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Official Report

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Wednesday 25 February 2015

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Scottish Parliament

Wednesday 25 February 2015

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

Portfolio Question Time

Rural Affairs, Food and Environment

The Deputy Presiding Officer (John Scott):

Good afternoon. The first item of business is portfolio questions. In order to get in as many people as possible, I would be grateful for short and succinct questions and answers.

Waste Management (Regulatory Standards)

1. Michael McMahon (Uddingston and Bellshill) (Lab): To ask the Scottish Government what work it is conducting in association with the Scottish Environment Protection Agency to ensure high regulatory standards in waste management. (S4O-04031)

The Cabinet Secretary for Rural Affairs, Food and Environment (Richard Lochhead): The Scottish Government and the Scottish Environment Protection Agency work closely in all areas of waste management regulation to ensure that high standards are in place across the sector. For example, the Regulatory Reform (Scotland) Act 2014 provides SEPA with new powers of investigation, new sentencing options for the courts and the new offence of causing significant environmental harm. We also recently announced a review, to be conducted jointly with SEPA, of legislation and guidance relating to the use of sewage sludge.

Michael McMahon: Is the cabinet secretary aware that, at a round-table session hosted by the Justice Committee last year, concerns were raised about the increasing presence of illegal operators in the waste management industry and about access to public contracts? The former Cabinet Secretary for Justice noted the difficulty that is faced in the absence of formal criminal proceedings and the fact that intelligence about potential links to serious organised crime cannot be taken into account in awarding public contracts. Will the Cabinet Secretary for Rural Affairs, Food and Environment give an update on support for the sharing of information between agencies and the impact that that is having on prosecution rates for environmental crime?

Richard Lochhead: The member raises the important issue of illegal operators in waste management and the huge problems that they cause for the regulators and for Scotland's

environment. As he knows, tackling environmental crime has been a big priority for all agencies and for the Scottish Government over the past few years, and we have set up the environmental crime task force. A conference on environmental crime was held in November last year, so there is more sharing of information between agencies.

If the member is concerned about a specific issue, he should write to me and I will pass the matter to the Lord Advocate to address. The Lord Advocate, SEPA, the police and others are all working together to tackle environmental crime and clamp down on illegal operators.

Jamie McGrigor (Highlands and Islands) (Con): Does the minister agree that the waste management sector is important to the economy, that the vast majority of companies in the sector are committed to meeting the high standards that are in place and that a partnership approach between SEPA and business is therefore important to ensure that the standards are met?

Richard Lochhead: I agree with Jamie McGrigor. A lot of effort has been put in, with good success, to ensure that SEPA is business friendly, as it has been over the past few years. Many business representatives to whom I have spoken have noticed the sea change in approach from the environmental regulator over the past seven years. Of course, it has a job to do, but it should enable economic development, not frustrate it. That is why SEPA is working proactively with the business community. I accept that the partnership approach is important.

Flooding (Urban Areas)

2. George Adam (Paisley) (SNP): To ask the Scottish Government what support it provides to help prevent flooding in urban areas. (S4O-04032)

The Minister for Environment, Climate Change and Land Reform (Aileen McLeod): The Scottish Environment Protection Agency, local authorities and Scottish Water are co-operating on developing flood risk management strategies and local flood risk management plans, which will identify priorities for reducing the flood risk in vulnerable areas—urban and rural—throughout Scotland. A consultation on the draft strategies and plans will be launched in March and publication of the strategies is due in December this year, with the local flood risk management plans following in December 2016.

George Adam: Paisley has dealt with more than 1,400 millilitres of rain in the past few months, which has caused some flooding in the town and has caused much concern among constituents. Are any plans under way to improve drainage systems across the country, and particularly in urban areas such as Paisley?

Aileen McLeod: The Scottish Government recognises the challenge that is posed by surface water flooding caused by heavy rainfall. That is why the Flood Risk Management (Scotland) Act 2009 established a planning process for the sustainable management of all flood risks, including surface water flooding.

We have published guidance to assist responsible authorities in preparing surface water management plans to help with managing surface water flooding as, by its nature, the challenge is too complex for any single organisation to address alone. We are looking at how we can better manage surface water before it enters the sewer system or receiving watercourses by allowing for more above-ground storage and routing of surface water, as well as increased absorption through the ground or via innovative solutions.

Alex Fergusson (Galloway and West Dumfries) (Con): The minister will be well aware of Dumfries and Galloway Council's proposals for flood prevention on the Whitesands in Dumfries. She will also be aware of the considerable and growing level of local opposition to those plans. What discussions has the Scottish Government had with the council about the proposals and what has been the outcome?

Aileen McLeod: Local authorities are responsible for developing, designing and promoting flood protection schemes as they see fit in their areas, which includes undertaking public consultation and engagement with stakeholders. The Scottish Government has no direct role in that process.

Dumfries and Galloway Council's decision-making process for determining how best to protect the Whitesands is on-going. I know that the council has recently continued its public engagement efforts, with model displays of the favoured scheme. I was fortunate enough to have the chance to view those displays when I was in Dumfries on 26 January. I am aware that the proposals for the Whitesands have divided opinion among residents, so I have asked my officials to liaise with their counterparts in Dumfries and Galloway Council to discuss the proposals.

Anne McTaggart (Glasgow) (Lab): Will the minister give an update on progress with the funding and development of one of the national infrastructure projects—the metropolitan Glasgow strategic drainage system?

Aileen McLeod: Scottish Water is investing heavily in improving its drainage and sewerage infrastructure to improve services to customers and to reduce flood risk, often in co-operation with local authorities and SEPA. The metropolitan Glasgow strategic drainage partnership is a prime example of such interagency co-operation in an

urban environment. Its work will result in substantial reductions in flood risk for residents of the greater Glasgow area. I would be happy to write to the member with a further update and to provide her with as much information as I can about the scheme.

Land Reform (Consultation Findings)

3. Johann Lamont (Glasgow Pollok) (Lab): To ask the Scottish Government when it will publish the findings of its consultation on the future of land reform. (S4O-04033)

The Minister for Environment, Climate Change and Land Reform (Aileen McLeod): The consultation on the future of land reform closed on 10 February. Approximately 1,200 responses were received from a range of organisations and many individuals. We are carefully considering all the responses and we look forward to receiving in the coming months the independent analysis report that we have commissioned. In March, consultation responses from respondents who indicated that they were content for their response to be made public will be published on the Scottish Government's website.

Johann Lamont: I am sure that the minister is aware of the Labour Party's long-standing commitment to and record on addressing land reform. I wish her every power to her elbow in an area in which we could really make a difference.

The minister might be aware that many who are campaigning for a transformation in land ownership feel that there is the need for a presumption in favour of a community right to buy. The Labour Party supports that. What is the Scottish Government's position on a right that many believe will create significant opportunities for sustaining communities across Scotland?

Aileen McLeod: I thank the member for her question and put it on the record that I am very open and that, if she wishes to write to me or meet me, I would be happy to discuss any proposals that the Labour Party would like to make.

Our vision for land reform is for a strong relationship between the people and the land of Scotland, in which ownership and use of the land deliver greater public benefits through a democratically accountable and transparent system of land rights that promotes fairness, social justice, environmental sustainability and economic prosperity. I am keen to see a fairer and more equitable distribution of land in Scotland, whereby our communities and individuals can own and use land to realise their potential.

We all know that Scotland's land must be an asset that benefits the many and not the few. I am

therefore keen to discuss land reform issues further with Johann Lamont.

Year of Food and Drink Scotland 2015 (Glasgow)

4. Bob Doris (Glasgow) (SNP): To ask the Scottish Government what it will be doing in Glasgow to mark the year of food and drink Scotland 2015. (S4O-04034)

The Cabinet Secretary for Rural Affairs, Food and Environment (Richard Lochhead): Scotland's natural larder will be showcased over the next 12 months at events the length and breadth of the country, including special events that are supported through a dedicated £265,000 fund, in order to raise awareness of the role of food and drink in our cultural identity and in shaping our country's economic success.

There will be a range of events in Glasgow throughout the year, including a food and drink showcase event at the Drygate craft brewery, where around 100 local businesses will hear about the opportunities that are available throughout the year and about our quality assurance scheme, taste our best, which recognises businesses that are committed to sourcing local produce.

Bob Doris: I thank the cabinet secretary for that answer and for the information about the event at the Drygate craft brewery. I noted from the Scottish food and drink website that there will be a significant event from 4 to 5 March called ScotHot, which will celebrate Scotland's hospitality, tourism and food and drink sectors in six events that will be held at the Scottish exhibition and conference centre. Has the Scottish Government done an economic analysis of the expected economic benefit to businesses that are based in Glasgow and to the wider Glasgow economy of the year of food and drink?

Richard Lochhead: I do not have figures for the benefits directly to Glasgow, but the benefits to Scotland, including all our communities, are evidenced by the growing economic contribution of food and drink overall to Scotland over the past few years. The sector is now worth £14 billion in turnover to the Scottish economy, and we believe that we are still scratching the surface. The year of food and drink is all about promoting and showcasing Scotland as a land of food and drink not only to people visiting Scotland but to people who live here, including people who live in Glasgow.

Sourcing more produce locally will have a huge economic benefit. It is good for local producers, businesses and suppliers. Given that I launched this morning a local food campaign called in season, which will run for the next few weeks, I should point out that we can enjoy healthy and

nutritious food when it is in season, because we grow it on our doorstep. There are many benefits for Glasgow and the whole of Scotland from the year of food and drink.

Sustainable Development (Rural Areas)

5. Alex Johnstone (North East Scotland) (Con): To ask the Scottish Government what it is doing to deliver sustainable development in those rural areas that are hardest to reach. (S4O-04035)

The Cabinet Secretary for Rural Affairs, Food and Environment (Richard Lochhead): The Scottish Government is working hard to ensure that everyone in rural Scotland has the same access to opportunities and services as is available to those in urban areas. Our new Scotland rural development programme will provide more than £1.3 billion for a range of initiatives across our rural communities and help to boost our rural economy and all the development that comes with that.

We are also investing more than £410 million in our digital Scotland superfast broadband programme, which will deliver fibre broadband access to 95 per cent of premises by 2018. Of course, that is being done in parallel with community broadband Scotland, which supports schemes in more rural and remote areas in Scotland.

Those initiatives will complement everything else that is happening across Government, which we do not have time to go into just now.

Alex Johnstone: The minister will be aware that much of the demand that has been created for that broadband is in agricultural businesses in remote areas that are now required to connect through the internet to the minister's department. Some of those areas are extremely hard to reach. What discussions has the minister had with ministerial colleagues in order to create a cross-ministerial effort to ensure that we can deliver to those hardest-to-reach areas alternative methods of connecting to the internet using available technology that is becoming affordable as we speak?

Richard Lochhead: As Alex Johnstone will be aware, one of the Government's key objectives, which First Minister Nicola Sturgeon launched a few weeks ago, is that of tackling inequality. I am sure that the member will welcome the fact that digital broadband is part of our discussions in that regard and that we want to ensure that tackling inequality in rural areas is very much part of the agenda.

I hope that what I laid out in my first response persuades the member that we are taking this issue seriously. There are years of neglect with regard to rolling out broadband across Scotland,

but we are now addressing that, and it will make a difference.

With regard to the forms that farmers have to fill in, which they are being urged to do online these days, alternative methods are being made available for those who cannot get online. Facilities will be made available at local agricultural offices that farmers can visit if they do not have broadband facilities in their homes or farms, and they can submit paper copies if they have to.

Freshwater Pearl Mussels (River Spey)

6. Mary Scanlon (Highlands and Islands)

(Con): To ask the Scottish Government what is being done to comply with the habitats directive to conserve freshwater pearl mussels in the River Spey. (S4O-04036)

The Minister for Environment, Climate Change and Land Reform (Aileen McLeod): The requirements of the habitats directive with respect to freshwater pearl mussels are delivered largely by three legislative pillars.

First, pearl mussels are listed in schedule 5 to the Wildlife and Countryside Act 1981 and benefit from strict protection. Secondly, the habitat quality of pearl mussels in protected areas and the wider environment is maintained and improved under the Water Environment and Water Services (Scotland) Act 2003. Lastly, competent authorities must execute the procedural requirements of the Conservation (Natural Habitats, &c) Regulations 1994 in relation to the assessment of the implications of plans or projects for European sites.

Mary Scanlon: As the self-styled species champion for the freshwater pearl mussel, I am aware of the 50 per cent decline in its population, which proves that neither the Government nor the public agencies have done enough to protect the species and are still not providing adequate protection, despite the legislation going back as far as the minister said. How prepared is the Scottish Government for referral to the European Court of Justice and subsequent fines for not providing adequate protection for the pearl mussel?

Aileen McLeod: I commend Mary Scanlon for her passion, the commitment that she has shown to the conservation of the freshwater pearl mussel, and all the work that she has been doing in that regard as the Scottish Environment LINK species champion for the species.

I admit that the decline is of grave concern. It only became apparent in the results of recent survey work that is due to report next month. As a result, the Scottish Environment Protection Agency has commenced an analysis of environmental data collected over the past 10

years to establish the cause or causes of the decline. That will inform future action under, for example, the Spey catchment initiative.

Separately to that, the Scottish Government has asked SEPA and Scottish Natural Heritage to work together to draw up the appropriate objectives and standards for water bodies within conservation sites. On receipt of those later this year, the Scottish Government will consider the need for public consultation.

I am happy to meet Mary Scanlon to discuss what further action can be taken on the conservation of the freshwater pearl mussel.

Transatlantic Trade and Investment Partnership (Animal Welfare and Food Standards)

7. Christina McKelvie (Hamilton, Larkhall and Stonehouse) (SNP):

To ask the Scottish Government what discussions it has had with farmers or their representatives on the impact of the transatlantic trade and investment partnership on animal welfare and food standards. (S4O-04037)

The Cabinet Secretary for Rural Affairs, Food and Environment (Richard Lochhead):

As Christina McKelvie knows, NFU Scotland gave written and verbal evidence to the European and External Relations Committee on 27 November. In that evidence, it outlined its concerns about the possible implications for food standards and geographical indication labelling, among other things. The Government has agreed to maintain a dialogue with the NFUS as the proposals develop and will ensure that its views are fed into the negotiations.

Christina McKelvie: The cabinet secretary will know that farmers in my constituency of Hamilton, Larkhall and Stonehouse are extremely anxious about TTIP. Last week, at the European and External Relations Committee, Lord Livingston went to great pains to suggest that all of the standards are currently exempt.

Will the cabinet secretary tell me what reassurances he has had from the United Kingdom Government on seeking reservations from the European Commission on, in particular, animal health standards, genetically modified organisms, food standards and, of course, protected name status for produce such as Scotch and the Stornoway black pudding, of which my colleague Jamie McGrigor is a great champion?

Richard Lochhead: As a big fan of Stornoway black pudding, I will ensure that the trade negotiation does not harm its fantastic status. However, until we see the black and white of the trade agreement, we have to make every effort to make representations to Europe and the UK

Government about the need to heed the views of Scotland's farmers.

I should say that the European Commission has repeatedly stated that consumer, health and safety and environmental standards will not be lowered and that, for example, there is no prospect of GM crops or hormone-treated beef being allowed into the European Union or the UK. However, until we see the black and white of the agreement, we will keep up the pressure on the authorities to ensure that that is the case. I will make a point of once again raising the issue with UK ministers following Christina McKelvie's raising it in Parliament.

Sarah Boyack (Lothian) (Lab): I welcome the cabinet secretary's commitment on that. I can add to the pressure that he is putting on the authorities the fact that members of Unite the union are also very concerned about the impact on our own farming industry in relation to the pressure to cut costs, the pesticide issues that the cabinet secretary mentioned, and health and safety issues at work in Scotland in regard to food processing organisations. It is therefore very much in our interests to make sure that those standards are retained.

Would the cabinet secretary be prepared to meet the Unite trade union, which has expressed reservations about the impact not just on the workforce but on the wider environment and on Scottish consumers, given the very high standards that exist in our agricultural industry?

Richard Lochhead: I would be happy to meet representatives from Unite to discuss their concerns. I give that pledge today.

Albeit that there is still some way to go in the negotiations, we have had repeated assurances that there will be no lowering of standards in relation to any shared agreements, but of course the issue remains a concern. The trade agreement, according to the European authorities, is all about coherence of standards and getting rid of duplication, but we must be absolutely certain that it does not lead to a lowering of the very high standards that are maintained by the Scottish agricultural sector and by the wider food industry sectors.

Justice and the Law Officers

The Deputy Presiding Officer: We move to portfolio questions on justice and the law officers. Question 1 has been withdrawn and an explanation has been provided.

Police and Fire Services (Information and Communication Technology Systems)

2. Chic Brodie (South Scotland) (SNP): To ask the Scottish Government what the actual and

contracted expenditure was for ICT systems in the police and fire services in 2013-14. (S4O-04042)

The Cabinet Secretary for Justice (Michael Matheson): Expenditure by the police and fire services for ICT systems in 2013-14 was £34.87 million and £10.6 million respectively.

Chic Brodie: I thank the cabinet secretary for that information. Given the growth in availability of real-time developed applications and databases that might be shared by the emergency services, will the cabinet secretary initiate a review of immediately available commercial applications that might be applicable so that even greater efficiencies can be developed in those services as a result of their sharing data, which would lead to lower costs?

Michael Matheson: I am sure that Chic Brodie recognises that Police Scotland and the Scottish Fire and Rescue Service have been through a significant period of change over the past 18 months to two years, with the various police forces and fire services both moving to single services. That has led to a considerable need for renewal in ICT provision and consolidation of the various ICT platforms that they have been utilising.

A key part of that work has been to ensure that service has continued to be provided and that the quality of the service has been unaffected. It has therefore been important to ensure that the integrity of the process has been maintained as best it can be during the changeover period. That said, that process is continuing and I recognise that there is an opportunity for greater sharing and co-operation between Police Scotland and the Scottish Fire and Rescue Service. I have no doubt that they will be interested in looking for opportunities to share platforms and data as and when appropriate.

I assure Chic Brodie that it is our desire to ensure not only that we have an integrated fire service and an integrated police service but that we make sure that our emergency services collectively are working in co-operation and partnership as and when that is appropriate.

Elaine Murray (Dumfriesshire) (Lab): Last week, the Justice Sub-Committee on Policing heard that 20,086 stop-and-search records were lost by Police Scotland because somebody who was operating a computer pressed the wrong button. Does the cabinet secretary share my concern that Police Scotland has such a "clunky" information system that a large volume of data can apparently be lost without any prompt or back-up? Is Police Scotland getting value for money when it comes to its IT system?

Michael Matheson: We need to separate two different things, here. The system that is used for collecting stop-and-search data is separate from

the rest of the police system. The stop-and-search system was created specifically to capture those data when the police were requested to do so. However, the rest of the police system, which captures information about offences and everything else, is separate from that stop-and-search system and works very effectively.

As Elaine Murray will be aware, Police Scotland is currently developing the i6 system, which will be rolled out next year to improve the system's capacity even further. As she will have heard last week, there are some issues to do with loss of data but—as was explained at the time—a significant amount of the data has been recovered.

Her Majesty's inspectorate of constabulary for Scotland is currently examining the data-collection process and mechanisms that Police Scotland has in place for stop and search; we expect a report to be with us by the end of March.

It is important not to generalise about the IT system that the police use. The loss of data concerned a component part that had been developed for collecting specific information. The rest of the IT system, in which the vast majority of Police Scotland data are collected, was not affected by the problem.

Roderick Campbell (North East Fife) (SNP): Can the cabinet secretary add anything further on implementation of the i6 system?

Michael Matheson: The i6 system will increase the capacity and the technical ability of Police Scotland's IT system. For example, it will help to improve the way in which data are collected and information is shared with other agencies. At present, as I understand it, the project is on budget and on time and will help to improve the overall capacity of Police Scotland.

Antisocial Behaviour etc (Scotland) Act 2004 (Quad Bikes)

3. Paul Martin (Glasgow Provan) (Lab): To ask the Scottish Government how many quad bikes have been seized by police under the Antisocial Behaviour etc (Scotland) Act 2004 in the last year. (S4O-04043)

The Minister for Community Safety and Legal Affairs (Paul Wheelhouse): Section 126 of the Antisocial Behaviour etc (Scotland) Act 2004 provides powers for the police to seize

"vehicles used in manner causing alarm, distress or annoyance."

Information on the number of vehicle seizures broken down by vehicle type is not currently collated by Police Scotland. We have contacted Police Scotland to explore whether we can improve the breakdown of vehicle-seizure data to

allow a better understanding of the extent of the problem regarding antisocial use of quad bikes.

Paul Martin: Apart from mentioning the issue relating to the recording of incidents, I pay tribute to and commend the local police inspector in my constituency, who I know has seized a number of quad bikes that have been related to antisocial behaviour.

There is an issue concerning registration of quad bikes. I know from discussions with local Police Scotland representatives in my constituency, and from discussions with other agencies, that people would find registration helpful. Would the minister agree to meet me and other interested parties to discuss how we can develop a registration process to ensure that quad bikes are registered to their owner at a specified address?

Paul Wheelhouse: I share Paul Martin's concern. It would be ideal if we could reunite a stolen quad bike with the original owner once it has been recovered as part of an action under section 126 of the 2004 act. It is difficult for the police to identify whether a vehicle has been stolen, and to find the original owner, so there is very strong interest in ensuring that a registration process is implemented.

I met Paul Martin's colleague Claire Baker to talk about similar issues, and I am happy to meet him to hear his ideas about what we could do to progress the matter and to explain what we propose to do, including working with NFU Scotland in particular to ensure that farmers register their vehicles and get them back when they are lost.

Margaret Mitchell (Central Scotland) (Con): Is the minister aware of the SmartWater identification system, whereby chemical solutions can be sprayed on a quad bike to enable it to be traced and returned to the owner? Its use has been promoted by NFU Scotland. Would he be in favour of promoting awareness of that system?

Paul Wheelhouse: There is a bit of serendipity in that respect. As it happens, I was at an event on metal theft this morning at which I met SmartWater company representatives and discussed quad bikes. I would certainly be interested in looking at the potential for using that approach.

The support from the NFUS is very welcome. I am keen to meet all members who have an interest in tackling the problem, because many vehicles and a lot of money are being lost to the farming industry. I would be interested in looking at anything, like SmartWater, that could help.

Miners Strike 1984-85 (Inquiry)

4. Neil Findlay (Lothian) (Lab): To ask the Scottish Government whether it will hold an inquiry into the policing and convictions of miners who were arrested in Scotland during the 1984-85 miners strike. (S4O-04044)

The Cabinet Secretary for Justice (Michael Matheson): We have robust procedures in place in our justice system for where potential miscarriages of justice may have occurred. Those should be used in the appropriate way by anyone who considers that they have experienced a miscarriage of justice. It may be helpful to confirm that the Scottish Government has no powers to overturn convictions—only a court is able to do so.

There are no plans to hold an inquiry into the conduct of the police or into individual criminal convictions. That does not prevent an individual from contacting the chief constable of Police Scotland or the Scottish Criminal Cases Review Commission to ask them to consider complaints.

Neil Findlay: I was hoping that we might, with the new cabinet secretary, have a new attitude, but it appears that we do not. In a few weeks we will reach the 30th anniversary of the end of the strike. I was hoping that the new cabinet secretary would commit to some form of inquiry in Scotland because, 30 years on, many people still feel that they were victims of miscarriages of justice. Will the cabinet secretary not even consider looking at the issue again?

Michael Matheson: As I have outlined to Neil Findlay, and as my predecessor outlined to him, we have in place for anyone who believes that they have been subject to a miscarriage of justice a robust mechanism for the issue to be thoroughly investigated. That is done through the Scottish Criminal Cases Review Commission, which we established and which is the most appropriate way for such cases to be taken forward. If the member is aware of any individuals who believe that they have been the subject of a miscarriage of justice, he should let them know that their first port of call should be the commission, to ask it to consider their complaint. The commission will then determine whether the matter should be referred back to the court for consideration. That is the due process; that is how someone who believes that they have been the subject of a miscarriage of justice should have the issue considered.

