDonald for bringing the debate to the chamber.

As a Lothian MSP, I am delighted that the work of the Rotary Club of Currie Balerno is being recognised in the Scottish Parliament in this way. Indeed, I paid tribute to that club and, in particular, to its community chest project in a motion that I lodged last year. The club did that project alongside the Balerno Village Trust. Its aim was to set aside funds to assist local clubs and organisations with small projects that benefit the local community.

The Rotary Club of Currie Balerno assists a wide range of people and groups—both young and old—through an impressive array of different projects. A clear example of the footprint that the club leaves is its work with the Georgia Rotary scholarship programme, as detailed on its website. Three Rotary districts in the US state of Georgia sponsor up to 67 students from around the world each year to study at one of Georgia's universities for an academic year. The package is worth around \$30,000 per student. My understanding is that between two and five pupils from the local area secure places on those programmes each year through the Rotary Club of Currie Balerno.

The club does not just benefit the people of Currie and Balerno, as Gordon MacDonald and his motion have pointed out. Its international efforts have included raising substantial funds for the end polio now campaign and the Nepal earthquake appeal in 2015. It is a club with global reach.

Gordon MacDonald has set out the work that the club has done with computers. Why computers? We live in a globalised world, and those who are cut off from it can often be left behind. Fundamental to tackling the issue of poverty in Africa is equipping as many people as possible with the technology and support to work in that global environment. That includes equipping young people with the tools and skills to be able to learn and work in a world that is IT and

technology driven in a way that our own young people in Scotland take for granted.

There is much to be done to help to build that capacity for Africa so that people there can enjoy the same access that we often take for granted. Computer access is of course essential to that, which is why this is so important, as is the generosity of those who donate their old computers to the club.

I conclude by highlighting a quote from the club's website, which is from a volunteer working in Africa as part of the project. This gives a flavour of the impact that the work has on the people receiving the computers:

"The emotions on the teachers and students' faces as we were setting up the computers is something I will treasure forever".

I end my speech by saying a big thank you to all the Rotary club members involved in this vitally important work.

17:15

Stewart Stevenson (Banffshire and Buchan Coast) (SNP): I draw members' attention to my entry in the register of interests as a member of the Institution of Engineering and Technology and of the Association for Computing Machinery.

It is a great delight to see the members of the Rotary Club of Currie Balerno in the public gallery. My father became the president of the Rotary Club of Cupar in 1956, which was just a few years ago, and one of my very early speeches on computing was given to that Rotary club in 1973. Rotary clubs are a very important part of our social infrastructure and do good work right across Scotland, as well as work with international reach. It is a delight to hear of a relatively small club doing something that, without question, is benefiting people in Africa who need our support.

Old computers are something that I rather like, given that I am the oldest person in the chamber—I am looking around carefully—and think that there is some value in things that have aged. We can reuse them and rediscover their merits. Although computers are obsoleted by updates in the software environment and changing fashion, they can in fact continue to operate for many years delivering useful service. The reuse of old computers benefits the environment, but it is of wider benefit altogether. It is worth saying that two pals and I built the first home computer in Scotland in 1975, which is still running up in Caithness with one of that combine.

There is something in what Gordon MacDonald said about scaling up, but there is an intrinsic value in many ways, particularly in innovation, in having comparatively small teams. Innovation

happens when communication between the members of a group is tight and close; if there is a big group, that becomes much more difficult. Where the opportunity has been created in Africa for access to technology, we have seen genuine innovation that shows the way for people far beyond Africa. In particular, Africa is the place where electronic money has been developed using mobile phones. To avoid having to go to banks, people can exchange money between phones. That technology has been developed locally and it shows the rest of the world that there is genuine ability to innovate there if only we can give people the equipment with which to do it.

The Raspberry Pi is a wonderful tiny computer that can sit in the palm of one's hand. The American moon landing programme was the genesis of the integrated chip. There was only 0.4W available for the 2 kilobyte computer that navigated the moon lander down, and that required the integrated chip. Today, the integrated chip is such that I now have 4 gigabytes of memory in the device on my wrist, whereas the first computer that I programmed in the 1960s had 1 kilobyte of memory.