Police Scotland (Compensation Payments)

5. John Finnie (Highlands and Islands) (Ind): To ask the Scottish Government how much compensation was paid out by Police Scotland and its predecessor service in each of the last three years. (S4O-04045)

The Cabinet Secretary for Justice (Michael Matheson): For 2011-12 and 2012-13, any compensation that was paid out was a matter for the police joint boards and unitary authorities. For 2013-14, it was the responsibility of the Scottish Police Authority. The Scottish Police Authority's head of legal and compliance has authority to settle claims up to the value of £50,000. Claims above £50,000 require the approval of the SPA board for settlement.

John Finnie: The cabinet secretary will be familiar with the Association of Scottish Police Superintendents resilience survey last year, which showed that 87 per cent of superintendents acknowledged that they were in breach of the working time regulations. Those are the most senior front-line individuals, who make important decisions about public safety. Can the cabinet secretary reassure me that there are sufficient funds to address the inevitable claims that will come as a result of decisions being made by people in senior positions who have been overcome by sleep? Alternatively, and ideally, can he ensure that the working time regulations are applied and enforced by Police Scotland as they should be?

Michael Matheson: It would not be appropriate for me to pre-empt any claims that may be made against the SPA. It is for individual officers to consider pursuing such matters when they have been provided with appropriate legal advice. We are in regular contact with the staff side organisations, including the superintendents association, on a range of issues that might affect their members. If there are specific issues about the operation of Police Scotland and the way in which it is taking forward the working time arrangements for officers, those should be duly pursued through the Scottish Police Authority, which is responsible for scrutinising and holding Police Scotland to account for its conduct and the way in which it operates the service.

Lord President of the Court of Session (Meetings)

6. John Wilson (Central Scotland) (Ind): To ask the Scottish Government when it last met the Lord President of the Court of Session and what issues were discussed. (S4O-04046)

The Cabinet Secretary for Justice (Michael Matheson): I met the Lord President on 29 January and the Minister for Community Safety and Legal Affairs met the Lord President on 3 February. A number of matters relating to the judiciary and the business and reform of the courts were discussed.

John Wilson: What approach is the Scottish Government taking to the role and budget of the Judicial Complaints Reviewer? Have there been

any discussions on reviewing the powers and increasing the independence of the Judicial Complaints Reviewer?

Michael Matheson: At present, no review of the Judicial Complaints Reviewer's role has been undertaken and there are no plans to consider extending its remit and responsibility.

I recognise John Wilson's interest in this issue. If he wishes to discuss particular aspects of the issue with me or my ministerial colleagues, we would be more than happy to do that, but none of the points that he raised is being taken forward at the moment.

Police Scotland (Kettling)

7. Ken Macintosh (Eastwood) (Lab): To ask the Scottish Government whether Police Scotland plans to review its operational method known as kettling. (S4O-04047)

The Minister for Community Safety and Legal Affairs (Paul Wheelhouse): As the cabinet secretary stated in his response to parliamentary questions from Ken Macintosh in January, deployment of police officers and decisions on the use of tactical options for crowd management, including containment, are a matter for Police Scotland. Any decision to utilise containment as a tactical option is made by the police tactical commander and is fundamentally subject to a variety of legal tests derived from stated cases. The Scottish ministers expect that any use of the approach to policing is proportionate to the situation making the measure necessary and is enforced for no longer than is reasonably necessary. The Scottish Police Authority has a statutory responsibility to hold the chief constable to account for the policing of Scotland.

Ken Macintosh: I notice that the minister did not give any figures on the frequency of the use of kettling in Scotland. Given the current concerns about such illiberal practices as stop and search and armed policing, is this another area that Police Scotland could review, with a view to improving its relations with the general public and confidence in Police Scotland?

Paul Wheelhouse: Ken Macintosh did not ask for any statistics on the use of containment. Had he done so, I might have been in the position to look at them.

On the more substantive point about the relationship between police and the public, Police Scotland works very hard to ensure good community relations and the SPA has the important role of holding the chief constable to account for how policing is delivered in operational terms. The Scottish ministers do not intervene on operational matters for very good reasons, as I am sure that Mr Macintosh will appreciate.

If there are concerns about the use of containment and people have specific complaints, those should, in the first instance, be addressed to the chief constable. They can then be taken forward in the appropriate manner.

New Psychoactive Substances (Charges and Convictions)

8. Annabel Goldie (West Scotland) (Con): To ask the Scottish Government how many people supplying new psychoactive substances have been charged under common law with reckless and culpable conduct, and how many convictions have resulted. (S4O-04048)

The Solicitor General for Scotland (Lesley Thomson QC): The common-law offence of culpable and reckless conduct covers a wider range of offending than just the supply of new psychoactive substances. Figures for the number of people charged with or convicted for supplying new psychoactive substances under that offence are not available. The offence of culpable and reckless conduct can be used where a person is supplied with a new psychoactive substance in certain circumstances. In particular, evidence is required that the supplier knew or was reckless to the fact that the NPS was being used for human consumption.

Annabel Goldie: With a threat so serious as that posed by new psychoactive substances, it is deeply disappointing that the information that I have requested is not available from the Scottish Government. How does it know what is going on and, in such ignorance, how can it respond to the threat?

Will the Solicitor General endeavour to find out the information and will she and the Lord Advocate liaise with the chief constable about issuing guidance to police officers to clarify what circumstances justify a charge of culpable and reckless conduct being brought against those who supply these dangerous substances?

The Solicitor General for Scotland: I thank Annabel Goldie for her interest in this difficult area. The Crown Office and Procurator Fiscal Service issued guidance to the police in relation to an operation last year that specifically covered the use of the offence of culpable and reckless conduct and the type of evidence that would be required.

It is clear from today's *Business Bulletin* that there will a ministerial statement tomorrow on new psychoactive substances.

I assure Annabel Goldie that the Crown Office was part of the NPS expert review group and continues to work with the police, local authorities and trading standards to ensure that, in this difficult area of law, the offence of culpable and

reckless behaviour and other types of offences, in particular those under the product safety regulations, are used when they are appropriate.

Cashback for Communities Scheme

9. Colin Beattie (Midlothian North and Musselburgh) (SNP): To ask the Scottish Government whether it will provide an update on the cashback for communities scheme. (S4O-04049)

The Cabinet Secretary for Justice (Michael Matheson): The cashback programme continues to enhance and support communities across Scotland, particularly our young people. Cashback offers young people from all backgrounds the opportunity to be all that they can be. A wide range of projects are supported by the programme and are providing young people, many of whom come from disadvantaged areas, with supported opportunities to develop important life skills through involvement in sport, culture, youth work and youth employability schemes. Cashback will continue to strengthen our communities and provide positive destinations for our young people.

Colin Beattie: I am sure that the cabinet secretary will agree that the cashback for communities scheme makes a real difference to communities. What funding can my constituency expect over the forthcoming year?

Michael Matheson: I assure the member that his constituency and the Midlothian area have received a significant financial benefit from the cashback programme. For example, up to 2013-14, more than £790,000 was invested in Midlothian, delivering over 41,000 activities and opportunities for young people. That investment will continue as we continue with phase 3 of the cashback programme. Given the extensive range of different programmes that the member's constituency has benefited from, I would be more than happy to write to him with their details.

Energy Strategy

The Deputy Presiding Officer (John Scott): The next item of business is a debate on motion S4M-12395, in the name of Murdo Fraser, on an energy strategy for Scotland. I call Murdo Fraser to speak to and move the motion.

14:41

Murdo Fraser (Mid Scotland and Fife) (Con): Last week, we had yet more unwelcome news about the future of the Longannet power station in Fife. As someone who represents the area, I am well aware of the significance of the plant to the local economy. It was only a few months ago that I made my most recent visit there.

In all the press speculation about the plant's future, one of our primary concerns should be for the workforce, who undoubtedly face a worrying time. The issue that was highlighted last week in relation to the future of Longannet was that of transmission charging, although there is nothing new about that. Last week, I spoke to both Scottish Power and National Grid about that, and I sincerely hope that a resolution can be found. The Office of Gas and Electricity Markets has recently approved a significant change to substantially reduce future generation charges in Scotland, particularly for a plant such as Longannet, which generally tends to run when the wind is not blowing. Those charges are planned to be introduced from April next year. However, we should go further.

Although transmission charging is a serious issue, we should not pretend that it is by any means the only threat to Longannet's future. New European Union emissions rules and the introduction of carbon pricing mean that the future of Longannet after 2020 is, at best, very uncertain. Therefore, resolving the transmission charging issue is likely to buy, at best, a stay of execution.

It is a serious matter, and not just for those whose jobs are dependent upon the power station. Longannet provides some 20 per cent of Scotland's electricity output and the figure has been as high as 25 per cent in the recent past. It is also a major buyer of coal from Scottish opencast producers and its possible closure therefore has a wider significance for the Scottish economy. What makes the current situation even more worrying is the fact that Longannet is not the only power station facing closure. Scotland's three biggest generating stations are Longannet, Torness and Hunterston, the last two of which are nuclear powered and are both scheduled to close by 2025. Those three power stations currently produce 55 per cent of Scotland's electricity.

We know that the Scottish Government has something of an obsession with renewable energy. The Scottish Conservatives believe that renewable energy has a part to play as a component in the energy mix, but we do not share the Scottish Government's single-minded obsession with renewable energy, particularly wind power, to the exclusion of all other technologies. The simple fact is that intermittent energy sources cannot provide the base-load that is necessary to provide electricity to Scotland's homes and businesses at all times, to meet every demand, whether or not the wind is blowing.

The Minister for Business, Energy and Tourism (Fergus Ewing): Does Murdo Fraser recognise that I have made clear not only for the past four years, but in our "Electricity Generation Policy Statement—2013" that we will continue to need a minimum of 2.5GW of conventional thermal delivered electricity? That has been our position for as long as I have been the minister, despite constant misrepresentation otherwise.

Murdo Fraser: If that is the minister's position, he is not convincing anyone involved in the industry. Just last week, Professor Paul Younger, the professor of energy engineering at the University of Glasgow—a man who we might expect to know a little bit about the subject—said:

"We're already getting to where it's getting too late to design, commission and build new power stations, especially when you have got the Scottish Government making common cause with the anti-everything brigade."

Given that those are the views of a professor of energy engineering, one would think that the Scottish Government might be listening to them. Instead, the Scottish Government is putting all its eggs in the basket of intermittent wind power, it has slammed the door shut on fracking and the potential for unconventional gas, and it refuses to consent to any new nuclear plants. Within a decade, we will lose 55 per cent of our electricity generating capacity and there is simply no Scottish National Party Government strategy on how we are going to keep the lights on after 2025.

Professor Younger got it right again last week when he said:

"It doesn't help when last week we have got the Scottish Government cheerleading against fossil fuels and then this week saying 'Oh, hang on a minute, we desperately need them.' Well, you know, let's get consistent guys."

The minister may think that his position is consistent, but that is certainly not reflected in some of his colleagues' statements. We need a clear statement from the Scottish Government on exactly what its energy strategy for the next decade is.

To be fair to the minister, he can, on occasion, approach the issues with a degree of good sense.

Unfortunately, his amendment resorts to the tired old tactic of blaming everything on Westminster. The Scottish Government amendment does not recognise the full picture, even in relation to Longannet. It does not mention the issues of EU emissions targets or of carbon pricing, both of which the SNP Government is fully signed up to. Even in relation to the transmission charging issue it misses the point, because the transmission charging regime, which has been in existence for many years, affects all generating plant in Scotland.

Exactly the same transmission charging regime that applies to Longannet applies to Scottish Power's other generating asset, the Whitelee wind farm. It sits on more or less the same latitude as Longannet, but the charging regime does not threaten that project's viability. Indeed, we see applications flooding in daily for wind farms, all over Scotland, that would be subject to the same transmission charging regime that affects conventional stations. Clearly, the transmission charging regime is a barrier that we need to overcome, but it is not insurmountable if one has the right project, with the right technology.

The SNP amendment leaves us with the question: what exactly is the SNP electricity generation policy? Is it to rely wholly on renewables? The minister is fond of saying that, in energy, variety is everything. However, there are no concrete proposals to replace our existing nuclear capacity or conventional generation. Although the SNP may not like nuclear power, it is a low-carbon green energy and we will need that if we want to meet our climate change targets while keeping the lights on.

Chic Brodie (South Scotland) (SNP): I have before me a letter. It is—members have heard me use this phrase before—a "Dear Chic, from Nick" letter. It talks about the coalition's objectives on new nuclear stations and how those can go ahead as long as that happens without subsidy. How does Murdo Fraser explain the £35 million-plus that is about to be spent on the Hinkley Point reactor, largely through Government subsidy?

Murdo Fraser: The reality is that all energy sources require a level of subsidy. That is the regime that we have under contracts for difference. However, Mr Brodie needs to bear it in mind that new nuclear power is cheaper than every form of renewable technology, including onshore wind. Members on the SNP benches should bear that in mind.

Patrick Harvie (Glasgow) (Green): Will Mr Fraser give way?

Murdo Fraser: No—I need to make some progress.

In his amendment, the minister mentions

“the need for increased investment in large-scale flexible electricity storage solutions, including pumped storage”.

If we are to rely on intermittent sources of energy, he is right to say that we need more storage, but how much more? Does the Government know? I have seen an assessment this week that says that we would need 20 large-scale pump storage schemes. Does the minister agree? If the figure is not 20, how many such schemes do we need? Where would they be built? What would the cost be? Those projects would cost billions in capital expenditure to create. What would the impact on electricity bills be? Does the minister have any answer to those questions, or is he simply making it up as he goes along? We will hear from him shortly.

I turn briefly to the other amendments. Although I agree with the tone of much of Lewis Macdonald’s amendment, unfortunately it deletes the motion’s reference to the closure of Hunterston and Torness, which makes it difficult for us to support it. In addition, I see that Labour’s famous resilience fund is getting yet another run-out; I wonder how many times over that pocket of money has been spent.

The kindest thing that I can say about Patrick Harvie’s amendment is that, after yesterday’s campaign launch, it is good to know that at least one person in the Green Party can finish a sentence. As to the substance, it is the stuff of fantasy. I do not know anyone with a professional involvement in power generation who believes that we can rely wholly on renewables for our energy supply. Even the industry trade body, Scottish Renewables, does not make that claim.

Over the past decade, we have heard a lot from the Scottish National Party and from the former First Minister about how Scotland is to be the Saudi Arabia of renewables and how we are an oil-rich, energy-rich nation, so what an irony it would be if the only way of keeping the lights on in Scotland would be to import power from England, yet that is exactly where we are heading. Members should not take my word for it—that is the view of Professor Younger, who said last week:

“We will be reliant on importing power from England for about 25% of Scottish demand”.

We need at least one new gas-powered generating station for Scotland, and if we are not going to replace Torness and Hunterston with new nuclear capacity, we will probably need more than one. I would like to make a bid for a new gas station to be located at Longannet in Fife. The infrastructure is there, the skills are there and the workforce is there. If the existing station at Longannet has to close—sadly, that looks inevitable, whatever happens to transmission charging—let us have a replacement in that corner

of Fife. That needs to be part of a broader energy strategy, which is currently lacking.

I will close by again quoting Professor Younger. Talking of the Scottish Government’s approach, he said:

“We need to be consistent here and have a bit of leadership”.

I agree entirely with that. We need an updated energy strategy for Scotland, and we need that urgently before the lights go out.

I move,

That the Parliament notes with concern the latest threats to the continued operation of Longannet Power Station in Fife, contributing 25% of Scotland’s electricity output at its peak; urges Scottish Power and National Grid to work toward a resolution of the transmission charging issue, but recognises that EU emissions rules and carbon pricing mean that the future of Longannet beyond 2020 is very uncertain; further notes that Scotland’s two nuclear power stations, at Torness and Hunterston, which produced 35% of Scotland’s electricity output between them in 2013, are due to close by 2025; acknowledges the significant loss of electricity generating capacity that this is likely to cause in the next decade; notes that renewable energy, while having a part to play in the energy mix, cannot supply baseload from intermittent sources and that the Scottish Government is opposed to any new nuclear stations being built, and calls on the Scottish Government to bring forward as a matter of urgency a new energy strategy, setting out how new generating capacity will be created to ensure that the lights are kept on without Scotland having to rely on importing energy from the rest of the UK.

14:52

The Minister for Business, Energy and Tourism (Fergus Ewing): I genuinely welcome the opportunity to debate this important matter, and I thank Murdo Fraser and his party for raising it in the chamber. Few things are of more immediate importance than the future of Longannet power station, because that future is under imminent threat.

Like Mr Fraser, I have visited Longannet on more than one occasion—I did so most recently on Monday—and I pay tribute to the professionalism of the staff there. The station was built to have a life of 25 years and 150,000 running hours, but it has delivered electricity for this country for 42 years over 215,000 running hours. I was informed by the manager of Longannet that last year was its best operational year ever. I think that that says a lot for the professionalism of those who have worked there over four decades, many of whom have served for most of that period. In addition, I believe that the company has invested in the order of £200 million in meeting the challenges that it faces, such as those that relate to emissions of sulphur dioxide and other gases. It has quite rightly sought to address the environmental concerns.

I want to start by finding some consensus. I feel that there is a broad consensus in Scotland that Longannet has served us well, that we continue to need it now and that although it faces a challenging future beyond 2020, broadly speaking—political disagreements aside—we all want a solution to be found that will allow the station to continue to operate for several years to come.

The record will show that, as energy minister, I have been pretty consistent in arguing that to meet our need for security of supply, reasonable cost and reliability we need a balance to our electricity mix. Not only have I argued that time and again in speeches in the chamber, but in 2013 I ensured that it was set out in the “Electricity Generation Policy Statement—2013”, which was prepared by technical experts. I am not such an expert—and neither, I suspect, are many members in the chamber—but that policy document was prepared on expert advice. Whatever is said by various people who write for tabloid newspapers or who communicate what they purport to be news to the outside world does not detract from the fact that we have been entirely consistent in calling for a balanced means of electricity supply and that we have set that out clearly in writing and in great technical detail.

Murdo Fraser: Does the minister include in his denigration of all those who disagree with his stance Professor Paul Younger, professor of energy engineering at Glasgow university? Why does Professor Younger not buy into the vision that the minister has just set out?

Fergus Ewing: The member has asked three questions. I will not be drawn into commenting on particular individuals, but if Mr Fraser can demonstrate that I have said anything that contradicts what I have just said, I will be very interested to hear it. Such comments do not exist.

I want to make some progress, because I have only seven minutes and I want to get to the meat of the issue. I point out gently to Murdo Fraser that there are a couple of difficulties with his motion, which, I am sad to say, is factually wrong. For example, it

“urges Scottish Power and National Grid to work toward a resolution of the transmission charging issue”.

Scottish Power and National Grid are not working towards any such resolution. The new grid contract sought by Scottish Power is not a resolution of the transmission charging problem, but simply a very limited stop-gap measure under the supplementary balancing reserve to enable Longannet to continue to operate. It only partly addresses the symptoms of a much deeper problem—that is, the discriminatory grid charges.

Let me introduce some facts into the debate. The grid charge for Peterhead is £22.97 per kW; for Longannet, £18.02; for Hunterston, £16; for Torness, £14; and for Eggborough in Yorkshire, £7.61. Didcot, which is in Oxfordshire, gets paid 83p, while Taylors Lane in London gets paid £3.78. That is the evidence. What does that mean? It means that, in addition to the legal obligations that I accept exist in respect of industrial emissions and carbon duties and which affect all stations, Longannet has to pay an extra £40 million.

Patrick Harvie: Will the minister give way?

Fergus Ewing: I am sorry, but I do not have the time. I might come back to the member in my closing speech.

The central conundrum for the Scottish Conservatives is this: as I have made clear ad infinitum, we agree that we need more conventional thermal generation in Scotland—indeed, I gave consent to 1GW of new gas generation at Cockenzie—but the fact is that no one is going to build those stations, because it makes no economic sense. The great irony, therefore, is that the Tories are calling for something that is economically impossible. No one is going to do this. The discrimination with regard to transmission charging must be addressed in the long term, and that is a crystal-clear problem to which the Scottish Conservatives with, I am sad to say, their flawed motion have brought forward no solution whatever.

I move amendment S4M-12395.1, to leave out from “contributing” to end and insert:

“brought about by the UK’s discriminatory transmission charging regime; further notes that cleaner thermal generation progressively fitted with carbon capture and storage technology will continue to play an important role in securing Scotland’s future energy mix, alongside the expansion of renewables, as set out in the Scottish Government’s *Electricity Generation Policy Statement 2013*; recognises that UK energy policy and regulation actively discourages the construction of new conventional thermal generating plants in Scotland compared with other locations in the UK, given the higher transmission charges faced by Scottish generators; shares the Scottish Government’s disappointment at the further delay in implementing transmission pricing reforms stemming from Ofgem’s Project TransmiT; recognises the significant progress in renewables deployment in Scotland, with over 44% of gross electricity consumption met from renewable sources in 2013; supports the need for increased investment in large-scale flexible electricity storage solutions, including pumped storage, to complement the increasing deployment of renewable technologies, and further supports the First Minister’s call for the UK Government to undertake a dedicated electricity capacity assessment for Scotland and to transfer to the Scottish Parliament the authority to set a Scottish security and quality of supply standard for electricity.”

14:59

Lewis Macdonald (North East Scotland)

(Lab): Longannet power station is under threat of closure, which is a matter of regret, but it should come as no surprise to anyone and least of all to ministers in the Scottish Government. The Scottish Government's report on proposals and policies, which is supposed to show how ministers intend to meet binding carbon emission targets that were agreed by Parliament, assumes that Longannet will be closed by 2020. The plant is acknowledged to be seriously polluting by European standards, and European Union requirements on carbon emissions mean that it cannot survive in its current form without substantial additional investment. That investment has not yet been forthcoming. Scottish Power has not invested to date, and the company's decision not to bid in the capacity market auction from 2018-19 gives a pretty clear indication of its intentions.

The best recent hope for Longannet in the medium term was a scheme to enable investment in carbon capture and storage. That scheme did not reach fruition in part because Scottish Power deemed the billion pounds of public money that were potentially on offer not to be enough. Once that decision was taken, the die was cast and the chances of Longannet surviving into the 2020s in its current form effectively came to an end.

The Scottish Government's responsibility in that situation is to be open and honest with the communities of west Fife about the power station's prospects. However, the Scottish National Party's amendment fails to address the prospect of closure, be it in 2018, 2020 or beyond. Instead, Mr Ewing asserts that

"cleaner thermal generation progressively fitted with carbon capture and storage technology will continue to play an important role",

as if such cleaner thermal generation already plays a part. Of course it does not, and it might not do so for some time. Although the technology certainly exists, it does not yet operate at scale, and it has some proving to do before it can do so.

Fergus Ewing: Does Lewis Macdonald accept that CCS schemes—gas CCS at Peterhead and the white rose project for coal south of the border—are being agreed to go ahead? I thought that we all welcomed that.

Lewis Macdonald: I am sure that we all welcome that. I heard a good deal about the Peterhead gas CCS project last night at the Shell springboard event in Edinburgh. That is an exciting prospect, and I wish it well. I hope that it can prove the commercial feasibility of gas carbon capture, and I hope that white rose can do the same for coal, but both projects are at a very early stage in proving their effectiveness, so it would be

a mistake to make assumptions about either of them, and neither project bears directly on the position at Longannet.

The Scottish Government's amendment refers to the Scottish Government's "Electricity Generation Policy Statement—2013", which the minister quoted on Radio Scotland last week when he was interviewed about the position at Longannet. He quoted that policy statement again today. It envisages

"The scheduled closure of existing plants"

and, as the minister said,

"the construction of a minimum of 2.5 GW of new or replacement efficient fossil fuel electricity generation progressively fitted with CCS".

The phrase "progressively fitted with CCS" is interesting. It appears to mean possibly building a new coal or gas-fired power station in the 2020s in the hope that it can be successfully retrofitted with carbon capture technology after the event. I hope that that will prove to be the case, but there are many problems with that basic proposition in the Government's position.

There is an obvious paradox between a legal obligation to seek to meet world-leading targets on carbon emissions and a policy choice to allow new coal-burning plant without CCS built in from the beginning. There is an equally obvious risk in basing an energy policy on the retrofitting of a new technology before that retrofitting or that technology has been shown to work at the required scale. Most seriously, by appearing to imply that future energy needs can be met by burning coal, there is a real risk of the Government misleading the workforce at Longannet on the prospects for their jobs.

Hundreds of valuable jobs are provided directly at Longannet and hundreds more are provided indirectly. The sudden loss of so many jobs in the event of an early closure would hit the local economy hard, especially if the Government and its agencies have not fully engaged with the community in good time. That prospect makes the case again for a resilience fund to be open to councils to bid for support in the case of a sudden economic shock, and we call for such a fund again today.

There is a duty on ministers to engage in meaningful discussion with the council and the community about what will happen when Longannet ceases to generate electricity from coal. That engagement needs to happen urgently and it needs to happen now. It is on that basis that I move the amendment in my name.

I move amendment S4M-12395.3, to leave out from "further notes" to end and insert:

"believes that the Scottish Government is responsible

both for its stewardship of the Scottish economy and for the choices that it has made in relation to future energy generation; regrets its failure to address the likely impact of the closure of Longannet on the west Fife economy to date, and calls on it to do so now as a matter of urgency, and further calls for the establishment of a resilience fund, to help support communities affected by a sudden economic shock such as the threatened closure of Longannet.”

15:05

Patrick Harvie (Glasgow) (Green): Murdo Fraser indicated that he had tried to find the kindest thing that he could say about my amendment. I appreciate the effort that he went to, but I am happy to acknowledge that I could have survived without that particular kindness this week. However, let me repay the compliment, because there was something in his opening remarks that we can agree on. He made it clear that the Government’s position of placing the emphasis regarding recent developments at Longannet purely on the transmission charging regime is at best a partial description of current circumstances. In that regard, his motion is right to refer to

“EU emissions rules and carbon pricing”.

I happily acknowledge that the transmission charging regime is clearly a factor; I will go as far in the minister’s direction as that. However, it is not a new factor but a long-standing one. I find it hard to rationalise a position that places such a heavy emphasis on that long-standing factor to explain recent events, which is what the minister does.

Fergus Ewing: On the face of it, that is a fair point, but Mr Harvie will recollect quite well that SNP members—including Mike Weir back in 2005—and then the SNP Government and the First Minister campaigned for what became project transmit, which was supposed to deliver a significantly improved position by reducing price discrimination. However, that process has been delayed until 2016 and potentially beyond that because of judicial review.

Patrick Harvie: I hope that the general point is made that the transmission charging regime is one factor among many and that the minister has failed to place sufficient emphasis on, or failed to sufficiently recognise, the issues of emission rules and carbon pricing.

However, Mr Fraser’s motion only partially emphasises some aspects. For example, it states that Longannet contributes

“25% of Scotland’s electricity output at its peak”.

In considering such questions, it is not enough to look only at electricity output; we also have to acknowledge that Longannet is far and away the biggest contributor in Scotland to climate change, because it is the biggest contributor to the carbon

emissions that are driving climate change, which is one of the most crucial threats that our civilisation faces in the 21st century. It is a partial description of the situation to look only at the electricity output and not at the carbon emissions factor.

Chic Brodie: Will the member take an intervention?

Patrick Harvie: I am sorry, but I have to move on.

Lewis Macdonald rightly emphasised the slight ambiguity in the wording on CCS in the minister’s amendment. The suggestion in the amendment that CCS will continue to play a role implies that it currently plays a significant role, which it does not. As Mr Macdonald rightly identified, the word “progressively” in the amendment seems to leave open the possibility that additional fossil-fuel generating capacity will be approved without CCS being an existing element.

I refer members to the WWF briefing for the debate, in which WWF acknowledges its support for research into CCS. I, too, have never been against research into CCS or public support for such research. However, the briefing makes it clear that the commercialisation of CCS has not been happening at pace. It states:

“The Scottish Government has a responsibility to plan and cater for a scenario in which CCS does not establish itself commercially as quickly as might previously have been hoped.”

WWF calls on the Scottish Government to review its electricity generation policy statement accordingly. WWF’s point is an important one that is consistent with the Scottish Government’s long-standing assumption, which I think is mentioned in RPP2, that Longannet might close by 2020.

We should acknowledge that the transition that we are in must be just and that there must be a far greater emphasis by both levels of government on the diversification of local economies that currently depend heavily on short-term forms of energy generation that have no long-term future.

Mr Macdonald’s amendment states:

“the Scottish Government is responsible ... for ... stewardship of the Scottish economy”.

Would that that was so. Responsibility is clearly divided between two Governments, and it is not enough to say that one Government has responsibility without it having the power. The wider issues about the just transition are echoed in the final part of the Green amendment, which I commend to Parliament.

I move amendment S4M-12395.2, to leave out from first “notes” to end and insert:

“supports an energy strategy for Scotland based on a step-change in energy efficiency, a focus on demand

reduction, increased storage capacity, development of a North Sea transmission grid and a rapid transition to low-carbon power production with an emphasis on local and community ownership; notes research such as the World Wildlife Fund's *Pathways to Power*, which demonstrates that an almost fully renewables-based electricity generation system is technically feasible and achievable in 2030; recognises that Longannet's age, EU emissions rules and carbon pricing mean that the closure of the plant is inevitable, and believes that this closure, coupled with recent oil price volatility, demonstrates the need to focus on a just transition for workers and communities from fossil fuels to a secure low-carbon energy system."

The Deputy Presiding Officer: We move to the open debate. We are very tight for time, as I said. Members have up to four minutes.

15:10

Mark McDonald (Aberdeen Donside) (SNP): I have a lot to get through in my four minutes, so let us crack on.

On Longannet, I hear the comments that are being made that transmission charging is only a part of what is affecting the station, but it is a £40 million part. The press release that has been issued by Prospect, the union, states:

"The union representing engineers, technicians and other professional staff in the electricity supply industry has warned the viability of Scottish Power-run Longannet, Scotland's largest power station, is threatened by a £40m charge for connecting it to the grid, which penalises it in comparison to similar energy generation south of the border."

That is a like-with-like comparison. Prospect's national secretary said of Fergus Ewing:

"We welcome the minister's commitment to continue to put pressure on the Westminster Government who have responsibility for this matter."

The union is identifying transmission charging as the key element in the Longannet situation.

Murdo Fraser: Will Mr McDonald give way?

Mark McDonald: I have only four minutes and I have a lot that I need to get through.

We should also accept that—contrary to Murdo Fraser's statements—transmission charging impacts on the renewables industry. Scottish Renewables states in its briefing to members:

"Levying higher charges on generators using the transmission network located furthest away from the main centre of demands can present a barrier to renewable energy generators which must locate where the resource is strongest, often far from the main centres of demand."

Renewable energy, in terms of its location, is not as flexible as other forms of energy generation might be, because of the requirements of the resource from which the electricity is delivered into the grid.

On Murdo Fraser's call for a new gas power station on the site of Longannet, it is worth noting that without resolution of the transmission charging regime situation, any future station of the type that Murdo Fraser envisages will, irrespective of the merits or otherwise of the proposal, simply find itself being affected by the same transmission charging problems and the same economic barriers that Longannet is facing. The key is to address the discriminatory transmission charging regime, which results in—as the minister highlighted—projects in the south of England being subsidised for connection and projects in Scotland paying through the nose to connect.

I am becoming a little bit concerned that the Scottish Conservatives are becoming overly obsessed with wind energy to the point of its being detrimental to them. I note that they do not mind wind farms as long as they are, perhaps, beneficiaries as a consequence of the income. However, it is a little bit perverse that while the Tories seem to object to people being able to see turbines from their windows, they seem at the same time to be pretty gung-ho about having the same property drilled under as part of fracking and hydraulic exploration. The position that the minister has taken of imposing a moratorium in order that we can address the clear questions that need to be answered is sensible. I certainly do not wish him to go down the gung-ho route that Murdo Fraser and his colleagues seem to wish to go down.

The Deputy Presiding Officer: Will you draw to a close, please?

Mark McDonald: On security of supply, it is worth noting that, despite the Tories' obsession with wind, there are other renewables options. The briefing by Aberdeen and Grampian Chamber of Commerce states that wave and tidal power is a significant area that its members wish to see being developed to meet future demand. It is also worth noting that British Chambers of Commerce has said—

The Deputy Presiding Officer: You must close.

Mark McDonald: British Chambers of Commerce has said that it wants a 50-year energy security strategy from the UK Government. It would be worth our while to call for that before we look for an update to the sensible energy strategy that the Scottish Government is pursuing.

15:14

Cara Hilton (Dunfermline) (Lab): I am pleased to take part in today's debate on an issue that is of huge importance to Fife and to Scotland. Longannet sits on the west side of my constituency and many of its 260 employees are

my constituents. Hundreds more are employed as contractors and subcontractors, and many local jobs in Kincardine and west Fife are dependent on the plant having a future.

As members are all well aware, Longannet has been generating electricity since 1970 and has the capacity to put around 2,000MW into the national grid. When I met Longannet management and workers just a few months ago, they were confident that there could be a future for the plant to 2020 and for quite a few years beyond that, but events in the past 10 days appear to cast doubt on that and there is now renewed concern about security of supply and about the future of the workforce. That is no surprise when we consider that Longannet keeps the lights on for more than 2 million homes and businesses.

I am a supporter of renewable energy and I think that we need to do more to promote renewable energy sources, just as we all need to do more to save energy if we are to have any hope of meeting our climate change targets in Scotland. However, we must also be able to guarantee that when we flick the light switch the lights will come on. We need backup and we cannot rely solely on an energy supply that depends on when the wind blows or when water flows.

About 25 per cent of the energy that we consume is produced at Longannet, and although we are hearing assurances that security of supply is not an issue, if we want to be self-sufficient in Scotland, as SNP members want, that is clearly a problem. Right now, Scotland relies on imports of English electricity to meet demand in one out of every six days. Professor Younger, who has already been quoted by Murdo Fraser, has warned that Longannet's closure would leave Scotland in "serious trouble" and "absolutely dependent" on England to keep the lights on.

The talks between Scottish Power and National Grid have apparently broken down, which sparked this debate, and it seems after digging deeper that—as the minister has confirmed—transmission charges were not part of the negotiations. More is likely to come out about that in the coming weeks. We continue to hear conflicting accounts from all who are involved in the talks; such manoeuvring is not helpful at all for the workforce or their families at a time when all who are involved should be concentrating on working constructively to secure a sustainable solution. My constituents want to know that Scottish Power and National Grid are round the table negotiating to find a solution that maximises the life of Longannet and secures their jobs into the future. They also want assurances from the Scottish Government that it is doing all that it can to find a solution that will support the local community in and around Kincardine. I am

pleased to see the minister nodding his head at that.

We must plan to meet our energy needs now and in the future. Workers are worried about their jobs, their mortgages and their families, and they want to see action. The Scottish Government has long anticipated that Longannet may have to close by 2020. Why is it, then, that so little action has been taken to secure new employment investment into the Kincardine area in order to ease the transition, to support the local community and to build its resilience?

On behalf of all the people who are directly affected in my constituency, I would be grateful if the minister and the Scottish Government could—rather than trying to shift the blame on to Westminster or others—set out what practical steps they will take to protect the hundreds of jobs in my constituency that depend on Longannet, to prepare the local community should the worst happen, and to keep the lights on across Scotland, now and in the future. The Scottish Government needs a plan for the future of Longannet, and it needs it now.

An important related energy matter that is of huge concern to my constituents in Kincardine and the surrounding villages on the Forth is underground coal gasification. Unfortunately, I am running out of time, but I hope that the Scottish Government will act to extend the fracking moratorium to cover that extremely risky and potentially dangerous technique. As Friends of the Earth Scotland says in its excellent briefing for today's debate,

"two out of three is not good enough".

UCG must be included in the moratorium too. My constituents in Kincardine and west Fife want an assurance from the Scottish Government that there will be no fracking under the Forth; I hope that the minister will listen and take action.

15:18

Chic Brodie (South Scotland) (SNP):

Transmission charging is obviously a big element of the debate, but the first duty of a Government's energy policy is to guarantee a secure supply for businesses and consumers, and to maintain that secure supply through reserve capacity. The United Kingdom Government is failing in that regard. The UK Government's white paper in 2011 said that low-capacity margins could trigger supply shortages, costing the UK economy £600 million. The UK Government failed in its handling of the electricity market reforms that have—because of its shilly-shallying—led to delayed investment in new capacity, and to the mothballing of some existing capacity. However, only four months ago, at two meetings with some National Grid

managers, we were told that reserve energy capacity margins for this winter would be as low as 4 per cent.

When we then asked about next winter, National Grid's pearl of wisdom was that it did not know but it might seek to reopen mothballed gas-fired stations down south or import energy from abroad in the event of possible outages. It does not know, although we are talking about an imminent threat to the Longannet power station. Nothing short of senior officers from Ofgem and National Grid coming to Parliament to explain the basis of their analysis and strategy is acceptable.

On top of the UK electricity market reform debacle and National Grid's inability to clarify the strategy, we have the Tories calling for a new energy strategy for Scotland after applauding the single UK energy market to which we subscribe. Yes—today we are talking about a single European market.

The Tories hint again at their disappointment at the removal of nuclear power as part of the energy mix. I have to say that Murdo Fraser misled members when he said that nuclear power is cheaper. New nuclear power is expensive. The strike price is £92.50 per MWh, which is twice the current wholesale price. It is not cheaper.

Murdo Fraser: Will Chic Brodie take an intervention?

Chic Brodie: No, I will not. I am just about to finish. We hear their—

Murdo Fraser: On a point of order, Presiding Officer.

The Deputy Presiding Officer: Point of order, Murdo Fraser.

Chic Brodie: We hear their newly adopted bleats—

The Deputy Presiding Officer: Mr Brodie, sit down.

Chic Brodie: —about the possible reliance—

The Deputy Presiding Officer: Sit down, Mr Brodie.

Murdo Fraser: On a point of order, Presiding Officer. When a member deliberately misrepresents and misquotes what another member has said in the chamber, what steps can I take to have the record corrected?

The Deputy Presiding Officer: If he wishes, the member can correct the record for himself. Notwithstanding that, that was not a point of order; Mr Brodie's remarks are a matter for him.

Chic Brodie: I was making a point and the point stands.

We hear the Tories' newly adopted bleats about Scotland possibly having to rely on importing energy from the rest of the UK. For goodness' sake: Scotland exports energy to the rest of the UK. That is why Longannet must stay open. There is also the implication for jobs and that is why we must continue to encourage investment in our renewable energy mix of wind, tidal and solar power. That is why we need a dedicated capacity assessment for Scotland—about which the First Minister wrote to the Prime Minister, who has apparently refused to take any action.

That is also why we will seek clarity on National Grid's numbers and on a policy that charges more for transmission at potential major points of production such as the Western Isles, Peterhead and Longannet while subsidising major consumer belts in the south-east of England. It is the economics of the madhouse.

The problem is with transmission charges, but it is also about policy and capacity. We need answers on that and we need them now.

15:23

Neil Findlay (Lothian) (Lab): For 200 years or more, West Lothian in my region has been at the centre of energy development in Scotland. In the 1850s, James "Paraffin" Young developed a refinery at Bathgate and shale mines operated across West Lothian. We had oil refineries, candle works and so on all operating in West Lothian, and new villages emerged because of that industry. West Lothian was the world centre of the commercial oil industry at that time. Of course, we also had the coal industry. Pits littered the area, employing thousands of men in villages including Blackburn, West Calder, Armadale, Breich and Whitburn, with Polkemmet being the last colliery.

Today we are at the centre of a new energy Klondike in onshore wind development, with overseas speculators seeking to cash in on the rush to put up as many turbines as possible in as short a space of time as possible. Austrian, French, Spanish and Italian multinational corporations, venture capital firms and wealthy speculators are looking to cash in on communities that they have never visited and probably could not point to on a map. For me, that is the problem. Shale and coal produced energy, but they also produced thousands of jobs and homes for families, some of which are standing to this day. They produced community halls and miners' welfare social clubs. They provided services for pensioners, education facilities, gala days and the like. They created and developed communities.

Although communities can and do get involved in community benefit negotiations with onshore wind energy developers, in the big scheme of

things, the money and benefit that are received amount to crumbs from the table compared to the profits that are made by the speculators. I was therefore pleased to see in the budget this year an increase in the cash that is available for the new local energy innovation fund. However, that needs to be driven by Government and there needs to be an enthusiastic and dynamic champion to make it happen by banging the First Minister's table and demanding action. I am afraid to say that I just do not see the minister in that role.

For years, I have been calling for community development trusts, local authorities, national health service trusts, schools and colleges to be allowed to run and develop renewable energy projects. They should retain the profits in the communities that host the wind energy schemes. Those profits should not be exported to corporate boardrooms across Europe.

Mark McDonald: Will Neil Findlay give way?

Neil Findlay: No, thank you.

Such profits should be invested in initiatives to address fuel poverty, cut heating bills for people and build new energy efficient social housing. We are missing out on one of the greatest opportunities for us to provide energy at the same time as we empower our communities.

Energy planning requires a long-term Government strategy, but too often we see companies taking a short-term approach, happy to cream off profits and dividends when the sun is shining, but calling for tax cuts and subsidies when prices fall. In the oil sector, having coined in cash for decades, large multinationals now threaten workers with redundancy because of the downturn in the oil price.

In coal, we see Hargreaves Services threatening to get rid of another 250 skilled coal workers as coal prices fall due to the impact of shale gas on world prices. As we have heard, Scottish Power has permission to build a new plant at Cockerzie, but little progress has been made. Furthermore, who can forget Jim Ratcliffe threatening to hold the country to ransom over Ineos? Of course, as all of that has been going on, we have seen fuel poverty increasing and energy prices rising.

We need a mixed energy policy—one that is more balanced and which involves energy being generated from a range of sources, all of them operating to the highest environmental standards.

15:27

Joan McAlpine (South Scotland) (SNP): Balanced energy generation has to be our short-term strategy. That is common sense, and that is why we must continue to urge the UK Government

to change its discriminatory charging regime, because it is damaging Longannet and the future of Scotland's renewables industry.

However, there is no contradiction in combining that short-term pragmatism with the long-term ambition to be a greener nation, as the World Wide Fund for Nature's report "Pathways to Power: Scotland's route to clean, renewable, secure electricity by 2030" says is achievable—not by tomorrow but by 2030.

The research that was carried out by the respected energy consultant DNV GL rather flies in the face of the gloomy claims that renewable energy cannot provide baseload power supply. There are challenges with every type of generation. In fact, output from a thermal plant can drop off suddenly, posing serious operational challenges, as the National Grid highlighted to the Economy, Energy and Tourism Committee.

The WWF report outlines two scenarios, both of which fit within current Scottish Government policy. The first is what it calls the high climate risk scenario, which involves the commercialisation of carbon capture and storage technology. The second, which it calls the low climate risk scenario, envisages a future energy supply without the use of CCS, on a commercial basis, and with no other gas, coal or nuclear plant in the system. According to WWF and its consultants, both those scenarios are technically and economically achievable. WWF calls on Westminster to make electricity market reform work better for offshore wind in particular, stating that

"The enduring regime under Electricity Market Reform is currently constraining"

the growth of offshore renewables to

"around one project under the first allocation round ... which could severely restrict growth in Scotland."

It continues:

"The current lack of ambition and certainty risks stymying investment in an industry with long-lead in times and a need for deployment at scale to drive learning and cost-reductions."

I share the concerns for Longannet that have been expressed across the chamber, and I am particularly concerned about the future of the workforce. However, figures from the Department of Energy and Climate Change show that across the course of a year, without Longannet, Scotland's electricity generation will still exceed demand. We should not forget that Scotland is a net exporter of electricity to the rest of the UK.

Our challenge in the long term is to create sustainable jobs. Again, the solution can be found in renewables—a sector that has already led to the establishment of an industry that is responsible

for 11,000 full-time jobs in Scotland and billions of pounds of inward investment.

However, one key dimension to the renewables revolution deserves more attention in the chamber: energy storage technology. Being “the Saudi Arabia of renewables” is of little use without somewhere to store all the green energy. Scottish Renewables agrees and argues that we will, by 2030, need better storage as well as increased interconnection.

Brian Richardson, who is a constituent of mine and the chief executive officer of Energy Storage Scotland, has convincingly argued that the development of storage technology in Scotland presents an exceptional opportunity for training, jobs and a place in the global market. Although we have a tried and tested technology in pump storage, on which we lead, many other exciting energy storage technologies are being developed around the world, and our universities—in particular, Heriot-Watt University—are keen to develop them further in Scotland.

On 5 March, I will host a presentation in the Parliament by Energy Storage Scotland and Heriot-Watt University’s energy academy on the development of those technologies. I hope that members from around the chamber with an interest in the matter will attend.

The Deputy Presiding Officer: I apologise to the member whom I have been unable to call. We now move to closing speeches. I call Patrick Harvie. You have up to four minutes, Mr Harvie.

15:31

Patrick Harvie: I am grateful to Joan McAlpine for focusing some of her remarks on the WWF report that is cited in the Green amendment because it saves me a little time in my closing speech. That report sets out a clear vision for producing by 2030 a largely fossil fuel-free and nuclear-free energy system that would be achievable, credible, cheaper than the alternative, lower climate risk and—yes—secure.

Murdo Fraser: Will Patrick Harvie give way?

Patrick Harvie: I am afraid that, with four minutes, I do not have time.

That security cannot be achieved on a stand-alone basis. No man is an island, it is said. No country—even one that looks like an island geographically—is an island in energy terms. It will be increasingly important that we have interconnectivity not only to the rest of the UK but across the North Sea to the rest of Europe.

I cannot remember who it was, but somebody used the phrase “importing English electricity” during the debate. Whatever view we take of the

constitutional relationship between Scotland and the rest of the UK, none of us should be worried about importing English electrons or, indeed, exporting electricity to other countries across the North Sea. There will be an increasing need for interconnectivity.

I cite the support of Ian Duncan, the Tory MEP, who talked the other day about the need for high-voltage direct current transmission across the North Sea so that we can trade different sources of renewables to match variable supply with variable demand efficiently without transmission losses. That must be part of the future.

There were some brief exchanges on the costs, particularly of nuclear energy. I would not accuse Mr Fraser of deliberately misrepresenting his position or the facts, but I highlight the difference between the rhetoric that we often hear, particularly from the political right, on issues such as so-called green taxes—the parts of the subsidy for renewable energy generation that show up on our bills—and the hidden subsidy for nuclear generation as the taxpayer picks up the tab for the decommissioning of nuclear plant. The amount of money that is going into that is dramatically bigger.

There is no subsidy-free solution to our energy challenges. We should not be ashamed of that. We should acknowledge that we can invest public subsidy in producing an energy system that meets people’s needs securely not only today but for the long term, which means sustainably.

None of that should deflect us from the need to address transition and to do so justly. Neil Findlay’s comments on the industrial heritage from fossil fuels are significant, but we must look to the future. We have the opportunity to do something that fossil fuels or nuclear power cannot do, which is to decentralise the ownership of our energy system and, thereby, the economic benefits from it. Renewables lend themselves to that in a way that fossil fuels and nuclear energy simply do not.

In the final analysis, we need to recognise that this brief little blip in the planet’s history—this tiny century in which a bunch of allegedly smart apes have become so hooked on every form of fossil fuel that can be extracted, which has bound us intimately and intricately with those products—is coming to an end. Unless we get to grips with the need for a just transition, we will be failing to meet not only our ecological needs but our social and economic needs.