The world moves on, but that should not mean that the computers of the past are without value. I very much welcome the Rotary Club of Currie Balerno showing the way in how we can reuse computers. I hope in particular that we will see the recycling of laptops, which seem to have a shorter fashion life cycle. One of the important benefits of a laptop going out to areas where continuous access to electricity is limited is that they work when they are not connected to the mains. I hope that, if laptops have not been part of the focus, they will become part of the future focus.

I hope that the debate helps to ensure that what is going on in the Rotary Club of Currie Balerno and in Africa with used computers becomes more widely known and that the model is picked up and copied. I hope that there are no patents and no copyrights on the design of the SolarBerry, because it sounds like a rattling good idea that I would certainly like to see replicated elsewhere. The next time I meet Rotarians in the north-east of Scotland, I will certainly be drawing their attention to the example that the small Rotary Club of Currie Balerno has given us. I congratulate its members and congratulate Gordon MacDonald on bringing the debate to the Parliament today.

17:20

Alison Johnstone (Lothian) (Green): I, too, congratulate Gordon MacDonald on securing this debate on the important work that the Rotary Club of Currie Balerno and the Edinburgh-based Turing Trust are doing to promote the recycling of PCs. It is lovely to have them with us this evening. I will

spend my short time focusing on what that work does to tackle the vexing problem of electronic waste and the educational benefit that it is clearly having.

As we know, electronic waste is a major and growing problem. The United Nations publication, “The Global E-waste Monitor 2017”, reports that every year the world produces around 44 million tonnes of e-waste, which is the same weight as 4,500 Eiffel towers. Unfortunately, it predicts that that will rise to 52 million tonnes by 2021. Only around 20 per cent of that e-waste is reported to be recycled, and we simply do not know what happens to many millions of tonnes of it, due to lack of monitoring.

E-waste from Europe and other developed countries is exported to emerging economies, where it is not always properly reused or recycled. The European Environment Agency estimates that between 250,000 tonnes and 1.3 million tonnes of used electrical products are shipped out of the EU every year to west Africa and Asia, and that a significant proportion is not safely processed.

That is one of the many reasons why the work of the Rotary Club of Currie Balerno and the Turing Trust is so important. Collecting, cleaning and upgrading more than 4,000 computers with educational software is a huge task—what a fantastic achievement. Ross Cockburn from Currie, the founder of the West Lothian-based Reusing IT charity, has donated more than 400 PCs and monitors to the Rotary club’s campaign.

As well as the positive environmental impact, evidence shows that the computers are having a profound impact on the quality of the education and life chances of the students who receive them. A survey conducted by the Turing Trust in Malawi found that the vast majority of students reported that using the donated computers made learning easier and more enjoyable, and teachers reported an increase in academic performance. The pupils at the Lidoma secondary school all passed their science exams, something that had not been seen before the arrival of the Turing Trust computers. It was a notable achievement.

Both organisations are also doing their bit to ensure that the proper infrastructure exists to support computer learning. As Gordon MacDonald mentioned, 87 per cent of Malawian schools do not have electricity, so the Turing Trust’s SolarBerry project is vital. With the help of four retired professionals, who are members of the Rotary Club of Currie Balerno, the trust has transformed a large cargo container by fitting solar panels to the roof and 13 low-energy Raspberry Pi computers inside, allowing young people in the Choma community to access computers when that would otherwise have been impossible. The wider community is clearly benefiting, too.

Rotary club members have also been raising money for solar-powered electric lighting, so that classes in the Choma community can continue in the evening. It is a transformative model and one that we should seek to learn from and to roll out wherever appropriate. There is much for all of us to learn from this fabulous example.