15:35

Lewis Macdonald: This has been a welcome debate and has touched on many aspects of power generation policy in Scotland. I particularly enjoyed Patrick Harvie’s effort to say that no island is an island, despite the sea around it. However, I

know that the energy policy that he was putting forward is a very serious proposition.

I am glad that Cara Hilton, as the constituency member, focused firmly on Longannet and the west Fife economy. This is not just a debate about electricity generation options for the future; it is also about support for people who are working in the power industry today and who are facing the prospect of losing their jobs.

Of course we support engagement between Scottish Power and National Grid and between the Scottish and UK Government on this issue, as on other issues. We do not, however, accept the assertion that the threat to Longannet comes simply from the transmission charging regime, even if that regime stands in need of reform. The threat to Longannet's future comes principally from the requirement to phase out high-carbon-emission power stations across Europe, which is supported by both the Scottish and UK Governments.

Nor do we accept the proposition that the way to ensure security of supply is to give the Scottish Government the power to set Scottish-specific standards in this field, as the SNP amendment proposes. Rather than dividing up responsibilities for capacity and security of supply at this juncture, Labour believes that now is the time to move in the opposite direction, by pulling together the existing responsibilities in the field, which are currently divided among DECC, Ofgem as the regulator, and National Grid as the system operator. Rather than those bodies having to negotiate their different objectives to resolve issues such as those at Longannet, we want to have a single energy security board that has responsibility for taking a lead in providing a joined-up approach.

If we had that, we might also find that a more joined-up approach could be taken to issues such as transmission charges. It certainly makes little sense to separate off the issue of security of supply in Scotland from the parallel security of supply issues in England and Wales when we operate a single electricity transmission and trading market and when Scotland consumes power from England on a weekly basis and vice versa.

The Scottish Government, of course, already has responsibilities that bear upon energy choices in Scotland—namely, planning and environmental consents. Licensing powers in relation to unconventional gas extraction will follow before too long.

The question has been raised whether the Scottish Government's policy of a temporary presumption against planning consent for onshore fracking also applies to underground coal

gasification below the Firth of Forth and if not, why not. We already know how effective a planning presumption against development can be in relation to nuclear energy. That approach by the SNP has effectively deterred investment in new nuclear capacity in Scotland and constrains the choices that Scotland can make in seeking to move towards a low-carbon future. Most important, as long as there is a need for base-load generation alongside intermittent renewable power, it makes new unabated coal-burning power stations more likely, not less likely, in the future.

New unabated coal is not the answer to the crisis that is facing Longannet. We need Scottish Power, as owner of the power station, to live up to some of the promises of investment that it has made in the past. If it does that, we also need Government agencies at every level to work with the company on reducing costs.

However, we also need Government at every level to get serious about life after unabated coal—locally in Fife and nationally—if Scotland's commitment to a low-carbon economy is to survive into the 2020s. That is what we call on the Scottish Government to do today.

15:39

Fergus Ewing: I am glad that we have had the opportunity to debate energy today, especially given the imminent threat of Longannet's premature closure.

The debate has been wide ranging, and I will answer some of the points that have been made, but I cannot respond to all of them. We have made considerable progress in renewables deployment in Scotland—more than 44 per cent of gross electricity consumption was met from renewable sources in 2013—which has been broadly welcomed. However, we have always been clear that our renewables target does not, and cannot, mean that Scotland will rely on renewable generation alone. I have always argued that back-up and base-load are necessary, and members will have heard me argue the case for the continued life of our nuclear stations at Hunterston and Torness, both of which I have visited.

I point out to Murdo Fraser that there is unfortunately another error in his motion. It says that nuclear stations

“are due to close by 2025”,

but that is not the case. Both stations are due to close in 2023, although we understand that EDF may seek an extension to life in the case of Torness. It is unfortunate that the motion contains a factual error. Perhaps, in the scheme of things, it is not as important as the key issue, which is the immediate threat to Longannet, but it is

nonetheless an error, along with the other one that I identified.

Our policy supports clean thermal generation as part of a diverse energy mix. When I consented to the proposed gas plant of 1GW at Cockerzie, it was with the condition that the plant must be CCS ready. Our policy on coal—to respond to Lewis Macdonald's line of argument—was that it must have CCS on 300MW.

All of that is not new. It was set out in our electricity generation policy statement. Perhaps because that document is not exactly what one would call the most riveting read, what I have described is perhaps not widely understood, but it is in there. I hope that members would accept that I am at least being consistent.

On the key issue of the immediate threat to Longannet, I do not want to be political. As Cara Hilton said, the issue is too important for that. When I visited the plant on Monday, I spoke to members of the Prospect union, and I was impressed with their obvious concern about the issues.

We are all aware of the reasons to do with climate change—such as emissions, which Patrick Harvie mentioned—behind the need to move to a low-carbon economy. Longannet does not have an infinite life—indeed, there is project 2020, and the staff hope that the plant will continue to operate up to then. Last year was the plant's most successful operational year, which I would have thought proved its capability. Expenditure on tackling some of the sulphur dioxide emissions has been very substantial indeed, and the company should be given due credit.

However, the signal factor in this debate, to strip it down to its essence, is this. In addition to the legal requirements to reduce emissions, Longannet must find an additional £40 million to fulfil its duty to meet the carbon levy. The same duty is faced by all coal-fired generation stations throughout the UK. As Mark McDonald said, that is a substantial sum. If Longannet were located in the south-east of England, there would be a payment of £7 million for it to contribute to the grid.

That problem is not new, as Patrick Harvie pointed out. Indeed, the Scottish Affairs Committee identified it in 2003-04, and recommended that it be dealt with. That is why project transmit took place, with the aim of trying to bring about a fair resolution. It was due to come in by 2014, as the minded-to proposals set out, but the process has been delayed, so an answer is not yet here.

My hope is that National Grid and Scottish Power will reach a resolution following negotiations, which are not about the transition charging regime but about a supplementary

balancing reserve. National Grid has a budget of approximately £1 billion, and a relatively small amount of that will secure the future. Regrettably, to date, despite the First Minister raising the issue with the Prime Minister, we have been unable to persuade the UK Government to intervene.

In conclusion—

Murdo Fraser: Will the minister give way?

Fergus Ewing: Do I have time, Presiding Officer?

The Deputy Presiding Officer (Elaine Smith): I can give you only six minutes, so it is your choice.

Fergus Ewing: Well, all right.

Murdo Fraser: I agree with much of what the minister says about project transmit and the delays, many of which are not of the UK Government's making, but can he explain why transmission charging is such a problem for Longannet and other conventional generators when the same regime, which applies to renewable energy, is not preventing massive renewable energy development from going ahead today?

Fergus Ewing: The answer is very simple: it is because wind farms have higher output than similar plants in England, whereas coal-fired power stations have the same output as those in England.

Let us get back to the key point. This is very serious. My information is that, unless there is a resolution, Scottish Power must intimate to National Grid, no later than the end of March, that Longannet will be closed. Therefore, unless the negotiations are concluded successfully, there is a great deal at stake. I have taken that matter extremely seriously not for months but for years. At one point, Scottish Power was optimistic that a deal would be reached. We are not satisfied that the assumptions that National Grid has made are prudent—in fact, many of our experts take the opposite view.

The Deputy Presiding Officer: You must close, minister.

Fergus Ewing: We will come back to the chamber on this topic. It is too important to treat as a political football.

15:46

Alex Johnstone (North East Scotland) (Con): The debate was an attempt by the Conservative Party to bring forward an issue that is of genuine concern to many people in Scotland. It was perhaps an attempt to find a way of bringing together the political parties and the Government

at such an important time, yet it has served as one more opportunity for political parties to set out radically differing positions without recognising the imminence of the decision making that is in process.

The truth is that Scotland is a cold country and a country where energy is important. The availability and affordability of energy are critical not only in domestic terms but for our industrial development and economic growth. It is important that no one is left to freeze in the top of a tower block somewhere because electricity is too expensive to buy, but it is equally important that, when Scottish workers go to their jobs, the lights come on and the motors begin to run.

That is why electricity generation has always been at the heart of Conservative Party concerns about energy policy in Scotland. We have been raising the subject for years. We have been raising it for so long that the landscape has changed radically over that time. Once, we could say clearly that Scotland had five main power stations, which together produced more electricity than Scotland could use. We talked a lot about Scotland exporting electricity, although that was perhaps slightly misleading given the commitments that we have to supply across the Northern Ireland interconnector. Nevertheless, we were electricity exporters.

In the intervening time, largely at the instigation of the current Government, we have seen a massive shift to onshore wind and we have become increasingly reliant on it. At the same time, Cockszie has closed, Hunterston has been downgraded and even Boddam has reduced its output. Longannet and Torness remain the only two power stations in Scotland that are capable of achieving anything near the required output. Actually, everybody agrees on our need for nuclear energy, although we do not agree about replacing that capacity. Nevertheless, this Government and others, along with various political parties in Scotland, have been keen for the life of Hunterston to be extended. We heard today from the minister that the same approach will be taken to Torness. Everybody understands that we are reliant on nuclear energy in Scotland. The question is simply how long we can afford to go before we consider how it might be replaced.

The whole issue has been thrown into focus by the immediate threat to Longannet, which is a high-capacity coal-fired power station. It is under threat for a number of reasons, not least of which is the fact that it does not meet the likely requirements of the European environmental legislation under which it will have to survive in future.

We have said a lot today about the grid charging regime and, again, we have perhaps had a

misleading representation. The national grid is not free. It cost money to build and it costs money to maintain. The current regime, whether we like it or not, is designed to incentivise the pursuit of low transmission costs and to minimise losses in the grid. I support the Scottish Government's argument that a more favourable charging regime would be welcome, and I hope that that will come forward. Nevertheless, it is ironic that that regime, if it is successfully achieved, will be one in which English consumers pay more and Scottish generators pay less.

The truth is that we need to look ahead in this difficult situation. We need a clear picture of where our energy will come from in five, 10 and 20 years' time, because we know that the capacity that we have today will close down. Longannet will not survive in its current form beyond 2020 and we know that, thanks to the minister, our nuclear capacity will disappear, most likely by 2023, which could call into question the reliability and affordability of our electricity. However, if we allowed Chic Brodie to do the mathematics, we could perhaps avoid that difficult conclusion, given that the strike price for nuclear energy, which he clearly stated to be £92.50 per MWh, is apparently significantly more expensive than the equivalent strike price for onshore wind of £95 per MWh—the secret behind which he declined to tell us when challenged.

The reality is that we are in a difficult position. We need to address a key challenge and remember that the transmission regime does not discriminate between generating methods. Investment is being made in onshore wind at the same latitude as the power stations that we are discussing, so it is ironic that transmission charges are a threat to coal-fired reserves but not to wind generation. The minister was slightly disingenuous when he suggested that that was somehow because onshore wind capacity in Scotland is higher than that in the south of England. That is a fact that is undeniable, but it has nothing to do with the impact of transmission charges.

We have had one or two key contributions today and I would like to draw attention to the first three quarters of Cara Hilton's speech. She is the local member for Longannet and she made it clear that the future of the workers there should always be at the front of our minds. We must remember that Longannet is not only an important power station for the supply of electricity but a very major employer in the area. Sadly, Cara went on to spoil her speech by reciting some myth and superstition about the shale gas extraction techniques that we might adopt in the future.

The key proposal that my colleague Murdo Fraser made in his opening speech was that we should consider the opportunity to look forward

and build a gas-fired power station at the Longannet site. We have the opportunity to use the infrastructure, skills and, ironically, perhaps even the fuel supplies that exist there. Perhaps if the Government sanctioned the drilling of a few wells, it might discover that Longannet is very close to a source of energy that could supply it.

I support the motion in the name of Murdo Fraser and commend it to the chamber.

STEM Education in Scottish Schools

The Deputy Presiding Officer (Elaine Smith):

The next item of business is a debate on motion S4M-12385, in the name of Liz Smith, on science, technology, engineering and mathematics education in Scottish schools. We are very short of time, and I give warning that I may not be able to call every member who wishes to speak in the debate.

15:54

Liz Smith (Mid Scotland and Fife) (Con): The Parliament has just debated energy policy, on which there were robust differences of opinion. However, there was agreement on all sides of the chamber about the crucial importance of the sector in Scotland because of the rich natural resources with which this nation is blessed, the resulting investment potential and the opportunity for future employment. That sector is not alone in relying heavily on scientific and technological skills, and we know that, by 2030, 7 million jobs in the United Kingdom will be wholly dependent on science-based skills. Indeed, in the eyes of many economic commentators, Scotland's importance in the sector could grow more strongly than that of the rest of the UK.

In the Scottish Government's 2012 science and engineering education advisory group report, energy and life sciences were rightly identified as the two key sectors when it came to skills training. It is, therefore, plainly obvious that we must do everything that we can to ensure that we are able to provide a highly trained workforce that has those scientific skills. At present, however, our ability to achieve that is being hampered.

That is not to say there are no encouraging signs—there are. According to the latest Higher Education Statistics Agency figures, a growing number of Scottish students are opting to study courses in computing, with the figure rising by 21 per cent in the past two years. I note the reference to computing in the Labour Party's amendment, which we would have been happy to support were it not for the reference to the 50p top tax rate. The figure for mathematical sciences grew by 26 per cent in the same period, and both engineering and technology numbers have risen by 10 per cent.

There are also encouraging signs in the uptake of Scottish Qualifications Authority highers in science, given that there have been 4,689 more presentations in science subjects in the past five school sessions. Nonetheless, I question whether the SQA made the right decision in abandoning the geology higher this year when it could easily have been argued that its science base was

perhaps the most relevant to many of the offshore technology industries in Scotland that look certain to flourish in the years ahead, irrespective of what happens to the oil industry. That decision is even more extraordinary because of the trends elsewhere towards the need for an interdisciplinary approach. That, after all, is the key philosophy that underpins the curriculum for excellence and it is why, in science exams, there has been a move towards more open questions and away from a focus on the traditional, knowledge-based approach.

That change came at the suggestion of representatives on the curriculum for excellence design teams who came from industry, and I think that it is a good thing. There is a complementary move to make science much more meaningful to the everyday lives of pupils—for example, in showing how organic carbon chemistry affects our lives in terms of fuel, cosmetics and plastics rather than in just giving the scientific facts that describe its processes.

That interdisciplinary approach is important and it was what the Scottish Government thought would be achieved with the introduction of the Scottish baccalaureate in science. Unfortunately, the Government set the bar far too low and gave the baccalaureate virtually no distinctive characteristics from the separate higher and advanced higher—hence only 110 pupils across the whole of Scotland are taking it and universities do not really rate it as an added-value qualification. The interdisciplinary approach is also at the core of the Wood commission. The needs of Scotland and our young people are changing fast in a fiercely global economy, and they are changing because employers want a much more finely tuned labour force that is both more flexible and more skilled when it comes to the diverse needs of the economy.

So, although there ought to be plenty incentives, there remains considerable concern among many of Scotland's foremost industries that we do not have anything like the numbers required to ensure that we match our economic potential in the decades to come. With greater diversity being required in the energy industry, with the debates about climate change, transport and communication, and with the significant challenges in the health industry, there is no end to the need for well-trained scientists and engineers. Seventy per cent of Scotland's exports come from the science, engineering and technology-related sectors, yet the oil and gas industries continue to express their concern.

All that brings us to teacher numbers in science. Let us set aside the political rammy that is going on between the Scottish Government and the Convention of Scottish Local Authorities about

whose fault it is that teacher numbers have dropped and let us look at the Scottish Government's statistics on teacher numbers in science and maths. In biology, there were precisely three more teachers in Scotland in 2014 than there were in 2008, but the number of teachers in maths, chemistry, physics, general science and technology have all declined—in some cases, such as in maths and physics, quite significantly. For example, there are 383 fewer maths teachers in Scotland now than when the SNP came to power.

How ironic it is that at the very time that we are seeing an increase in the number of pupils wanting to take up science courses, teacher numbers are going in the opposite direction. I am not persuaded by the argument that there is a direct correlation between teacher numbers and the ability to improve educational outcomes. Nonetheless, it is hard to argue that a 9 per cent rise in the number of pupils taking mathematics, biology, chemistry, physics and technology and a corresponding drop of just under 10 per cent in teacher numbers is not bound to have a serious impact.

I will make positive suggestions about what we could do. There is an important issue about primary school science. In autumn last year, the Royal Society of Chemistry made the call to have specialist science teachers in primary schools. The Scottish Conservatives backed that call then; we back it again now. There is no more important time to inspire youngsters than in primary school. We urge the Scottish Government to tell us this afternoon what it will do about the issue.

We also need to bring in some of our top science graduates to school education. Two things can do that. First, we can learn from elsewhere in the UK. For example, the national science learning centre in York provides very generous bursaries for science teachers who want to enhance their continuing professional development. Secondly, we can do that via programmes akin to the Teach First programme. I agree whole-heartedly with the need for 100 per cent teacher registration and it is absolutely right that the independent and state sectors are making the move to do just that. That move is long overdue. However, that is not to say that we cannot also have a fully accredited Teach First programme running alongside to assist those who can bring added experience into our classrooms.

Many in the English system have not been able to get a job in Scotland because they are banned from doing so. That is simply unacceptable.

Professor Lindsay Paterson argued two years ago at a Royal Society of Edinburgh event that we could do much more to help our very gifted pupils from whatever part of the educational system they

may come or whatever their background. We need to do far more in that direction. His argument fell on deaf ears at the time but, particularly in the context of science education, it has considerable merit.

I will talk a little bit about teacher workforce planning. Workforce planning is not an easy task in any sphere, because it is difficult to get the demand and supply fully aligned, particularly in a fast-changing world. Recently, after the Scottish Government's initial troubles on teacher numbers, the Cabinet Secretary for Education and Lifelong Learning's predecessor moved, with some success, to make the process a bit more flexible.

Two things matter in all this. First, there must be absolute trust between central Government and local government, although that is obviously on a sticky wicket at the moment. Secondly, there must be greater flexibility when it comes to freeing up the supply of teachers.

I should at this point declare an interest as a fully paid-up member of the General Teaching Council for Scotland.

It is absolutely right to say that much more must be done to ensure that we can encourage greater diversity of teachers. There have been serious issues about fully qualified teachers from south of the border who have been prevented from teaching in Scotland simply because they do not have a Scottish qualification. By all means, we should carefully check that they meet the correct professional standards, but we should not bar them. If we do that, we are preventing top-class people from coming into the teaching profession. I hope that the Scottish Government will address that, because it has a direct influence on the number of science teachers in our schools.

We have debated science issues many times in this chamber. I pay tribute to Iain Gray as a member who has a distinct interest in the subject. Although I have no doubt whatsoever that some very good things are happening out there, the central issue remains that the number of teachers in STEM subjects is declining at the very time when the number of pupils wanting to opt for science courses is increasing. There is an urgent need to address the situation for the benefit of economic development, as well to address the weakness of not having sufficient numbers of qualified science teachers in our primary schools.

The evidence that comes from our academic bodies, almost all of which is extremely well researched over a long period, is absolutely compelling.

I move,

That the Parliament demands urgent action from the Scottish Government to reverse the decline in the number of secondary school teachers in science, maths,

engineering and technology (STEM) subjects, which occurred between the academic sessions 2007-08 and 2013-14, and which, many employers believe, is leading to insufficient numbers of pupils seeking tertiary education courses in these subjects; is concerned that, if the situation is allowed to continue, there will be a detrimental effect on the Scottish economy which, in the future, will be increasingly dependent on science, engineering and technology skills; urges the Scottish Government to heed the calls from the Royal Society of Chemistry in Scotland that there should be specialist science teachers in every primary school and the calls from the Institute of Physics in Scotland that more should be done to encourage female science graduates, and calls on the Scottish Government to work with local government and the General Teaching Council for Scotland to remove the red tape that is preventing full flexibility in the recruitment of teachers.

16:04

The Minister for Learning, Science and Scotland's Languages (Dr Alasdair Allan): As Liz Smith knows, the debate in some ways follows a members' business debate five weeks ago in which a not dissimilar motion that Iain Gray lodged was discussed. That debate raised issues on science and schools that I am sure we will speak about today.

As Liz Smith mentioned, we can agree across the parties on many areas. However, I am sure that she will not be entirely surprised to hear that I disagree with some of the premises in her motion, which is why we will seek to amend it.

As our amendment makes clear, the Government agrees that all young people need a solid grounding in STEM education. That grounding starts in primary 1 and builds progressively through primary school. The science, technologies and maths experiences and outcomes of curriculum for excellence are making learning more exciting, relevant and fun for all pupils.

In secondary school, learning and teaching continue through the broad general education to the end of secondary 3. We know that, particularly at the secondary stages, STEM subject specialists are knowledgeable and enthusiastic about their subject areas.

All that grounding is ensuring not only that record numbers of young people are taking science, technologies and maths subjects, as has been mentioned, but that the education system is contributing to ensuring that we have a more scientifically literate population.

Liz Smith: I absolutely agree with the minister, but does the fact that more pupils want to access STEM subjects—that trend is being manifested in higher and further education, too—not make it even more crucial that we increase the number of teachers in those areas?

Dr Allan: I am glad that the member acknowledges that there are links between teacher numbers and the experience of young people in learning. I certainly acknowledge that there is an issue in some subjects, not least computing science, which has been mentioned. I accept that the number of teachers of computing science has reduced, but efforts are under way to deal with that. For instance, I am pleased to note that the Government-chaired teacher workforce planning working group met this morning to discuss, among other things, that very subject. I am also pleased that the targets that we are setting for a number of the subjects in question, not least computing science, will move upwards every year; I certainly plan for them to do that.

The qualifications front is very important and, as has been mentioned, maths, physics, chemistry and biology are among the six most popular national 5 and higher qualifications for which pupils sat exams in 2014. In comparison with 2006, the number of pupils who took higher biology in 2014 increased by 14.2 per cent, and the number of pupils who took highers in maths, physics and chemistry increased by 17 per cent, 18 per cent and 24 per cent respectively.

I suggest that the on-going enthusiasm for and positive interest in science and maths in schools have been influenced by the considerable investment—in what I am sure that Ms Smith will acknowledge has been a very challenging fiscal period—that local authorities and the Government have worked together to make to allow the STEM subjects to flourish in schools. There has been such co-operation on investment not only in learning and curriculum support but in the quality of our teachers and of our school buildings and infrastructure. It is worth saying that the £1.8 billion schools for the future programme demonstrates our commitment and will ensure that we have science facilities in our new schools that are fit environments in which to learn in the 21st century.

Arguably, the most important thing is the quality of our teachers. We are committed to having the right number and quality of teachers in our schools. That is why we have just secured the commitment of each of Scotland's local authorities to maintaining teacher numbers over the coming year. We have added £10 million to the £41 million that is already included in the local government settlement explicitly for maintaining teacher numbers.

Ms Smith mentioned the General Teaching Council for Scotland, and I appreciate her knowledge of that body. It is worth making it clear that, as an independent body, it makes its own rules, but I understand that it is alive to the need to make sure that we deal with hotspots around the

country, where there is a need to ensure that teachers come into the system. However, on the basis of what the GTCS has said until now, I would be very surprised—I am not in any way prejudging what it decides—if it were to be flexible to the point that it was enthusiastic about anyone who was not a qualified teacher becoming a teacher in a Scottish school. I appreciate that the member was not suggesting that, but some voices elsewhere in the country have taken that line.

Last year, we founded the Scottish College for Educational Leadership and, earlier this week, we announced that from 2018-19 the new masters qualification for headship will become a mandatory requirement for new headteachers.

I accept that there are challenges. We recognise that STEM subject teacher numbers have faced challenges in recent years and, as I mentioned, we are taking steps to address that through the targets that we have set.

The Deputy Presiding Officer: You are in your final minute, minister.

Dr Allan: In that case, I will conclude by making it clear that we can agree to work together on many areas, and not least on an issue that is important to the Government: encouraging women to enter science professions and ensuring that the number of women in those professions increases.

We are not complacent about the challenges and recognise that issues need to be addressed. That is what we are doing. We are supporting primary and secondary teachers and are looking to find solutions to the many challenges of recruitment. That is what people would expect any competent and sensitive Government to do, and it is exactly what we are doing.

I move amendment S4M-12385.3, to leave out from “demands” to end and insert:

“agrees that a solid grounding in science, technology, engineering and maths (STEM) education delivered by high-quality teachers is essential in equipping all young people with the knowledge and skills to successfully contribute to the economy and 21st century society; notes that high numbers of young people choose to take science and maths qualifications, in particular at school, and congratulates those young people, their teachers and their schools for their hard work and their achievement across the STEM subjects; agrees that both young women and young men should be encouraged to aspire to and work toward the full range of rewarding careers on offer in the STEM sectors; notes the considerable investment and commitment that local authorities and the Scottish Government have made to support STEM education in schools; recognises the government's commitment to raising educational attainment and tackling educational inequity as evidenced through the announcement of the Scottish Attainment Challenge and that STEM subjects are at the heart of the government's approach to developing Scotland's young workforce; agrees that Scotland's young people deserve the very best teachers and supports the work of the General Teaching Council for Scotland and

others in enhancing the quality and professionalism of teachers in Scotland, and calls on all members to support the commitment to a masters level qualification for head teachers in Scotland announced this week.”

16:11

Iain Gray (East Lothian) (Lab): The teaching of science is a subject that is close to my heart, but more important, it is central to the country's economic future, as Liz Smith was right to say. The Institute of Physics has calculated that Scotland has 100,000 jobs—or 4 per cent of the workforce—in physics-based industry, but those high-skilled, high-value jobs drive 10 per cent of the economy. That percentage can only increase. At a recent event in the Parliament, the Institution of Engineering and Technology told us that by 2022 we will need 147,000 more engineers than were needed in 2012.

However, science teaching in this country faces what I have previously called a perfect storm. The learned societies group has demonstrated that our schools do not have the resources to teach practical science properly, and it has warned us of a looming shortage in science teachers, most notably in the crucial area of computer science, where numbers fell by 14 per cent in only two years. The group knows that the targets for teacher training in computer science have been raised, but it reports that those places cannot be filled. As a result, we are not addressing a situation in which 43 of our high schools do not offer computer science at all.

The Institute of Physics recently told a meeting in the Parliament of a similar shortage of physics teachers and reported that the brightest teachers are heading for England. No wonder—the latest *New Scientist* contains a full-page advertisement telling people that they can receive £25,000 tax free to retrain as physics teachers. That is not the Teach First programme; it is the equivalent of a postgraduate certificate in education. It is a £25,000 bursary to train in physics, and would-be physics teachers who are mobile are, of course, voting with their feet.

Meanwhile, as the new curriculum rolls out, pupil numbers in STEM subjects are falling. I know that the minister has quoted numbers for highers that are holding up, but the problem is coming behind that. Presentations at levels 3, 4 and 5 are 5.6 per cent down in physics, 8.8 per cent down in chemistry, 8.9 per cent down in biology, 9.4 per cent down in maths and, not surprisingly, 22.5 per cent down in computer-related subjects. The Government's survey of numeracy levels also reports a significant drop at all levels.

Dr Allan: I am sure that the member appreciates the difficulty of comparing one exam system with another, given the changes that have

been made at that level in education, and that he appreciates that many people who do not choose to take a science subject in fourth year will do so in fifth year.

Iain Gray: The figures that the minister quoted do not take account of the new curriculum moving through into higher and advanced higher levels.

If we do not have enough equipment, enough teachers and perhaps enough pupils and enough basic numeracy skills, where on earth will we get the extra engineers? We know that, unless we do something, they will not be girls or young people from our poorest families. According to the National Union of Students Scotland's excellent briefing for the debate, 86 per cent of entrants to university engineering courses are still men and only 9.3 per cent of entrants come from the poorest fifth of our communities. Girls and young people from our poorest families are going to miss out on those opportunities of the future, and we are going to waste their potential.

The Government's attainment fund is welcome, and we have welcomed it, but it is not enough. It is temporary and its targeting is flawed. That is why we want to add £125 million to that fund over the next session, which would be paid for by raising taxes on the most prosperous of our citizens. The funding would be targeted ruthlessly where it could make the most impact. That would mean that pupils in the city of Edinburgh, for example, would benefit rather than be ignored by the Government's attainment fund.

As for girls, the NUS has made the excellent suggestion that research excellence grant funding should depend on action to address the gender gap. However, as Ms Smith said, the truth is that we must also inspire girls to take an early interest in science before gender stereotyping takes hold.

The Deputy Presiding Officer: You have 30 seconds.

Iain Gray: The Royal Society of Chemistry is right to suggest access to a science teacher for every primary school. In my constituency, Dunbar primary school has its own science teacher, and it is no coincidence that next week will see that school's fifth science festival, attracting more than 8,000 participants in an ever-expanding variety of events.

The Deputy Presiding Officer: Draw to a close, please.

Iain Gray: There is little to oppose in the Government's amendment but, in truth, it reeks of complacency and abjures any self-criticism or even self-examination. It ignores the voices of teachers, scientists and industry.

The Deputy Presiding Officer: You must close.

Iain Gray: Science is always ill served by smug self-satisfaction, and we will pay a price for that in our future.

I move amendment S4M-12385.1, to leave out from “which occurred” to end and insert:

“particularly computing science teachers, which occurred between the academic sessions 2007-08 and 2013-14, and which, many employers believe, is leading to insufficient numbers of pupils seeking tertiary education courses in these subjects; is concerned that, if the situation is allowed to continue, there will be a detrimental effect on the Scottish economy, which, in the future, will be increasingly dependent on science, engineering and technology skills; urges the Scottish Government to heed the calls from the Royal Society of Chemistry in Scotland that there should be specialist science teachers in every primary school, from the Institute of Physics in Scotland that more should be done to encourage female science graduates and the recent survey, published by the Learned Societies Group on Scottish Science Education and supported by The Royal Society of Edinburgh, which suggested that 98% of primary and secondary schools depended on external funding for practical work; believes that the “attainment gap” excludes thousands of Scots from STEM opportunities and therefore welcomes the Scottish Attainment Fund, but calls on the Scottish Government to further increase the level of funding to reduce educational inequality by at least £25 million per year, funded from a 50p top rate of tax, targeted at those schools whose pupils face the greatest educational challenges to ensure that all pupils have the opportunity to achieve the qualifications needed for a career in science, maths, engineering and technology.”

The Deputy Presiding Officer: Thank you. I am afraid that we are very tight for time. Speeches should be four minutes, but if members take less than that, I might be able to call everyone.

16:16

Stewart Maxwell (West Scotland) (SNP): I am very well aware of the concerns that are raised in Liz Smith’s motion. The Education and Culture Committee has taken evidence on the matter. On the back of the work by the learned societies group, we asked it to come in and give us evidence on the particular issue, so we are very well aware of it and, of course, of the debate that Iain Gray sponsored a few weeks ago. Therefore, we are well aware of the situation—and some of the comments do not reflect the reality of it.

I do not accept at all what Iain Gray has just said and what others have said about some sort of cataclysm going on in Scottish schools with regard to science. The Scottish Government is investing in science education. For example, it is providing some £900,000 per annum to the Scottish schools education research centre to support the professional learning of teachers. That is important because that funding stream includes a programme that is focused on primary teachers to raise their confidence and skills in science, so it directly addresses some of the issues that others have raised.

The Government’s programme for government for 2014-15 states that the Government will

“Continue to support improvement in the learning and teaching of Science, Technology, Engineering and Mathematics in schools, with a particular focus on primary schools”.

Liz Smith: Does the member acknowledge that there are different trends in the STEM subjects in teacher numbers compared with some of the other secondary subjects? That is part of the issue, too.

Stewart Maxwell: I will try to come on to teacher numbers in a moment, if the member will excuse me.

One of the recommendations in the final report from the commission for developing Scotland’s young workforce is on STEM education. The report says that

“A focus on STEM should sit at the heart of the development of Scotland’s Young Workforce”,

and it calls for long-term partnerships to be established among schools, colleges and employers to bring about significant change. The Scottish Government is committed to implementing the recommendations of that commission, so it has already agreed to take forward the very recommendation on STEM education that many people have called for.

We all understand that the underrepresentation of women in STEM subjects is a serious problem that has to be addressed, but the Cabinet Secretary for Education and Lifelong Learning has said:

“There is no such thing as ‘a girl’s job’ or ‘a boy’s job’ and any perception that such unhealthy boundaries still exist need to be changed, whether they’re held by employers or young people exploring their career options.”

In fact, the letter of guidance that was issued to the Scottish Further and Higher Education Funding Council on 31 July 2014 by the former education secretary, Mike Russell, said:

“I want a renewed focus on reducing gender segregation in participation: too many college and university courses are dominated by either men or women”.

Action is being taken. Of course it is not quick enough and it does not have an immediate impact in bringing about some of the changes that we want to see, but the issue has been recognised by the Scottish Government and efforts are being made to reverse some of the trends.

On students who take science, last year there was an increase in higher entries in all three of the main science subjects—biology, chemistry and physics—and pass rates are holding up very strongly. As I said earlier, there is not the cataclysm that some have suggested.

On the issue of teacher numbers, the Deputy First Minister has of course already announced that £51 million is on offer for councils for 2015-16 to protect teacher numbers. I will not quote the head of the Educational Institute of Scotland, but at a meeting of the Education and Culture Committee earlier this year and in news reports he made very clear his view about the actions of individual councils and their responsibility for keeping up teacher numbers.

A deal was struck on teacher numbers, but it takes two to tango. The Government made sure that it held up its side of the bargain, and it is about time that some of our local authorities held up their side of the bargain on teacher numbers. If they did, maybe we would not have some of the problems that we are facing with teacher numbers declining.

16:20

Malcolm Chisholm (Edinburgh Northern and Leith) (Lab): Unlike my three Labour colleagues in front of me, each of whom is a distinguished scientist or engineer, I gave up science at 15 and have spent the past 50 years of my life regretting it. I have tried to remedy that in various ways, but I am certainly passionate about science and ensuring that more people continue to study and enjoy science. The economic arguments have been well articulated by all the front-bench speakers, but if we get science right in school it surely must be intrinsically interesting and endlessly fascinating for pupils. I refer to pupils because of course science teaching should start from a very early age.

Certain worrying features about science teaching have already been highlighted in the debate. First, the issue of the number of science teachers, particularly in computer science and physics, has been well rehearsed. Secondly, there is a problem in relation to the practice of science. Clearly, that is an area that is potentially very attractive to young people because it allows them to be more hands-on with science. However, one of the main features of the learned societies group's report was its reference to schools' reliance on external funding for practical work in science, which is also referred to in the Labour amendment. For example, 82 per cent of secondary schools said that they did not have sufficient resources for "equipment and consumables" for practical work, which is a very serious problem. I noticed that Professor Sally Brown highlighted that point at a meeting three weeks or so ago of the Education and Culture Committee.

There has been a bit of disagreement about the number of students taking science subjects, but Iain Gray made an important point about that

earlier. Again, I noticed that the point was referred to at the meeting of the Education and Culture Committee that I have mentioned. I will not read out the whole quote, but Dr Beveridge said at the meeting:

"The figures that give us concern are those for the new curriculum for excellence courses, which have only reached S4 level in schools. Having looked at those figures ... we are concerned that we are seeing decreases in all the sciences."—[*Official Report, Education and Culture Committee*; 27 January 2015; c 12.]

Clearly, a watching eye must be kept on that, because it would be an issue of enormous concern if an unintended consequence of the curriculum for excellence was that fewer people studied STEM subjects.

What do we do about the current situation? Having more partnerships with colleges has not come up in the debate, but it is an important area that could be explored. Central to the motion, and something we support in our amendment, is the idea of having a science subject leader in primary schools, which is vitally important. Perhaps another approach would be to have science requirements on primary teachers, although that is not going to happen for existing teachers in primary schools. The Royal Society of Chemistry's suggestion of science subject leaders in primary schools, which I think the Royal Society of Edinburgh also made, is therefore very important.

I have to say that I am very impressed, now that my granddaughter has been in primary school for one and a half years, by the science that she knows, but I imagine that as children go up through primary school it is more important that the teacher should really have a grasp of science, which many of them clearly do not have. We have to do something about science in primary schools.

The other issue that is highlighted in the motion and which we support is of course having more female science graduates. Again, Iain Gray gave the figures for engineering graduates, which are particularly stark in that 86 per cent of entrants to engineering are men. I was very privileged to have been at the engineering event in the Parliament recently, not least because Naomi Mitchison— young woman engineer of the year—works as an engineer in my constituency. I was very pleased to have a conversation with her in which she emphasised the importance of changing the perception of gender in engineering. However, that must start much earlier in the school system. I was going to say that it must be done before gender stereotypes build up in school, but we all know that they begin at a very early stage. It is clearly very important that they are challenged.

Lastly, but by no means least, there should be positive action on the attainment gap so that more opportunities for STEM subjects and careers in

those subjects can arise for those from the most disadvantaged areas.

That is exactly four minutes for my speech, Presiding Officer.

16:24

Christian Allard (North East Scotland) (SNP): I welcome this Conservative debate on education.

I note that the Institute of Physics in Scotland has said that we should do more to encourage female science graduates, and I think that we are doing just that. Not only the Scottish Government but all of us in this Parliament, across the political parties, have done a lot to address gender and science, technology, engineering and mathematics participation.

However, it is not the be-all and end-all. I like the wording in the briefing from NUS Scotland, which states:

“STEM education is a crucial part of our education system in Scotland, however we must ensure that our focus in this area is not to the exclusion of other subject provision.”

Liz Smith talked about that, but I wanted to point it out and maybe to remind Murdo Fraser, who is sitting behind Liz Smith, that languages are important as well. The teaching of French in schools is important. We must ensure that we also promote that.

Liz Smith: I entirely agree with the member: of course STEM cannot be taught to the exclusion of other subjects. However, among the main drivers are the needs of the economy, and that is one reason why there has to be much more focus on the STEM subjects.

Christian Allard: Indeed—the needs of the economy. Tonight, in Edinburgh, the French ambassador to the UK will be meeting a lot of French companies that operate in Scotland. I suggest that Liz Smith suggests to Murdo Fraser that he changes his comments this morning. The economy is what it is all about, and our children need a well-rounded education to ensure that they can participate in the economy in Scotland. It is not only about STEM. This debate is about STEM and it is important, but we need a rounded approach, and French is part of that.

The last thing that this Government would do is to make it difficult for local authorities to fill the present vacant posts in classrooms across Scotland. Of course there is a problem of teacher numbers, which we have talked about. We have heard the call for a specialist science teacher in every primary school. To my mind, that is more wishful thinking than an answer. It ignores the reality at a time when many local authorities are struggling to recruit primary teachers. When I met

members of the Peterhead parent council, who are concerned about attracting teachers to the blue toon, I said to them that we are looking to widen the recruitment pool, not to reduce it.

Another message that Liz Smith could take to the Conservative and Liberal Democrat coalition at Westminster is that we should act regarding the foreign students who are studying here in Scotland and consider how we can ensure that we retain them to work and—why not?—to teach here. It is important that we widen our net as much as possible. A few years ago, for example, Aberdeenshire Council recruited in Ireland and Canada. We do not want to prevent foreign students from working here. I would not want to have to go back to my country, but you never know: with the proposed referendum to take this country out of the EU, I might be in that position in a few years' time.

The reality today is that, despite the backdrop of cuts from Westminster, the Scottish Government is investing in science education, providing £900,000 per annum to the Scottish schools education research centre to support the professional learning of teachers.

The Deputy Presiding Officer: Will you come to a close, please?

Christian Allard: We are investing a lot, and in the north-east of Scotland the Scottish Government is moving forward. Local authorities are also playing their part, and we as a Parliament must support the great work of our teachers in classrooms here in Scotland.

16:28

Liam McArthur (Orkney Islands) (LD): I, too, welcome this debate. As Stewart Maxwell rightly pointed out, the issue has occupied the time of the Education and Culture Committee recently, and I acknowledge Liz Smith's track record on it—and indeed Iain Gray's. In fact, I was reminded of a comment that Iain Gray made in the attainment debate last week when he accused us of “violently agreeing”. I think that we are at risk of doing something similar this afternoon.

I am certainly not going to accuse the Government of doing nothing, but I will focus on areas where we probably need to do more and to do better, in the light of the figures that Liz Smith cited and the evidence that various academic bodies have produced in recent times.

I start with the learned societies group report, which was published around the time of the science in the Parliament event last year. It raised serious concerns about spending on science in primary and secondary schools, an insufficiency of teaching expertise and an absence of data. It was

not just a whinge. It made some reasonable and fairly achievable recommendations alongside those points.

The Government's response to the report was in some senses rather disappointing. Rather than engaging with the issues, it sought to discredit the evidence by talking about small sample sizes when it could have undertaken to amplify the survey and get the data, provide the evidence and collect it on a regional basis in a whole host of areas, not least the qualifications of teachers. It could have committed to ensuring that, by 2020, every teacher has access to a science subject leader, and it could have looked again at training and CPD opportunities to improve skill levels. All the learned societies group's recommendations were reasonable asks.

On vocational education—the focus of an amendment that I tabled and something that is picked up on in Iain Gray's amendment—the Wood commission made a series of sensible recommendations. The delivery of industry-recognised qualifications alongside academic qualifications during the senior phase was seen as critically important, and that is a point that Malcolm Chisholm made in referring to the college sector. Sir Ian Wood emphasised the need not just to widen availability but to improve the quality of what is provided, and he concluded that STEM must be at the heart of the development of our young workforce.

I turn finally to the area of women in STEM, which is referred to in the Tory motion and which plays a prominent part in the NUS briefing for this afternoon's debate. The "Tapping all our Talents" report, produced in June 2012, set out a stark reminder of the challenge that we face. The Royal Society of Edinburgh has pointed out that the number of female STEM graduates and postgraduates has increased, but that the numbers who proceed to take up senior positions in universities, research, business and industry remain proportionately much smaller than in the case of their male counterparts. The minister acknowledged that in his opening remarks, and I welcome that.

The RSE talks about wasted investment and the representation of a serious loss of potential for Scotland. It is calculated that around £2 billion could be wasted in the UK economy as a whole. That is not a new challenge, but it demands a response from the public, private and third sectors.

One of the recommendations in the "Tapping all our Talents" report relates to the Athena SWAN charter, supported by the scientific women's academic network. The report recommends:

"The Scottish Government, through the Scottish Funding Council, should: expect its universities to develop a strategy within a two-year period to bring all their STEM

departments up to the Athena SWAN Silver award, or equivalent, level; monitor their progress in achieving this ... and ensure that there is adequate funding for the programme to be developed."

The then Deputy First Minister, Nicola Sturgeon, welcomed the recommendations at the time. Almost three years on, it would be interesting to know from the minister what progress has been made in that regard.

Sir John Arbuthnott says:

"To be a smart economy, we need strength in STEM areas."

That is why the issue matters and why we are violently agreed on our shared ambition, but it is also why the shortcomings identified by various academic and learned bodies must be addressed as a matter of urgency.

16:33

George Adam (Paisley) (SNP): I welcome the fact that we all recognise the importance of science education and how it can equip our young people with knowledge and skills to contribute to our society and, as Liz Smith has said, to our economy. However, improving science, technology, engineering and mathematics education is a key priority of the curriculum for excellence, enabling new and exciting opportunities to make school science education stimulating and exciting for all pupils.

That brings me to a discussion that I had towards the end of last year with the head of the engineering and technology school at the University of the West of Scotland. As many members will know, the UWS campus in Paisley was a technical college, and engineering is the very heart and soul of the university, or it should be. He mentioned during that discussion that the problem that university staff had was encouraging people but that, once they had explained the career path and how young people could move on in life with the potential that a technology degree would give them, it was not so difficult to recruit. They had to find different ways to recruit and interest young people, particularly into engineering and technology.

That is something that also came up during the evidence that we heard recently from the learned societies group. The witnesses mentioned computer science at one point, but the problem is that there are not many young people who want to teach computer science, although they do want to get in a car, bus or train to Dundee to make the next computer game and become involved in that industry. That is part of the issue that we are dealing with: how can we make those same young people want to teach as a future career?

In terms of the evidence that we took from the learned societies group, we had the situation that the report that it did last year involved only 2 per cent of Scottish primary schools and 13 per cent of secondary schools. It is important to bring that up: as the witnesses were from the learned societies group and had a scientific background, they knew that the report was not evidence-based to the extent that they could say confidently that everything in it was right. The Government is therefore quite right to bring up—

Liam McArthur: Will the member give way on that point?

George Adam: Unfortunately I do not have much time. I would love to, but I cannot at this stage.

In giving evidence, Stuart Farmer of the learned societies group said:

“basic knowledge in science subjects is being taught well ... lots of pupils are seeing positive benefits from studying science”.—[*Official Report, Education and Culture Committee*, 27 January 2015; c 8.]

One of the things that we agreed on is the question about how we get to where we want to be. We need to ensure that young people are aware of the future that they could have. As has been said already, the cabinet secretary has said that there is no such thing as a girl’s job or a boy’s job, and we have to make sure that we move away from those terms when we are talking about STEM subjects because it is important to include everyone from all backgrounds.

We received a briefing for the debate from NUS Scotland, which said that

“We have seen a strong focus, and welcome action, on widening access over the last few years, and the current drive to improve participation and attainment across Scottish education is also welcome. However, we must build on this not only for STEM, but also more generally for post-16 education as a whole.”

Last week’s debate on attainment was the real life-changing debate. The Scottish Government has committed to the Scottish attainment challenge and the attainment fund, and it is going to invest in people from difficult backgrounds to ensure that they get their opportunities. When we are having this debate, we should make sure that we do as NUS Scotland says and talk about the STEM subjects, but we should not forget about everything else that is happening in education. We need to ensure that we encourage everyone to be all that they can and to pursue whatever careers they want in future.

The Deputy Presiding Officer: Before I call Elaine Murray, I apologise to Richard Lyle. I am afraid that we have run out of time, so I cannot call him.

16:37

Elaine Murray (Dumfriesshire) (Lab): I am grateful to the Conservative Party for bringing this important subject back to the chamber. We talk a lot about Scotland competing globally through developing a highly skilled and high-wage workforce. However, unless we invest adequately in developing that highly skilled workforce, it will not happen.

Iain Gray spoke about the review that was conducted by the Institute of Physics. He often has a dig at me for being a physical chemist, so I say to him that a report in October last year by chemical sciences Scotland on the skills investment plan stated that almost 80,000 people were employed as a result of the chemical sciences sector. The estimated turnover is £8.6 billion, with a gross value added of £1.1 billion. That report identified the need to increase the flow of new entrants into chemical science, including through the development of careers information and by addressing the gender imbalance.

Our global competitors understand the importance of investing in science and innovation. China intends to spend 2.5 per cent of its gross domestic product on research by 2020. Brazil intends to do the same by 2022, and South Korea intends to spend 5 per cent by 2022. We can be certain that those countries will invest in producing the people who can undertake that research.

From the 2012 programme for international student assessment—PISA—of school students aged 15, we know that the UK performs slightly better than the Organisation for Economic Co-operation and Development average in science, and England actually performs slightly better than Scotland. We are behind China, Japan, South Korea, Finland, Poland, Germany and other competitors, so there is nothing to be complacent about. We need to do better in Scotland; we need to improve educational attainment in schools in order to attract more college and university students into science courses, and we need to retain workers with science qualifications.

We also need to close the attainment gap because far too many children from poorer families are not getting the opportunities to fulfil their potential. That cannot be done without enthusiastic suitably qualified teachers in primary and secondary schools. Primary school teachers are expected to teach across the curriculum and should have access to a science specialist to increase their confidence in how they approach teaching science. It is not necessary for every school to have a science specialist attached only to that school. Small schools could have access to science specialists through cluster arrangements, for example.