I warmly welcome the work of both the Rotary Club of Currie Balerno and the Turing Trust, and congratulate everyone involved in getting so many computers, which might otherwise have gone to waste, to the people who need them most. I hope that the support that the Scottish Government has provided through its small grants scheme will continue and perhaps grow, and I echo Gordon MacDonald’s call for this Parliament to do all that it can to provide support to smaller Scottish charities such as those, which are clearly making a profound and important difference to many lives.

17:24

Alexander Stewart (Mid Scotland and Fife)
(Con): I, too, congratulate Gordon MacDonald on bringing this members’ business debate to the chamber.

Like my MSP colleagues, I appreciate the massive amount of work that the Rotary Club of Currie Balerno and the Turing Trust have done. Their invaluable work in recycling used computers and providing them to schools in Africa over the past six years is nothing short of inspiring. It shows the real value of Rotary International and how Rotary clubs can assist and support individuals and organisations around the globe.

As a Rotarian, I am fully aware of the work that happens in clubs. I am fortunate enough to have had a number of roles in my club, the Rotary Club of Perth St Johns, including vice-president, president and an international development role, and I have experienced at first hand the sheer determination, commitment, enthusiasm and hard work that Rotarians put into their role, which they see as being to support not just local but national and international projects. Rotarians go that extra mile to support individuals to ensure that they can and do make changes to people’s lives, and the project that we are discussing this evening is doing that, without question. Much of the work of Rotarians is unseen and unsung, so it is important that members of the club and others who have provided support are in the public gallery this evening to hear our congratulations on and commendations for their achievements.

As co-convenor of the cross-party group on Malawi and a long-term supporter of the Scotland Malawi Partnership, I have been very aware of the Turing Trust’s excellent work with regard to

education not only in Malawi but across sub-Saharan Africa.

As we have heard, the PhD student James Turing founded the Turing Trust in honour of his great uncle Alan Turing, the computer scientist, who was heavily involved in the Bletchley Park code breaking. During his first trip to Ghana, in 2009, James noticed how difficult it was for schools to acquire affordable computers of reasonable quality. The project has galvanised support and it shows what can be achieved. I pay tribute to the staff and volunteers of the Edinburgh charity who have ensured that computers can be refurbished and reused in Africa. They have worked in partnership with the centre for youth and development in Mzuzu since 2015, and people have benefited massively from their involvement.

We have heard about the design of the SolarBerry, which addresses the need for electricity. It is an off-grid computer laboratory that ensures that the Raspberry Pi computers are workable and can be used. That has supported about 250 students and about 1,000 adult learners in the Choma community day secondary school in rural Malawi.

I pay tribute to the Turing Trust for supporting hundreds of schools across Malawi, Liberia and Ghana, where more than 4,000 computers have already been installed. As a result of the commitment of the Rotarians in the club alongside the Turing Trust, about 25,000 students in Africa are now IT literate and about 450 teachers have been trained in basic computer maintenance skills. That is to be commended and applauded.

I say to the Rotarians that what they are doing—the small part that they are playing—is changing the lives of individuals who would not otherwise have opportunities. That encapsulates the Rotarian ethos of doing things for others. I pay tribute to the club for the work that it has done, the talent that it has shown and its success, and I commend its members for all the work that they are doing.

17:28

The Minister for Europe, Migration and International Development (Ben Macpherson):

I, too, congratulate Gordon MacDonald on securing this debate and bringing the work of the Rotary Club of Currie Balerno—I warmly welcome its members to the public gallery—and the Turing Trust to the Parliament's attention as we start the year. I thank him and other members for highlighting the Scottish Government's international small grants programme.

As members said, the Scottish Government was pleased to provide funding to the Turing Trust under the small grants programme, for the trust's

project on improving information and communication technology skills in rural Malawi, powered by renewable energy. Members mentioned the trust's work in Ghana and Liberia; the Scottish Government's support was specifically for our partner country, Malawi.

The project, which began in 2016, has enabled the Turing Trust to create a customised e-library to complement the provision of community ICT hubs in 200 rural schools in Malawi. I understand that the project is progressing well and will be completed later this year.