In April, it will be three years since Professor Dame Jocelyn Bell Burnell's report from the working group on women and STEM, to which Liam McArthur referred, was published by the Royal Society of Edinburgh. That report contained a number of recommendations including some from the Scottish Government, such as the recommendation to produce an action plan for Scotland that is aimed at retaining and promoting women in STEM, which the group said should be led by a cabinet secretary. I would be grateful if, when he sums up the debate, the minister would advise whether that work is under way and when the action plan will be produced.

The report also proposed that all STEM departments in Scottish universities should achieve the Athena SWAN—scientific women's academic network—silver award or equivalent as a minimum standard within two years, and that the majority of departments should do so within three to five years. Is the Government monitoring progress on that recommendation? Also, after nearly three years, has the minimum standard for all STEM departments in all Scottish universities now been achieved?

I have stated in the chamber before that I left academic scientific research shortly before my second child was born. She is now 27 years of age and I am shocked that, a generation later, women are still leaving STEM subjects for the same reasons that I left, and that we are still debating attracting and retaining women in STEM subjects. Unless we act in Scotland—and across the UK—we will lag behind our competitors in science. Historically, we have had a huge advantage in that area, but we risk losing that advantage unless we take action.

16:41

Mark Griffin (Central Scotland) (Lab): This afternoon, we have heard a lot about the provision of STEM education in schools. However, for me, the key point was made by Liz Smith in her opening speech, when she spoke of the expectation that by 2030 more than 7 million jobs in the UK will depend on science skills. Those science jobs are exactly what we need—high quality, highly skilled and highly paid employment. By 2030, the four and five-year-olds who are starting primary school this summer will already be in work or possibly in the final years of university. If current spending levels continue, the same cohort of pupils with the same academic aptitude for science in England will have enjoyed more than 10 years of state education with 80 per cent more in primary school and 27 per cent more in secondary school having been spent on science equipment, according to the recently published report by the learned societies group. Issues about

the sample size of that study have been raised, but if the Government criticises the findings of the study, it has an obligation to expand on the work and do some investigation of its own.

The issue of science equipment has already been raised in Parliament, but we must also address the issue of science technicians and support staff. I have recently submitted a freedom of information request to all 32 local authorities on science technician numbers and have received responses from 25 so far. There has been an overall drop in the numbers of science technicians, with one authority having cut technician staff by more than 50 per cent. Those are the staff who maintain or repair what little practical science equipment our schools have. They are the people who set up the science labs and the complex experiments, which teaching staff just do not have time to do. It is hard to see that those numbers will do anything but go down as budget cuts to local authorities continue to bite.

Issues in schools and local authorities concerning computer science were recently flagged up to the Education and Culture Committee. Many high schools do not have a computing science teacher who can start developing the coders, programmers and software developers of the future, and some local authorities seem to confuse the teaching of computer literacy skills with computer science skills. That mixes up the facts when it comes to exactly how many computer science teachers we have in our schools.

Finally, there is the issue of educational inequality. By 2030, 7 million jobs in the UK will depend on science skills. However, unless the attainment gap is tackled, thousands of young people in deprived communities will never achieve their full potential to access those jobs. We have welcomed the Scottish attainment fund but would like to see more being done in that regard. Using the additional revenues from our new 50p top rate of tax, which would redistribute resources from those who can afford it to those who need it most, we would invest an additional £25 million a year, over and above the Government's proposals, to tackle educational disadvantage and ensure that the pupils who face the greatest educational challenges have the opportunity to achieve the qualifications that they need for careers in science, maths, engineering or technology. I challenge the Government to back our ambition and to support us through an increased fund to tackle issues around educational attainment.

16:45

Dr Allan: It is traditional to say at this point that the debate has been positive. To a large extent,

that comment is justified; it has been a useful debate.

I suspect that Mr Gray wrote his comments about there being a tone of “smug self-satisfaction” before he had listened to the tone of what I and many others had to say. We agree about many of the areas in which work needs to take place and improvements need to be made. For instance, we have all agreed on the need to encourage more people into teaching computer science, and we agree about the importance of the work agenda, and of developing it further and giving primary teachers confidence to deal with science.

A theme that recurred again and again—perhaps rightly—was the need to ensure that young women are attracted into science both as an area of study and as a career. Another theme, which Elaine Murray and Mark Griffin mentioned, has been the need for us to close the attainment gap in science, as for other areas. That is something to which the First Minister has indicated her strong commitment.

It is also worth mentioning—I will do it only briefly—the good practice that exists and which I see in schools when I visit science activities throughout the country. East Ayrshire Council, for instance, has opted into Primary Engineer’s programme, which is supported by the Institution of Mechanical Engineers; Aberdeen City Council has made science a priority area in its primary schools; and pathfinder activity to deliver foundation apprenticeships in Fife began in August 2014 with support from Skills Development Scotland. Many things are happening.

On the areas that need attention, a great number of speakers referred to the welcome contribution from the Royal Society of Chemistry and other learned societies—in particular, their focus on how we can support primary schools. We know that STEM in the primary school sector can be further developed and that teachers need support to help them to build their confidence. I have been corresponding with Clare Viney, who is the executive director of the Royal Society of Chemistry, on those issues and on engaging with the society’s campaign. My officials are working to agree a suitable meeting date with the RSC.

Although we have no plans to require a move away from the generalist tradition in our primary education sector, I am alive to the points that have been made about giving primary teachers the confidence and capacity to teach science.

Liam McArthur: I am grateful to the minister for taking a constructive approach in relation to the learned societies. However, one of the key points is the lack of data. Although there are concerns about the survey that the learned societies

undertook, does the Government acknowledge that there is a need to develop the data so that we have a better understanding of exactly what the need is and where it is?

Dr Allan: As I mentioned, correspondence on those issues is already under way with the learned societies.

I turn briefly to a point that Christian Allard and others raised. I do not want to set up any kind of competition between the case for languages and the case for science or, indeed, other areas of our curriculum. However, the fact that members raised those issues points to the fact that we have to be careful about prescribing the highers that people who are interested in becoming primary teachers take, to the point at which they have no choice about what highers they do. There are competing claims that we have to handle carefully.

Liz Smith made a number of reasonable points about many of the issues on which I have touched. The Government is open to learning from good practice where we see it, whether it is in London or Ontario. Ms Smith also mentioned Teach First, which has been in contact with the Scottish Government. We have indicated to it that we are willing to hear any proposal that it has for Scotland, subject to the fact that, as I said earlier, Scotland has a tradition—strongly emphasised by the GTCS—such that somebody who wants to be a teacher here has to be a qualified teacher. We await any response from Teach First to see whether it has a proposal that it wishes to make for Scotland.

On George Adam’s speech, I have to confess that we were having a sweepstake on the front benches: it took 34 seconds for him to mention his constituency—commendably—on this particular occasion. He rightly mentioned the achievements of the university sector; it is worth commenting that the number of entrants into university first degrees in STEM subjects is up 13 per cent this year.

Malcolm Chisholm rightly mentioned colleges. Again, the statistics are encouraging and significant: compared with 2006-07, there are currently 801 more full-time equivalent science and maths students in our college sector.

I want to say, by way of conclusion—or do you wish me to continue for a time, Presiding Officer?

The Deputy Presiding Officer: No, thank you.

Dr Allan: In that case, I am happy to say by way of conclusion that science is at the very heart of Scotland’s economy, and it is at the heart of our education system. Yes, there are challenges—as I think we have all agreed—but there are sound and verifiable reasons for saying that schools around Scotland share the view that science is growing in

importance, it is flourishing in our schools and it is something for us to celebrate.

16:51

Mary Scanlon (Highlands and Islands) (Con):

I am pleased to close the debate and I thank all the speakers for their positive contributions. There was plenty of heat in the previous debate, but it is fair to say that perhaps we had a little bit more light in this one.

There is much in the SNP amendment that we agree with, but more still needs to be done to address the central issues that have been raised today. In Dr Allan's summing up, there were much more encouraging signs of that than there were in his opening speech, and we are delighted about that.

Like others, I have listened seriously to the concerns that the STEM industries have expressed about the state of science education in Scottish schools. As Liz Smith said, it is expected that by 2030 7.1 million jobs in the UK will be science related, and current projections from the Science Council indicate that about 650,000 of those jobs will be in Scotland. We can all agree that we want children in Scotland to be able to take full advantage of all those opportunities.

Dr Allan talked about setting targets for teachers. It is not just about setting targets. We hear about the setting of targets in the health service and everywhere else. That is welcome, but it is the achievement of the targets—the supply of teachers—that we are looking for. It is very easy to say, "I set a target." That is good and it is welcome, but the achievement of the targets and an adequate supply of teachers would be even more welcome.

In the 2012 SEAG report, the Scottish Government recognised that life sciences and the energy sectors are industries that are key to economic growth in Scotland. Projections for growth in STEM have also been confirmed by those industries, which is why it is imperative to capitalise on the opportunities that that growth presents for all our young people, particularly women, to take advantage of that potential for economic growth.

Iain Gray and Liz Smith in particular made excellent speeches, especially on the STEM education gender equality issue and on highlighting potential career options for the future. Whether or not Iain Gray had a members business' debate on the topic recently, I think that if something is worth saying, it is worth saying quite a few times. This issue is so important that we felt that it was worth bringing back to the chamber for wider debate, and we make no apology for that.

I remind members that female scientists have excelled in politics. The UK's first female Prime Minister was a scientist, and I think that very few in the European Community would pick an argument with Mrs Merkel, who was a research scientist in a previous life and has brought first-class scientific analytical skills to politics with considerable success.

Christian Allard reminded us in his contribution that languages are important. Yes, the debate was about science, but it was well done nonetheless. The learned societies have raised some excellent issues, and Larry Flanagan from the Educational Institute of Scotland raised concerns in evidence to the Education and Culture Committee about teachers who train in Scotland and then fast-foot down to England—I do not know why.

I thank Iain Gray for showing us this week's *New Scientist*. We need to understand the issues better, and we need to understand what is happening and why in the area that he discussed.

Ruth Davidson highlighted the issue of college places in STEM courses, which are down by 30,000 on the SNP's watch—but never mind, because the Government has set a target to redress that.

Dr Allan rose—

Mary Scanlon: Let me just finish, please—it is quite an important point, and I will have to repeat it.

There has been a reduction of 30,000 STEM places in colleges on the SNP's watch, but never mind—the Government has set a target to change that, and within one year it has brought back 82 places. That is what a target means: pretty well nothing, aside from a few thousand.

Dr Allan: I am not quite sure whether Mary Scanlon heard me, but I mentioned the figures for full-time equivalents. Before she interrupts me, I note that full-time equivalents are generally regarded in the industrial sector as the most important measure, and there have been increases in the numbers of full-time equivalent students doing science subjects on our watch.

Mary Scanlon: Well, I do not think that the minister can argue too much about a reduction of 30,000, given the minuscule increase of 82.

I remind George Adam that what is a problem for Paisley can occasionally be a problem for the rest of Scotland too, so I thank him for his contribution.

One important point concerns maths being the language of science, and the fact that fluency in numeracy is critical for success in all STEM fields. It is surely unacceptable, therefore, that we have

lost 383 maths teachers as part of the 10 per cent decline in numbers since 2007.

With regard to numeracy, every member in the chamber should be concerned about the findings in Audit Scotland's report. The finding that 2 per cent of primary 7 pupils are not working at their expected level of numeracy is perhaps within what is acceptable, but what I find shocking and unacceptable is the finding that, two years later in S2, the percentage of pupils who are not achieving their expected levels of numeracy is not 2 per cent but 35 per cent. What is happening between primary 7, in which 2 per cent of pupils do not achieve the numeracy standards, and the point two years later at which 35 per cent do not?

I would have more respect for the Government if it had come to the chamber and said that those are the issues that it is addressing. Those issues have been highlighted not by political parties but by Audit Scotland.

Liz Smith made the point about teachers, which is particularly relevant where there are shortages. There are hot spots, as the minister said, and there are unique areas. One such area is Moray, where the council has done everything possible to advertise for teachers. It has had to close schools and send children home, as I know, given that my granddaughter is being educated at Mosstodloch primary school. There are 11 teachers in the area who are spouses of personnel who are based at RAF Lossiemouth. Those 11 teachers were qualified in the English system. Surely to goodness in that unique situation, something could be done by the GTC and the Government working together to ensure that every child in Moray gets the opportunities that they deserve.

The Presiding Officer (Tricia Marwick): You need to close, Ms Scanlon.

Mary Scanlon: Finally, despite all the issues that we have raised, I put on record our appreciation of the excellent work that is done by teachers across Scotland, including in Paisley, and in every subject, from science to languages. We value each and every one of them, in Paisley and the rest of Scotland.

Business Motions

17:00

The Presiding Officer (Tricia Marwick): The next item of business is consideration of business motion S4M-12406, in the name of Joe FitzPatrick, on behalf of the Parliamentary Bureau, setting out a business programme.

Motion moved,

That the Parliament agrees the following programme of business—

Tuesday 3 March 2015

2.00 pm Time for Reflection

followed by Parliamentary Bureau Motions

followed by Topical Questions (if selected)

followed by Stage 3 Proceedings:
Welfare Funds (Scotland) Bill

followed by Business Motions

followed by Parliamentary Bureau Motions

5.00 pm Decision Time

followed by Members' Business

Wednesday 4 March 2015

2.00 pm Parliamentary Bureau Motions

2.00 pm Portfolio Questions
Health, Wellbeing and Sport

followed by Scottish Liberal Democrats Business

followed by Business Motions

followed by Parliamentary Bureau Motions

5.00 pm Decision Time

followed by Members' Business

Thursday 5 March 2015

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	<i>followed by</i>	Members' Business
<i>followed by</i>	Scottish Parliamentary Corporate Body Questions	2.30 pm	Parliamentary Bureau Motions
<i>followed by</i>	Scottish Government Debate: Protecting Public Services and Boosting Scotland's Economy	<i>followed by</i>	Scottish Government Business
<i>followed by</i>	Business Motions	<i>followed by</i>	Business Motions
<i>followed by</i>	Parliamentary Bureau Motions	<i>followed by</i>	Parliamentary Bureau Motions
5.00 pm	Decision Time	5.00 pm	Decision Time—[<i>Joe FitzPatrick.</i>]

Motion agreed to.

The Presiding Officer: The next item of business is consideration of business motion S4M-12407, in the name of Joe FitzPatrick, on behalf of the Parliamentary Bureau, setting out a stage 1 timetable for the Mental Health (Scotland) Bill.

Motion moved,

That the Parliament agrees that consideration of the Mental Health (Scotland) Bill at stage 1 be extended to 13 March 2015.—[*Joe FitzPatrick.*]

Motion agreed to.

Tuesday 10 March 2015

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>	Business Motions
<i>followed by</i>	Parliamentary Bureau Motions
5.00 pm	Decision Time
<i>followed by</i>	Members' Business

Wednesday 11 March 2015

2.00 pm	Parliamentary Bureau Motions
2.00 pm	Portfolio Questions Culture, Europe and External Affairs; Infrastructure, Investment and Cities
<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 12 March 2015

11.40 am	Parliamentary Bureau Motions
11.40 am	General Questions
12.00 pm	First Minister's Questions

Decision Time

17:01

The Presiding Officer (Tricia Marwick): There are seven questions to be put as a result of today's business. I remind members that, in relation to the debate on an energy strategy for Scotland, if the amendment in the name of Fergus Ewing is agreed to, the amendment in the name of Lewis Macdonald falls.

The first question is, that amendment S4M-12395.1, in the name of Fergus Ewing, which seeks to amend motion S4M-12395, in the name of Murdo Fraser, on an energy strategy for Scotland, be agreed to. Are we agreed?

Members: No.

The Presiding Officer: There will be a division.

For

Adam, George (Paisley) (SNP)
 Adamson, Clare (Central Scotland) (SNP)
 Allan, Dr Alasdair (Na h-Eileanan an Iar) (SNP)
 Allard, Christian (North East Scotland) (SNP)
 Beattie, Colin (Midlothian North and Musselburgh) (SNP)
 Biagi, Marco (Edinburgh Central) (SNP)
 Brodie, Chic (South Scotland) (SNP)
 Burgess, Margaret (Cunninghame South) (SNP)
 Campbell, Roderick (North East Fife) (SNP)
 Coffey, Willie (Kilmarnock and Irvine Valley) (SNP)
 Constance, Angela (Almond Valley) (SNP)
 Crawford, Bruce (Stirling) (SNP)
 Cunningham, Roseanna (Perthshire South and Kinross-shire) (SNP)
 Dey, Graeme (Angus South) (SNP)
 Don, Nigel (Angus North and Mearns) (SNP)
 Doris, Bob (Glasgow) (SNP)
 Dornan, James (Glasgow Cathcart) (SNP)
 Eadie, Jim (Edinburgh Southern) (SNP)
 Ewing, Annabelle (Mid Scotland and Fife) (SNP)
 Ewing, Fergus (Inverness and Nairn) (SNP)
 Fabiani, Linda (East Kilbride) (SNP)
 FitzPatrick, Joe (Dundee City West) (SNP)
 Gibson, Kenneth (Cunninghame North) (SNP)
 Gibson, Rob (Caithness, Sutherland and Ross) (SNP)
 Grahame, Christine (Midlothian South, Tweeddale and Lauderdale) (SNP)
 Hepburn, Jamie (Cumbernauld and Kilsyth) (SNP)
 Hyslop, Fiona (Linlithgow) (SNP)
 Ingram, Adam (Carrick, Cumnock and Doon Valley) (SNP)
 Keir, Colin (Edinburgh Western) (SNP)
 Kidd, Bill (Glasgow Anniesland) (SNP)
 Lochhead, Richard (Moray) (SNP)
 Lyle, Richard (Central Scotland) (SNP)
 MacAskill, Kenny (Edinburgh Eastern) (SNP)
 MacDonald, Angus (Falkirk East) (SNP)
 Mackay, Derek (Renfrewshire North and West) (SNP)
 MacKenzie, Mike (Highlands and Islands) (SNP)
 Mason, John (Glasgow Shettleston) (SNP)
 Matheson, Michael (Falkirk West) (SNP)
 Maxwell, Stewart (West Scotland) (SNP)
 McAlpine, Joan (South Scotland) (SNP)
 McDonald, Mark (Aberdeen Donside) (SNP)
 McKelvie, Christina (Hamilton, Larkhall and Stonehouse) (SNP)
 McLeod, Aileen (South Scotland) (SNP)

McLeod, Fiona (Strathkelvin and Bearsden) (SNP)
 McMillan, Stuart (West Scotland) (SNP)
 Neil, Alex (Airdrie and Shotts) (SNP)
 Paterson, Gil (Clydebank and Milngavie) (SNP)
 Robertson, Dennis (Aberdeenshire West) (SNP)
 Robison, Shona (Dundee City East) (SNP)
 Russell, Michael (Argyll and Bute) (SNP)
 Salmond, Alex (Aberdeenshire East) (SNP)
 Stevenson, Stewart (Banffshire and Buchan Coast) (SNP)
 Stewart, Kevin (Aberdeen Central) (SNP)
 Sturgeon, Nicola (Glasgow Southside) (SNP)
 Thompson, Dave (Skye, Lochaber and Badenoch) (SNP)
 Torrance, David (Kirkcaldy) (SNP)
 Urquhart, Jean (Highlands and Islands) (Ind)
 Watt, Maureen (Aberdeen South and North Kincardine) (SNP)
 Wheelhouse, Paul (South Scotland) (SNP)
 White, Sandra (Glasgow Kelvin) (SNP)
 Yousaf, Humza (Glasgow) (SNP)

Against

Baillie, Jackie (Dumbarton) (Lab)
 Baker, Richard (North East Scotland) (Lab)
 Baxter, Jayne (Mid Scotland and Fife) (Lab)
 Bibby, Neil (West Scotland) (Lab)
 Boyack, Sarah (Lothian) (Lab)
 Brown, Gavin (Lothian) (Con)
 Buchanan, Cameron (Lothian) (Con)
 Carlaw, Jackson (West Scotland) (Con)
 Chisholm, Malcolm (Edinburgh Northern and Leith) (Lab)
 Davidson, Ruth (Glasgow) (Con)
 Dugdale, Kezia (Lothian) (Lab)
 Fee, Mary (West Scotland) (Lab)
 Ferguson, Patricia (Glasgow Maryhill and Springburn) (Lab)
 Fergusson, Alex (Galloway and West Dumfries) (Con)
 Findlay, Neil (Lothian) (Lab)
 Finnie, John (Highlands and Islands) (Ind)
 Fraser, Murdo (Mid Scotland and Fife) (Con)
 Goldie, Annabel (West Scotland) (Con)
 Grant, Rhoda (Highlands and Islands) (Lab)
 Gray, Iain (East Lothian) (Lab)
 Griffin, Mark (Central Scotland) (Lab)
 Harvie, Patrick (Glasgow) (Green)
 Hilton, Cara (Dunfermline) (Lab)
 Hume, Jim (South Scotland) (LD)
 Johnstone, Alex (North East Scotland) (Con)
 Johnstone, Alison (Lothian) (Green)
 Lamont, Johann (Glasgow Pollok) (Lab)
 Lamont, John (Ettrick, Roxburgh and Berwickshire) (Con)
 Macdonald, Lewis (North East Scotland) (Lab)
 Macintosh, Ken (Eastwood) (Lab)
 Malik, Hanzala (Glasgow) (Lab)
 Marra, Jenny (North East Scotland) (Lab)
 Martin, Paul (Glasgow Provan) (Lab)
 McArthur, Liam (Orkney Islands) (LD)
 McCulloch, Margaret (Central Scotland) (Lab)
 McDougall, Margaret (West Scotland) (Lab)
 McGrigor, Jamie (Highlands and Islands) (Con)
 McInnes, Alison (North East Scotland) (LD)
 McMahan, Michael (Uddingston and Bellshill) (Lab)
 McTaggart, Anne (Glasgow) (Lab)
 Milne, Nanette (North East Scotland) (Con)
 Mitchell, Margaret (Central Scotland) (Con)
 Murray, Elaine (Dumfriesshire) (Lab)
 Pentland, John (Motherwell and Wishaw) (Lab)
 Rennie, Willie (Mid Scotland and Fife) (LD)
 Scanlon, Mary (Highlands and Islands) (Con)
 Scott, John (Ayr) (Con)
 Scott, Tavish (Shetland Islands) (LD)
 Smith, Drew (Glasgow) (Lab)
 Smith, Elaine (Coatbridge and Chryston) (Lab)
 Smith, Liz (Mid Scotland and Fife) (Con)

Stewart, David (Highlands and Islands) (Lab)
Wilson, John (Central Scotland) (Ind)

The Presiding Officer: The result of the division is: For 61, Against 53, Abstentions 0.

Amendment agreed to.

The Presiding Officer: The amendment in the name of Lewis Macdonald therefore falls.

The next question is, that amendment S4M-12395.2, in the name of Patrick Harvie, which seeks to amend motion S4M-12395, in the name of Murdo Fraser, on an energy strategy for Scotland, as amended, be agreed to. Are we agreed?

Members: No.

The Presiding Officer: There will be a division.