I have been impressed by the incredible work that the Rotary Club of Currie Balerno and the Turing Trust have been doing together to deliver the project, with Scottish Government support. In particular, I am impressed by the approach that the organisations have adopted. The power and importance of partnership working should not be underestimated. Such an approach is at the heart of the Scottish Government's international development strategy, and I know from the work of the Rotary Club of Leith in my constituency, Edinburgh Northern and Leith, that it is also at the heart of what the Rotary movement seeks to achieve.

The Turing Trust is just one example of an organisation that receives funding through the Scottish Government's small grants programme, which was established in 2013 to help to grow the international development sector in Scotland and to support the sector to help some of the world's most vulnerable communities in our partner countries.

The work that we have heard about today illustrates the difference that the small grants programme is making. With £500,000 being made available annually, the programme is an integral part of our international development fund. We are beginning to see smaller, younger organisations in Scotland, such as First Aid Africa, successfully bidding for and being awarded grants under our larger programmes—in the case of First Aid Africa, for work in Zambia. That is a testament to the success of the small grants programme in developing smaller organisations and increasing capacity in the Scottish international development sector.

The most recent round of small grants funding closed just months ago, in November 2018. Applications are currently being assessed, and applicants will be notified of the outcome in the coming months. I very much look forward to receiving recommendations from our independent assessors.

The small grants programme is an important part of our international development strategy, as is exemplified in this debate about the difference

that has been made by the Rotary Club of Currie Balerno and the Turing Trust. I have had feedback on the programme from Scotland's International Development Alliance. I always welcome feedback on how things are operating, and I would be happy to meet Gordon MacDonald, as he requested in his speech.

As members said, technology is a hugely important aspect of international development. It has the capacity to make a major, life-changing difference to many of the world's most vulnerable people and communities. By making technology such as computers and mobile phones available to the most vulnerable, we can improve people's ability to hold their Governments to account, increase economic opportunity, empowerment and productivity, encourage learning and even save lives, through the provision of healthcare and health information.

Many of the projects that are funded from the Scottish Government's international development fund use old and new technologies to assist some of the most vulnerable people and communities to lift themselves out of poverty and build better futures for themselves and their children.

For example, in 2012, we funded an innovative project, through Onebillion Children, which helped more than 30,000 Malawian pupils to learn maths through the medium of Chichewa, using interactive apps on iPads. Through the 2015 to 2018 Malawi development fund, the Scottish Government provided funding to Voluntary Service Overseas, in partnership with Onebillion, for its unlocking talent through technology project, which built on the 2012 grant by equipping classrooms in Kasungu district with mobile tablet technology, to enhance instruction and enable highly tailored and interactive learning.

Unlocking talent is now a nationwide educational initiative across Malawi, partly as a result of the progress that the project made. The initiative is now institutionalised in the Ministry of Education, Science and Technology's digital education technology agenda, with the goal to embed it in all 5,300 primary schools, covering roughly 4.4 million children across the country. Building on the subject of the motion today, this highlights the power and importance of partnership working, supporting small organisations and harnessing technology to reduce poverty.

There are other examples across Malawi that I could highlight. For example, in the past year the Scottish Government supported the Malawi Scotland Partnership, which was mentioned, to use some of their funding and their IT equipment in their Lilongwe communications and resources centre to provide computing training and skills to 115 girls and young women from five schools.

That project and the subject of today's debate are important examples of how technology can be used to drive social change and empower those in our partner countries, and elsewhere in the developing world, to make a bigger difference

Let me focus again on the Rotary Club of Currie Balerno and the Turing Trust and thank them for the important work that they do in recycling, refurbishing and shipping computers to developing countries. They have been innovative in their approach to recycling computers and other technology. Their partnership working has been exemplary and that focus on increasing digital literacy skills in Malawi has made an important and meaningful difference.

This work is very much appreciated by all in the chamber, as has been said today, by the Scottish Government and more widely. We are happy to have supported this project through the international development small grants programme, and recognise and celebrate the collective contribution that has been made towards greater global citizenship and making a bigger difference.

Meeting closed at 17:36.

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