For

Finnie, John (Highlands and Islands) (Ind)
Harvie, Patrick (Glasgow) (Green)
Johnstone, Alison (Lothian) (Green)
Urquhart, Jean (Highlands and Islands) (Ind)
Wilson, John (Central Scotland) (Ind)

Against

Adam, George (Paisley) (SNP)
Adamson, Clare (Central Scotland) (SNP)
Allan, Dr Alasdair (Na h-Eileanan an Iar) (SNP)
Allard, Christian (North East Scotland) (SNP)
Beattie, Colin (Midlothian North and Musselburgh) (SNP)
Biagi, Marco (Edinburgh Central) (SNP)
Brodie, Chic (South Scotland) (SNP)
Brown, Gavin (Lothian) (Con)
Buchanan, Cameron (Lothian) (Con)
Burgess, Margaret (Cunninghame South) (SNP)
Campbell, Roderick (North East Fife) (SNP)
Carlaw, Jackson (West Scotland) (Con)
Coffey, Willie (Kilmarnock and Irvine Valley) (SNP)
Constance, Angela (Almond Valley) (SNP)
Crawford, Bruce (Stirling) (SNP)
Cunningham, Roseanna (Perthshire South and Kinross-shire) (SNP)
Davidson, Ruth (Glasgow) (Con)
Dey, Graeme (Angus South) (SNP)
Don, Nigel (Angus North and Mearns) (SNP)
Doris, Bob (Glasgow) (SNP)
Dornan, James (Glasgow Cathcart) (SNP)
Eadie, Jim (Edinburgh Southern) (SNP)
Ewing, Annabelle (Mid Scotland and Fife) (SNP)
Ewing, Fergus (Inverness and Nairn) (SNP)
Fabiani, Linda (East Kilbride) (SNP)
Fergusson, Alex (Galloway and West Dumfries) (Con)
FitzPatrick, Joe (Dundee City West) (SNP)
Fraser, Murdo (Mid Scotland and Fife) (Con)
Gibson, Kenneth (Cunninghame North) (SNP)
Gibson, Rob (Caithness, Sutherland and Ross) (SNP)
Goldie, Annabel (West Scotland) (Con)
Grahame, Christine (Midlothian South, Tweeddale and Lauderdale) (SNP)
Hepburn, Jamie (Cumbernauld and Kilsyth) (SNP)
Hume, Jim (South Scotland) (LD)
Hyslop, Fiona (Linlithgow) (SNP)
Ingram, Adam (Carrick, Cumnock and Doon Valley) (SNP)
Johnstone, Alex (North East Scotland) (Con)
Keir, Colin (Edinburgh Western) (SNP)
Kidd, Bill (Glasgow Anniesland) (SNP)
Lamont, John (Ettrick, Roxburgh and Berwickshire) (Con)

Lochhead, Richard (Moray) (SNP)
Lyle, Richard (Central Scotland) (SNP)
MacAskill, Kenny (Edinburgh Eastern) (SNP)
MacDonald, Angus (Falkirk East) (SNP)
Mackay, Derek (Renfrewshire North and West) (SNP)
MacKenzie, Mike (Highlands and Islands) (SNP)
Mason, John (Glasgow Shettleston) (SNP)
Matheson, Michael (Falkirk West) (SNP)
Maxwell, Stewart (West Scotland) (SNP)
McArthur, Liam (Orkney Islands) (LD)
McDonald, Mark (Aberdeen Donside) (SNP)
McGrigor, Jamie (Highlands and Islands) (Con)
McInnes, Alison (North East Scotland) (LD)
McKelvie, Christina (Hamilton, Larkhall and Stonehouse) (SNP)
McLeod, Aileen (South Scotland) (SNP)
McLeod, Fiona (Strathkelvin and Bearsden) (SNP)
McMillan, Stuart (West Scotland) (SNP)
Milne, Nanette (North East Scotland) (Con)
Mitchell, Margaret (Central Scotland) (Con)
Neil, Alex (Airdrie and Shotts) (SNP)
Paterson, Gil (Clydebank and Milngavie) (SNP)
Rennie, Willie (Mid Scotland and Fife) (LD)
Robertson, Dennis (Aberdeenshire West) (SNP)
Robison, Shona (Dundee City East) (SNP)
Russell, Michael (Argyll and Bute) (SNP)
Salmond, Alex (Aberdeenshire East) (SNP)
Scanlon, Mary (Highlands and Islands) (Con)
Scott, John (Ayr) (Con)
Scott, Tavish (Shetland Islands) (LD)
Smith, Liz (Mid Scotland and Fife) (Con)
Stevenson, Stewart (Banffshire and Buchan Coast) (SNP)
Stewart, Kevin (Aberdeen Central) (SNP)
Sturgeon, Nicola (Glasgow Southside) (SNP)
Thompson, Dave (Skye, Lochaber and Badenoch) (SNP)
Torrance, David (Kirkcaldy) (SNP)
Watt, Maureen (Aberdeen South and North Kincardine) (SNP)
Wheelhouse, Paul (South Scotland) (SNP)
White, Sandra (Glasgow Kelvin) (SNP)
Yousaf, Humza (Glasgow) (SNP)

Abstentions

Baillie, Jackie (Dumbarton) (Lab)
Baker, Richard (North East Scotland) (Lab)
Baxter, Jayne (Mid Scotland and Fife) (Lab)
Bibby, Neil (West Scotland) (Lab)
Boyack, Sarah (Lothian) (Lab)
Chisholm, Malcolm (Edinburgh Northern and Leith) (Lab)
Dugdale, Kezia (Lothian) (Lab)
Fee, Mary (West Scotland) (Lab)
Ferguson, Patricia (Glasgow Maryhill and Springburn) (Lab)
Findlay, Neil (Lothian) (Lab)
Grant, Rhoda (Highlands and Islands) (Lab)
Gray, Iain (East Lothian) (Lab)
Griffin, Mark (Central Scotland) (Lab)
Hilton, Cara (Dunfermline) (Lab)
Lamont, Johann (Glasgow Pollok) (Lab)
Macdonald, Lewis (North East Scotland) (Lab)
Macintosh, Ken (Eastwood) (Lab)
Malik, Hanzala (Glasgow) (Lab)
Marra, Jenny (North East Scotland) (Lab)
Martin, Paul (Glasgow Provan) (Lab)
McAlpine, Joan (South Scotland) (SNP)
McCulloch, Margaret (Central Scotland) (Lab)
McDougall, Margaret (West Scotland) (Lab)
McMahon, Michael (Uddingston and Bellshill) (Lab)
McTaggart, Anne (Glasgow) (Lab)
Murray, Elaine (Dumfriesshire) (Lab)
Pentland, John (Motherwell and Wishaw) (Lab)
Smith, Drew (Glasgow) (Lab)

Smith, Elaine (Coatbridge and Chryston) (Lab)
Stewart, David (Highlands and Islands) (Lab)

The Presiding Officer: The result of the division is: For 5, Against 79, Abstentions 30.

Amendment disagreed to.

The Presiding Officer: The next question is, that motion S4M-12395, in the name of Murdo Fraser, on an energy strategy for Scotland, as amended, be agreed to. Are we agreed?

Members: No.

The Presiding Officer: There will be a division.

For

Adam, George (Paisley) (SNP)
Adamson, Clare (Central Scotland) (SNP)
Allan, Dr Alasdair (Na h-Eileanan an Iar) (SNP)
Allard, Christian (North East Scotland) (SNP)
Beattie, Colin (Midlothian North and Musselburgh) (SNP)
Biagi, Marco (Edinburgh Central) (SNP)
Brodie, Chic (South Scotland) (SNP)
Burgess, Margaret (Cunninghame South) (SNP)
Campbell, Roderick (North East Fife) (SNP)
Coffey, Willie (Kilmarnock and Irvine Valley) (SNP)
Constance, Angela (Almond Valley) (SNP)
Crawford, Bruce (Stirling) (SNP)
Cunningham, Roseanna (Perthshire South and Kinross-shire) (SNP)
Dey, Graeme (Angus South) (SNP)
Don, Nigel (Angus North and Mearns) (SNP)
Doris, Bob (Glasgow) (SNP)
Dornan, James (Glasgow Cathcart) (SNP)
Eadie, Jim (Edinburgh Southern) (SNP)
Ewing, Annabelle (Mid Scotland and Fife) (SNP)
Ewing, Fergus (Inverness and Nairn) (SNP)
Fabiani, Linda (East Kilbride) (SNP)
FitzPatrick, Joe (Dundee City West) (SNP)
Gibson, Kenneth (Cunninghame North) (SNP)
Gibson, Rob (Caithness, Sutherland and Ross) (SNP)
Grahame, Christine (Midlothian South, Tweeddale and Lauderdale) (SNP)
Hepburn, Jamie (Cumbernauld and Kilsyth) (SNP)
Hyslop, Fiona (Linlithgow) (SNP)
Ingram, Adam (Carrick, Cumnock and Doon Valley) (SNP)
Keir, Colin (Edinburgh Western) (SNP)
Kidd, Bill (Glasgow Anniesland) (SNP)
Lochhead, Richard (Moray) (SNP)
Lyle, Richard (Central Scotland) (SNP)
MacAskill, Kenny (Edinburgh Eastern) (SNP)
MacDonald, Angus (Falkirk East) (SNP)
Mackay, Derek (Renfrewshire North and West) (SNP)
MacKenzie, Mike (Highlands and Islands) (SNP)
Mason, John (Glasgow Shettleston) (SNP)
Matheson, Michael (Falkirk West) (SNP)
Maxwell, Stewart (West Scotland) (SNP)
McAlpine, Joan (South Scotland) (SNP)
McDonald, Mark (Aberdeen Donside) (SNP)
McKelvie, Christina (Hamilton, Larkhall and Stonehouse) (SNP)
McLeod, Aileen (South Scotland) (SNP)
McLeod, Fiona (Strathkelvin and Bearsden) (SNP)
McMillan, Stuart (West Scotland) (SNP)
Neil, Alex (Airdrie and Shotts) (SNP)
Paterson, Gil (Clydebank and Milngavie) (SNP)
Robertson, Dennis (Aberdeenshire West) (SNP)
Robison, Shona (Dundee City East) (SNP)
Russell, Michael (Argyll and Bute) (SNP)
Salmond, Alex (Aberdeenshire East) (SNP)
Stevenson, Stewart (Banffshire and Buchan Coast) (SNP)

Stewart, Kevin (Aberdeen Central) (SNP)
Sturgeon, Nicola (Glasgow Southside) (SNP)
Thompson, Dave (Skye, Lochaber and Badenoch) (SNP)
Torrance, David (Kirkcaldy) (SNP)
Urquhart, Jean (Highlands and Islands) (Ind)
Watt, Maureen (Aberdeen South and North Kincardine) (SNP)
Wheelhouse, Paul (South Scotland) (SNP)
White, Sandra (Glasgow Kelvin) (SNP)
Yousaf, Humza (Glasgow) (SNP)

Against

Baillie, Jackie (Dumbarton) (Lab)
Baker, Richard (North East Scotland) (Lab)
Baxter, Jayne (Mid Scotland and Fife) (Lab)
Bibby, Neil (West Scotland) (Lab)
Boyack, Sarah (Lothian) (Lab)
Brown, Gavin (Lothian) (Con)
Buchanan, Cameron (Lothian) (Con)
Carlaw, Jackson (West Scotland) (Con)
Chisholm, Malcolm (Edinburgh Northern and Leith) (Lab)
Davidson, Ruth (Glasgow) (Con)
Dugdale, Kezia (Lothian) (Lab)
Fee, Mary (West Scotland) (Lab)
Ferguson, Patricia (Glasgow Maryhill and Springburn) (Lab)
Fergusson, Alex (Galloway and West Dumfries) (Con)
Findlay, Neil (Lothian) (Lab)
Finnie, John (Highlands and Islands) (Ind)
Fraser, Murdo (Mid Scotland and Fife) (Con)
Goldie, Annabel (West Scotland) (Con)
Grant, Rhoda (Highlands and Islands) (Lab)
Gray, Iain (East Lothian) (Lab)
Griffin, Mark (Central Scotland) (Lab)
Harvie, Patrick (Glasgow) (Green)
Hilton, Cara (Dunfermline) (Lab)
Hume, Jim (South Scotland) (LD)
Johnstone, Alex (North East Scotland) (Con)
Johnstone, Alison (Lothian) (Green)
Lamont, Johann (Glasgow Pollok) (Lab)
Lamont, John (Ettrick, Roxburgh and Berwickshire) (Con)
Macdonald, Lewis (North East Scotland) (Lab)
Macintosh, Ken (Eastwood) (Lab)
Malik, Hanzala (Glasgow) (Lab)
Marra, Jenny (North East Scotland) (Lab)
Martin, Paul (Glasgow Provan) (Lab)
McArthur, Liam (Orkney Islands) (LD)
McCulloch, Margaret (Central Scotland) (Lab)
McDougall, Margaret (West Scotland) (Lab)
McGrigor, Jamie (Highlands and Islands) (Con)
McInnes, Alison (North East Scotland) (LD)
McMahon, Michael (Uddingston and Bellshill) (Lab)
McTaggart, Anne (Glasgow) (Lab)
Milne, Nanette (North East Scotland) (Con)
Mitchell, Margaret (Central Scotland) (Con)
Murray, Elaine (Dumfriesshire) (Lab)
Pentland, John (Motherwell and Wishaw) (Lab)
Rennie, Willie (Mid Scotland and Fife) (LD)
Scanlon, Mary (Highlands and Islands) (Con)
Scott, John (Ayr) (Con)
Scott, Tavish (Shetland Islands) (LD)
Smith, Drew (Glasgow) (Lab)
Smith, Elaine (Coatbridge and Chryston) (Lab)
Smith, Liz (Mid Scotland and Fife) (Con)
Stewart, David (Highlands and Islands) (Lab)
Wilson, John (Central Scotland) (Ind)

The Presiding Officer: The result of the division is: For 61, Against 53, Abstentions 0.

Motion, as amended, agreed to,

That the Parliament notes with concern the latest threats to the continued operation of Longannet Power Station in

Fife, brought about by the UK's discriminatory transmission charging regime; further notes that cleaner thermal generation progressively fitted with carbon capture and storage technology will continue to play an important role in securing Scotland's future energy mix, alongside the expansion of renewables, as set out in the Scottish Government's *Electricity Generation Policy Statement 2013*; recognises that UK energy policy and regulation actively discourages the construction of new conventional thermal generating plants in Scotland compared with other locations in the UK, given the higher transmission charges faced by Scottish generators; shares the Scottish Government's disappointment at the further delay in implementing transmission pricing reforms stemming from Ofgem's Project TransmiT; recognises the significant progress in renewables deployment in Scotland, with over 44% of gross electricity consumption met from renewable sources in 2013; supports the need for increased investment in large-scale flexible electricity storage solutions, including pumped storage, to complement the increasing deployment of renewable technologies, and further supports the First Minister's call for the UK Government to undertake a dedicated electricity capacity assessment for Scotland and to transfer to the Scottish Parliament the authority to set a Scottish security and quality of supply standard for electricity.

The Presiding Officer: I remind members that, in relation to the debate on science, technology, engineering and mathematics education in Scotland, if the amendment in the name of Alasdair Allan is agreed to, the amendment in the name of Iain Gray falls.

The next question is, that amendment S4M-12385.3, in the name of Alasdair Allan, which seeks to amend motion S4M-12385, in the name of Liz Smith, on STEM education in Scottish schools, be agreed to. Are we agreed?

Members: No.

The Presiding Officer: There will be a division.

For

Adam, George (Paisley) (SNP)
 Adamson, Clare (Central Scotland) (SNP)
 Allan, Dr Alasdair (Na h-Eileanan an Iar) (SNP)
 Allard, Christian (North East Scotland) (SNP)
 Beattie, Colin (Midlothian North and Musselburgh) (SNP)
 Biagi, Marco (Edinburgh Central) (SNP)
 Brodie, Chic (South Scotland) (SNP)
 Burgess, Margaret (Cunninghame South) (SNP)
 Campbell, Roderick (North East Fife) (SNP)
 Coffey, Willie (Kilmarnock and Irvine Valley) (SNP)
 Constance, Angela (Almond Valley) (SNP)
 Crawford, Bruce (Stirling) (SNP)
 Cunningham, Roseanna (Perthshire South and Kinrossshire) (SNP)
 Dey, Graeme (Angus South) (SNP)
 Don, Nigel (Angus North and Mearns) (SNP)
 Doris, Bob (Glasgow) (SNP)
 Dornan, James (Glasgow Cathcart) (SNP)
 Eadie, Jim (Edinburgh Southern) (SNP)
 Ewing, Annabelle (Mid Scotland and Fife) (SNP)
 Ewing, Fergus (Inverness and Nairn) (SNP)
 Fabiani, Linda (East Kilbride) (SNP)
 Finnie, John (Highlands and Islands) (Ind)
 FitzPatrick, Joe (Dundee City West) (SNP)
 Gibson, Kenneth (Cunninghame North) (SNP)
 Gibson, Rob (Caithness, Sutherland and Ross) (SNP)

Grahame, Christine (Midlothian South, Tweeddale and Lauderdale) (SNP)
 Hepburn, Jamie (Cumbernauld and Kilsyth) (SNP)
 Hyslop, Fiona (Linlithgow) (SNP)
 Ingram, Adam (Carrick, Cumnock and Doon Valley) (SNP)
 Keir, Colin (Edinburgh Western) (SNP)
 Kidd, Bill (Glasgow Anniesland) (SNP)
 Lochhead, Richard (Moray) (SNP)
 Lyle, Richard (Central Scotland) (SNP)
 MacAskill, Kenny (Edinburgh Eastern) (SNP)
 MacDonald, Angus (Falkirk East) (SNP)
 Mackay, Derek (Renfrewshire North and West) (SNP)
 MacKenzie, Mike (Highlands and Islands) (SNP)
 Mason, John (Glasgow Shettleston) (SNP)
 Matheson, Michael (Falkirk West) (SNP)
 Maxwell, Stewart (West Scotland) (SNP)
 McAlpine, Joan (South Scotland) (SNP)
 McDonald, Mark (Aberdeen Donside) (SNP)
 McKelvie, Christina (Hamilton, Larkhall and Stonehouse) (SNP)
 McLeod, Aileen (South Scotland) (SNP)
 McLeod, Fiona (Strathkelvin and Bearsden) (SNP)
 McMillan, Stuart (West Scotland) (SNP)
 Neil, Alex (Airdrie and Shotts) (SNP)
 Paterson, Gil (Clydebank and Milngavie) (SNP)
 Robertson, Dennis (Aberdeenshire West) (SNP)
 Robison, Shona (Dundee City East) (SNP)
 Russell, Michael (Argyll and Bute) (SNP)
 Salmond, Alex (Aberdeenshire East) (SNP)
 Stevenson, Stewart (Banffshire and Buchan Coast) (SNP)
 Stewart, Kevin (Aberdeen Central) (SNP)
 Sturgeon, Nicola (Glasgow Southside) (SNP)
 Thompson, Dave (Skye, Lochaber and Badenoch) (SNP)
 Torrance, David (Kirkcaldy) (SNP)
 Urquhart, Jean (Highlands and Islands) (Ind)
 Watt, Maureen (Aberdeen South and North Kincardine) (SNP)
 Wheelhouse, Paul (South Scotland) (SNP)
 White, Sandra (Glasgow Kelvin) (SNP)
 Wilson, John (Central Scotland) (Ind)
 Yousaf, Humza (Glasgow) (SNP)

Against

Baillie, Jackie (Dumbarton) (Lab)
 Baker, Richard (North East Scotland) (Lab)
 Baxter, Jayne (Mid Scotland and Fife) (Lab)
 Bibby, Neil (West Scotland) (Lab)
 Boyack, Sarah (Lothian) (Lab)
 Brown, Gavin (Lothian) (Con)
 Buchanan, Cameron (Lothian) (Con)
 Carlaw, Jackson (West Scotland) (Con)
 Chisholm, Malcolm (Edinburgh Northern and Leith) (Lab)
 Davidson, Ruth (Glasgow) (Con)
 Dugdale, Kezia (Lothian) (Lab)
 Fee, Mary (West Scotland) (Lab)
 Ferguson, Patricia (Glasgow Maryhill and Springburn) (Lab)
 Fergusson, Alex (Galloway and West Dumfries) (Con)
 Findlay, Neil (Lothian) (Lab)
 Fraser, Murdo (Mid Scotland and Fife) (Con)
 Goldie, Annabel (West Scotland) (Con)
 Grant, Rhoda (Highlands and Islands) (Lab)
 Gray, Iain (East Lothian) (Lab)
 Griffin, Mark (Central Scotland) (Lab)
 Harvie, Patrick (Glasgow) (Green)
 Hilton, Cara (Dunfermline) (Lab)
 Hume, Jim (South Scotland) (LD)
 Johnstone, Alex (North East Scotland) (Con)
 Johnstone, Alison (Lothian) (Green)
 Lamont, Johann (Glasgow Pollok) (Lab)
 Lamont, John (Ettrick, Roxburgh and Berwickshire) (Con)
 Macdonald, Lewis (North East Scotland) (Lab)
 Macintosh, Ken (Eastwood) (Lab)

Malik, Hanzala (Glasgow) (Lab)
 Marra, Jenny (North East Scotland) (Lab)
 Martin, Paul (Glasgow Provan) (Lab)
 McArthur, Liam (Orkney Islands) (LD)
 McCulloch, Margaret (Central Scotland) (Lab)
 McDougall, Margaret (West Scotland) (Lab)
 McGrigor, Jamie (Highlands and Islands) (Con)
 McInnes, Alison (North East Scotland) (LD)
 McMahon, Michael (Uddingston and Bellshill) (Lab)
 McTaggart, Anne (Glasgow) (Lab)
 Milne, Nanette (North East Scotland) (Con)
 Mitchell, Margaret (Central Scotland) (Con)
 Murray, Elaine (Dumfriesshire) (Lab)
 Pentland, John (Motherwell and Wishaw) (Lab)
 Rennie, Willie (Mid Scotland and Fife) (LD)
 Scanlon, Mary (Highlands and Islands) (Con)
 Scott, John (Ayr) (Con)
 Scott, Tavish (Shetland Islands) (LD)
 Smith, Drew (Glasgow) (Lab)
 Smith, Elaine (Coatbridge and Chryston) (Lab)
 Smith, Liz (Mid Scotland and Fife) (Con)
 Stewart, David (Highlands and Islands) (Lab)

The Presiding Officer: The result of the division is: For 63, Against 51, Abstentions 0.

Amendment agreed to.

The Presiding Officer: The amendment in the name of Iain Gray therefore falls.

The next question is, that motion S4M-12385, in the name of Liz Smith, on STEM education in Scottish schools, as amended, be agreed to. Are we agreed?

Members: No.

The Presiding Officer: There will be a division.

For

Adam, George (Paisley) (SNP)
 Adamson, Clare (Central Scotland) (SNP)
 Allan, Dr Alasdair (Na h-Eileanan an Iar) (SNP)
 Allard, Christian (North East Scotland) (SNP)
 Baillie, Jackie (Dumbarton) (Lab)
 Baker, Richard (North East Scotland) (Lab)
 Baxter, Jayne (Mid Scotland and Fife) (Lab)
 Beattie, Colin (Midlothian North and Musselburgh) (SNP)
 Biagi, Marco (Edinburgh Central) (SNP)
 Bibby, Neil (West Scotland) (Lab)
 Boyack, Sarah (Lothian) (Lab)
 Brodie, Chic (South Scotland) (SNP)
 Burgess, Margaret (Cunninghame South) (SNP)
 Campbell, Roderick (North East Fife) (SNP)
 Chisholm, Malcolm (Edinburgh Northern and Leith) (Lab)
 Coffey, Willie (Kilmarnock and Irvine Valley) (SNP)
 Constance, Angela (Almond Valley) (SNP)
 Crawford, Bruce (Stirling) (SNP)
 Cunningham, Roseanna (Perthshire South and Kinross-shire) (SNP)
 Dey, Graeme (Angus South) (SNP)
 Don, Nigel (Angus North and Mearns) (SNP)
 Doris, Bob (Glasgow) (SNP)
 Dornan, James (Glasgow Cathcart) (SNP)
 Dugdale, Kezia (Lothian) (Lab)
 Eadie, Jim (Edinburgh Southern) (SNP)
 Ewing, Annabelle (Mid Scotland and Fife) (SNP)
 Ewing, Fergus (Inverness and Nairn) (SNP)
 Fabiani, Linda (East Kilbride) (SNP)
 Fee, Mary (West Scotland) (Lab)
 Ferguson, Patricia (Glasgow Maryhill and Springburn) (Lab)
 Findlay, Neil (Lothian) (Lab)

Finnie, John (Highlands and Islands) (Ind)
 FitzPatrick, Joe (Dundee City West) (SNP)
 Gibson, Kenneth (Cunninghame North) (SNP)
 Gibson, Rob (Caithness, Sutherland and Ross) (SNP)
 Grahame, Christine (Midlothian South, Tweeddale and Lauderdale) (SNP)
 Grant, Rhoda (Highlands and Islands) (Lab)
 Gray, Iain (East Lothian) (Lab)
 Griffin, Mark (Central Scotland) (Lab)
 Hepburn, Jamie (Cumbernauld and Kilsyth) (SNP)
 Hilton, Cara (Dunfermline) (Lab)
 Hyslop, Fiona (Linlithgow) (SNP)
 Ingram, Adam (Carrick, Cumnock and Doon Valley) (SNP)
 Keir, Colin (Edinburgh Western) (SNP)
 Kidd, Bill (Glasgow Anniesland) (SNP)
 Lamont, Johann (Glasgow Pollok) (Lab)
 Lochhead, Richard (Moray) (SNP)
 Lyle, Richard (Central Scotland) (SNP)
 MacAskill, Kenny (Edinburgh Eastern) (SNP)
 MacDonald, Angus (Falkirk East) (SNP)
 Macdonald, Lewis (North East Scotland) (Lab)
 Macintosh, Ken (Eastwood) (Lab)
 Mackay, Derek (Renfrewshire North and West) (SNP)
 MacKenzie, Mike (Highlands and Islands) (SNP)
 Malik, Hanzala (Glasgow) (Lab)
 Marra, Jenny (North East Scotland) (Lab)
 Martin, Paul (Glasgow Provan) (Lab)
 Mason, John (Glasgow Shettleston) (SNP)
 Matheson, Michael (Falkirk West) (SNP)
 Maxwell, Stewart (West Scotland) (SNP)
 McAlpine, Joan (South Scotland) (SNP)
 McCulloch, Margaret (Central Scotland) (Lab)
 McDonald, Mark (Aberdeen Donside) (SNP)
 McDougall, Margaret (West Scotland) (Lab)
 McKelvie, Christina (Hamilton, Larkhall and Stonehouse) (SNP)
 McLeod, Aileen (South Scotland) (SNP)
 McLeod, Fiona (Strathkelvin and Bearsden) (SNP)
 McMahon, Michael (Uddingston and Bellshill) (Lab)
 McMillan, Stuart (West Scotland) (SNP)
 McTaggart, Anne (Glasgow) (Lab)
 Murray, Elaine (Dumfriesshire) (Lab)
 Neil, Alex (Airdrie and Shotts) (SNP)
 Paterson, Gil (Clydebank and Milngavie) (SNP)
 Pentland, John (Motherwell and Wishaw) (Lab)
 Robertson, Dennis (Aberdeenshire West) (SNP)
 Robison, Shona (Dundee City East) (SNP)
 Russell, Michael (Argyll and Bute) (SNP)
 Salmond, Alex (Aberdeenshire East) (SNP)
 Smith, Drew (Glasgow) (Lab)
 Smith, Elaine (Coatbridge and Chryston) (Lab)
 Stevenson, Stewart (Banffshire and Buchan Coast) (SNP)
 Stewart, David (Highlands and Islands) (Lab)
 Stewart, Kevin (Aberdeen Central) (SNP)
 Sturgeon, Nicola (Glasgow Southside) (SNP)
 Thompson, Dave (Skye, Lochaber and Badenoch) (SNP)
 Torrance, David (Kirkcaldy) (SNP)
 Urquhart, Jean (Highlands and Islands) (Ind)
 Watt, Maureen (Aberdeen South and North Kincardine) (SNP)
 Wheelhouse, Paul (South Scotland) (SNP)
 White, Sandra (Glasgow Kelvin) (SNP)
 Wilson, John (Central Scotland) (Ind)
 Yousaf, Humza (Glasgow) (SNP)

Against

Brown, Gavin (Lothian) (Con)
 Buchanan, Cameron (Lothian) (Con)
 Carlaw, Jackson (West Scotland) (Con)
 Davidson, Ruth (Glasgow) (Con)
 Fergusson, Alex (Galloway and West Dumfries) (Con)
 Fraser, Murdo (Mid Scotland and Fife) (Con)

Goldie, Annabel (West Scotland) (Con)
 Harvie, Patrick (Glasgow) (Green)
 Hume, Jim (South Scotland) (LD)
 Johnstone, Alex (North East Scotland) (Con)
 Johnstone, Alison (Lothian) (Green)
 Lamont, John (Ettrick, Roxburgh and Berwickshire) (Con)
 McArthur, Liam (Orkney Islands) (LD)
 McGrigor, Jamie (Highlands and Islands) (Con)
 McInnes, Alison (North East Scotland) (LD)
 Milne, Nanette (North East Scotland) (Con)
 Mitchell, Margaret (Central Scotland) (Con)
 Rennie, Willie (Mid Scotland and Fife) (LD)
 Scanlon, Mary (Highlands and Islands) (Con)
 Scott, John (Ayr) (Con)
 Scott, Tavish (Shetland Islands) (LD)
 Smith, Liz (Mid Scotland and Fife) (Con)

The Presiding Officer: The result of the division is: For 92, Against 22, Abstentions 0.

Motion, as amended, agreed to,

That the Parliament agrees that a solid grounding in science, technology, engineering and maths (STEM) education delivered by high-quality teachers is essential in equipping all young people with the knowledge and skills to successfully contribute to the economy and 21st century society; notes that high numbers of young people choose to take science and maths qualifications, in particular at school, and congratulates those young people, their teachers and their schools for their hard work and their achievement across the STEM subjects; agrees that both young women and young men should be encouraged to aspire to and work toward the full range of rewarding careers on offer in the STEM sectors; notes the considerable investment and commitment that local authorities and the Scottish Government have made to support STEM education in schools; recognises the government's commitment to raising educational attainment and tackling educational inequity as evidenced through the announcement of the Scottish Attainment Challenge and that STEM subjects are at the heart of the government's approach to developing Scotland's young workforce; agrees that Scotland's young people deserve the very best teachers and supports the work of the General Teaching Council for Scotland and others in enhancing the quality and professionalism of teachers in Scotland, and calls on all members to support the commitment to a masters level qualification for head teachers in Scotland announced this week.

Clean Up Scotland

The Deputy Presiding Officer (John Scott):

The final item of business is a members' business debate on motion S4M-12205, in the name of Bruce Crawford, on the clean up Scotland campaign. The debate will be concluded without any question being put.

Motion debated,

That the Parliament recognises the scale of the remaining problem of litter impacting on Scotland's environment and welcomes the significant part played by the Keep Scotland Beautiful charity through its Clean Up Scotland campaign in tackling the problem over the last two years; welcomes the widespread national coalition that has been formed in support of the campaign, including the Scottish Government, the business community, local authorities, campaign groups and individuals from across Scotland, resulting in over 500,000 volunteer actions to clean up individual communities; welcomes the particular role that local authorities have played in adopting the Clean Up Scotland campaign and delivering integrated messages across the whole of Scotland including in Stirling; considers that litter has a significant impact as well as a negative impact on civic pride and notes evidence that poor environmental quality standards impact on health and social justice outcomes and costs Scotland £78 million per annum to clean up; welcomes the renewed focus for the Clean Up Scotland campaign on opportunities for individuals to do the right thing with their litter, recognising that significant further progress on litter levels requires behaviour change among those who dispose of their waste irresponsibly, and looks forward to further success in the battle against litter.

17:09

Bruce Crawford (Stirling) (SNP): I sincerely thank all those colleagues who signed the motion, enabling me to hold this important members' business debate. I also warmly thank those who are in the chamber this evening to take part in the debate or simply to listen to proceedings.

I wanted to lead the debate this evening because, like many others within and outwith the chamber, I care passionately about and have a deep pride in our country. I despair when I see our land tarnished by those who litter, spit their chewing gum on the street or allow dog fouling or fly tipping, whether that is through carelessness or illegal behaviour. As the briefing from Keep Scotland Beautiful, which was sent to all MSPs, tells us, the statistics on such matters are alarming. Every year in Scotland, 250 million easily visible items of litter are dropped. Every day, Scottish smokers throw away 2 million cigarette butts. There are 170 incidents of fly tipping every day, and 80 per cent of gum is not put in the bin and costs about £18 per square foot to remove. Goodness knows how many incidents of dog fouling there are.

It is because of such statistics and the evidence that we see with our own eyes that we should

enthusiastically support Keep Scotland Beautiful's clean up Scotland campaign. It is a fantastic mass engagement campaign that is working hard to make Scotland the cleanest country in Europe. Who could not sign up enthusiastically to such a vision? Across the chamber we agree that Scotland is one of the most beautiful countries in the world. We have a rich mix of incredible rural beauty, world-class cities and vibrant urban developments. It is vital that, in order to protect and enhance our country's natural advantages, we support such campaigns.

The clean up Scotland campaign works across all 32 local authorities and has, at its heart, the aim of changing people's attitudes and, therefore, their long-term behaviour towards litter. As we might expect, all of Scotland's 32 local authorities have thrown their weight behind the campaign, as have organisations such as VisitScotland, Historic Scotland, BT, Scottish Water and Scottish and Southern Energy. The Scottish Government is also supporting the campaign. The campaign has substantial business support and is building up an impressive coalition of the willing, having motivated more than 80 local, national and global brands to invest in the campaign messages. McDonald's has signed the clean up Scotland pledge, which is supported by all its stores and 13 franchisees that organise clean-ups. Other supporters include Business Improvement Districts Scotland, Greggs and Coca-Cola.

The clean up Scotland campaign is leading community clean-up activities across the country to tackle the carelessness and illegal behaviour of those individuals who damage our quality of life and tarnish the country's image. The campaign has seen 500,000 voluntary clean-up actions pick up 5,000 tonnes of litter—those are two impressive statistics, for different reasons. Keep Scotland Beautiful rightly wants to change long-term behaviour by making dropping litter as socially unacceptable as drink driving is today.

Of course, the problem is not simply a visual one. There are social, health and financial consequences as well as environmental considerations. The current cost of dealing with the problem of litter in Scotland alone is over £1 million a week. Socially, there is a proven link between environmental incivilities and the fear of crime, as people feel safer in cleaner communities. Our health is also affected by litter, with higher levels of depression, illness and medical interventions recorded among people who live in areas that are not clean. There are severe financial consequences, too, for householders—directly in their pockets, because large chunks of their council tax have to be spent on addressing such issues—and landowners who have to spend significant sums of money on clearing mess from their land.

Members who know me well know that I care passionately about tourism. The industry is worth more than £4 billion a year. Our scenery and landscapes are some of the top reasons that people give for visiting Scotland. The first impressions of people who visit our country are hugely important. Visitors do not want to see streets full of litter, walls covered in unsightly graffiti or fly-tipping along the side of our country roads.

The clean up Scotland campaign is helping to make sure that our villages, towns and cities are kept as clean as possible, so that people can enjoy what Scotland has to offer without having to worry about an unclean environment around them.

One way in which the clean up Scotland campaign goes about that is through its hero of the month award, which recognises a volunteer's outstanding contribution to cleaning up Scotland. In my Stirling constituency, Donald Holmes won the award in December 2014 for his outstanding individual efforts to collect and recycle litter around the village of Buchlyvie. Stirling Council nominated Donald, who has to date collected around 90 bags of rubbish and is starting to recycle the collected waste.

People such as Donald are inspirational. His work will, I hope, encourage others to work in the same quiet, efficient manner and make a difference to the local and therefore national environment. Heroes such as Donald, Keep Scotland Beautiful and all of those involved in the clean up Scotland campaign do a job that often goes unnoticed.

The most recent 2015 clean up Scotland initiative is the two-minute clean-up. For all the twitter users out there, the campaign hashtag is #2minutecleanup. The campaign aims to encourage those who may not have time to participate in a longer clean-up. Instead, people are provided with bespoke recycled bags, which they can cleanly and easily use to collect litter for two minutes a day.

When we see litter on the streets we will rightly complain about it. However, when we do not and see instead clean streets, we usually think nothing of it. Our clean streets are due to the hard work of organisations such as Scotland's councils, Keep Scotland Beautiful and its clean up Scotland campaign. I applaud them for helping to keep Scotland tidy and beautiful.

17:17

Christine Grahame (Midlothian South, Tweeddale and Lauderdale) (SNP): I congratulate Bruce Crawford on securing the debate and Keep Scotland Beautiful on its clean up Scotland campaign.

Members of the public dropping litter is one of my bugbears, ahead, incidentally, of queue jumpers in the supermarket or motorists who can see that a lane ahead is blocked but expect to nudge in when they reach the bollards. That makes litter dropping pretty high on my list of bugbears.

Whether it is schoolchildren dropping a baked potato or a pizza box, the parent letting their child drop lollipop wrappers or, worse, doing it themselves in front of their children, or the motorists gaily rolling down the window and brazenly emptying the ash tray, I see red. Logoed carrier bags waving at me from the trees and stuck on fences, the debris and the detritus on our shores: I wish we could name and shame the culprits big time.

I went on a trip to Bruges some years ago and settled myself in the square to people watch as I quaffed a light lager to wash down some mussels. The square is quaint and apart from the horse-drawn tourist carriages—by the way, the horses have a special shoot attachment to catch their detritus—it is a people place. There was something very different about the scene, apart from the above, which I could not quite put my finger on. I realised that there was not a single piece, nay not even a speck of litter. Could any of us say the same for any square or main street in our constituencies? Some even think it a macho gesture to throw litter; no wonder we call them litter louts.

Visually, it is vandalism with a capital V. It also costs in money and manpower. Midlothian Council spends approximately £850,000 a year on litter removal and street sweeping. It alone has 250 instances of fly-tipping a year from the single item—the ubiquitous mattress or the saggy-bottomed sofa—to tipping on an industrial scale.

It costs in animal welfare. Discarded fishing tackle causes misery for swans, plastic bags choke livestock and fish in our seas have their very DNA altered by our disposal of chemical waste.

In addition to livestock being harmed, fly-tipping affects farmers across the Borders and Midlothian. It is estimated that around one third of farms are affected. I may be wrong about this, but I understand that it is the landowner who is responsible for the cost of removal.

I have many faults, as you know, Presiding Officer, but being guilty of littering is not one of them. We have laws, of course, but many people are unaware of them. Besides, who always has the confidence to confront the culprit? Until society views littering with the same abhorrence and distaste with which it views, say, spitting in public,

I am afraid that we will never see the cleanliness of Bruges here.

To put it succinctly, if I were a guest on the television programme “Room 101”, I would advocate depositing litter—all litter—in room 101. There—I have got that off my chest. I welcome the continuing work of Keep Scotland Beautiful, and I hope, although not with a great deal of optimism, that I need not rant on the issue again.

I again congratulate Bruce Crawford on securing the debate.

17:20

Jackie Baillie (Dumbarton) (Lab): I join Christine Grahame in congratulating Bruce Crawford on securing the debate. I also congratulate him on the content of his speech.

It is said that timing is everything in politics, so we should note the reception for Keep Scotland Beautiful that is taking place in the garden lobby at 6 o'clock and welcome the clean up Scotland champions from across the country to Parliament this evening. Their efforts should be applauded.

There is no doubt that we live in a beautiful country. I am proud to have Scotland's first national park in my constituency—it is shared between my constituency and Bruce Crawford's. Loch Lomond is iconic, and it draws visitors from home and abroad. We have the most amazing landscapes and dramatic coastlines, and just occasionally we have nice weather to go with it.

Of course, the blot on our landscape is litter. The statistics bear repeating—250 million visible items of litter are dropped every year. If we think about that as we drive along looking at the grass verges and the hedges, we begin to understand the scale of the problem that we face. I could not believe that there were 170 incidents of fly-tipping every day. I suspect that that is the tip of the iceberg and that those are only the incidents that we know about. It is not just the grass verges and the hedges that are affected by litter. The city streets are littered with detritus from food, cigarettes and so on.

I was struck by the example of Bruges that Christine Grahame gave. I grew up in Hong Kong, where litter campaigns were run. There are not so many grass verges there, but we had a purple dragon called Lap Sap Chung. As a child, I was most fearful of that purple dragon appearing, but the streets of Hong Kong are absolutely spotless. Maybe there is something that we can learn from what goes on there.

Christine Grahame: There are times when we could do with having that dragon in the chamber to handle Jackie Baillie.

Jackie Baillie: I suggest that that is the role of the Presiding Officer—not that I am suggesting that he is a purple dragon.

Given that there seems to be a culture of just dropping litter, leaving it behind or throwing it out of the car window, the scale of the problem that we have is perhaps not astonishing. Therefore, the work of Keep Scotland Beautiful and the clean up Scotland campaign is vital. It is fantastic that they have encouraged an army of volunteers—including many of us—to undertake 300 clean-ups every month and to pick up thousands of tonnes of litter.

I know because I have participated in such activity that it is not just about doing something that is useful for the environment. It is great exercise, and it allows participants to switch off from the myriad things that they have going on in their heads. I have been at such events at Levensgrove park, at the beach at Dumbarton—yes, we have one—and at Dumbarton castle on the banks of the Clyde. There have been litter picks in Helensburgh, and there is a litter pick in Luss on the banks of Loch Lomond on 7 March—I invite all who are present to participate; it will be fun.

I commend Keep Scotland Beautiful, not just for the mass engagement that it has encouraged but because it has brought together communities, local authorities, the public sector, the third sector and businesses. It has done a great job in bringing everyone together to take co-ordinated action. As Bruce Crawford told us, 80 local, national and global brands have supported the clean up Scotland campaign, including McDonald's, Greggs, William Tracey, Wrigley's and Coca-Cola Enterprises. They all recognise that we need to do more.

The issue is not just the visual impact of what is known as environmental incivility, but a lessening of civic pride, the negative impact on wildlife on land and in marine areas, and negative health and social justice outcomes.

I am conscious of the time, Presiding Officer, but I want to mention the impact on farms in my area. I have been approached by NFU Scotland, which has reported the huge impact of dog fouling in fields on the wellbeing of livestock, with cattle regularly miscarrying. I understand that a consultation is being undertaken, but I would be very pleased to hear from the cabinet secretary about what more can be done to prevent this sort of thing in future. The problem is increasing, and we need to help.

Education can play a hugely important role in encouraging the next generation not to litter. For example, I know from my local eco-schools that Keep Scotland Beautiful has had a huge impact.

Education is about changing attitudes and behaviour, and our strategy needs to ensure that people take personal responsibility and are proactive about prevention and that enforcement action can be taken to ensure that those who litter are fined.

Finally, Presiding Officer—and you are not a purple dragon—I congratulate Keep Scotland Beautiful on its work and commend all the volunteers and partners across Scotland for their involvement.

17:26

Graeme Dey (Angus South) (SNP): One of the key themes to emerge from the work of the Parliament's Rural Affairs, Climate Change and Environment Committee on tackling climate change is the critical need for behavioural change. We will not respond to the challenges posed by global warming if we do not take drastic action to tackle our emissions, and we will be successful in tackling emissions only if, as a society and as individuals, we alter our behaviours. In many respects, the same points apply to the scandal of littering, which is a subject in which I know you take a strong personal interest, Presiding Officer.

One might almost say that the mission statement of the Scottish Government's litter strategy, "Towards a Litter Free Scotland: A Strategic Approach To Higher Quality Local Environments", is the need to encourage

"individuals to take personal responsibility to make sure that waste does not pollute the environment in the first place."

It is truly a national disgrace that a country as beautiful as Scotland is blighted by littering to such an extent. The fact that it costs an estimated £78 million annually to clean up litter gives us an idea of the scale of the issue. Of course, that cost, which is ultimately borne by us taxpayers, also hammers home the price of behaving in a socially unacceptable way.

However, it seems that, in the same way as the public are beginning to embrace recycling, they are getting on board with tackling the littering issue. I therefore congratulate my colleague Bruce Crawford on lodging this motion for debate and highlighting the vehicle for positive behavioural change that KSB's clean up Scotland campaign is. The campaign has attracted a coalition of support from the business community and local authorities—and, indeed, I will return to the local authority issue in a second.

More than anything, it is the buy-in from individuals and local groups that will ultimately determine the success or otherwise of the campaign. After all, if we realise the ambition to get 1 million people to take action, with the

demonstrable impact that that will have on our environment, we will find ourselves in a far better place.

We must also recognise the leadership role that our councils must have and which they are fulfilling. For example, in the local authority area that I represent, a clean up Angus campaign is being supported by the council's pride in place group. Funding from Zero Waste Scotland is also being deployed on two innovative litter projects.

First of all, the prevent litter and pick up three campaign, which was launched earlier this month at the West Links area in Arbroath, aims to reduce the incidence of littering between Arbroath and East Haven by encouraging all users—local residents, visitors and so on—to stop littering and to pick up any three items of litter that they see and place them in nearby litter or recycling bins.

Secondly, there is Forfar academy's litter prevention scheme, which school pupils, school staff and local businesses have been heavily involved in developing. The scheme, which includes the adoption of a school litter charter, followed a survey of the school's pupils that found that 84 per cent felt the area around the campus to be moderately to heavily littered and that one in three had themselves littered in the preceding month.

We are also seeing the branding of new litter bins with the clean up Angus logo. The campaign is being promoted via presentations at primary and high schools; free equipment and collection of waste are being offered to groups that carry out community litter clean-ups; and a litter awareness short film linked to the campaign is currently in production.

Beyond the work that has been instigated by the council, we are seeing individuals and communities stepping up to the mark, and I would like to highlight some examples.

Scott Smith, who is a cerebral palsy sufferer from Carnoustie, was named clean up Scotland's first ever ditch the dirt hero in September 2013. Scott was involved in taking the lead in work with primary school pupils of Burnside primary school and the Carnoustie canine capers group in addressing dog dirt in the town's Pitskelly park. It is worth noting in passing that 64 per cent of the litter picks that were registered with clean up Scotland recorded instances of dog fouling.

Kris Auchinleck of the Monifieth eco force was named hero of the month that same month for work to improve the appearance and experience of that town. In Forfar, Whitehills primary school pupil Sophie-Ann Robson was awarded the clean up hero award in 2013 for her campaigning work on dog fouling.

All three are due to attend Bruce Crawford's event in the Parliament, which follows this debate. All three have demonstrated the campaign's mantra. They have demonstrated civic responsibility and have taken pride in where they live, work and spend their leisure time. All of us surely must follow that lead.

17:30

Jamie McGrigor (Highlands and Islands)

(Con): I, too, congratulate Bruce Crawford on securing this important debate, and I recognise the good work of Keep Scotland Beautiful and its clean up Scotland campaign.

Litter in our environment can seriously impact on our quality of life, and the presence of litter sends out an incredibly bad message to visitors and tourists, many of whom are attracted to our shores by what they expect to be our pristine natural environment and well-kept villages, towns and cities. The costs of remedying litter fall on hard-pressed taxpayers.

The motion is right to highlight the commendable efforts of those who volunteer to help to clean up their communities, including many thousands of residents in my Highlands and Islands region. I pay tribute to all those constituents who give up their time to undertake those activities, from Kintyre to Shetland.

I highlight the example of Sandra McMillan from Beachwatch Bute. She does sterling work on Bute to bring together local people and visitors to the island to remove litter from Bute's coastline and beaches. She is a clean up Scotland hero, and I am delighted that she has won a number of small litter grants to assist her efforts.

Tackling litter on our beaches and coastlines is a massive challenge. The Scottish Association for Marine Science did a survey in 2010 and collected more than 53,000 pieces of litter from a sample of 22km of Scottish beaches. That is more than one item for every step trod. Litter can also do a lot of harm to our wild birds and animals and it can, of course, be lethal to farmers' livestock.

The motion refers to the role of the business community. I am pleased that Coca-Cola Enterprises is one of a number of businesses that readily accept the part that they can play in the clean-up of their products' packaging. It is encouraging that Coca-Cola Enterprises is helping to fund and support KSB and allowing it to back up local groups that wish to tackle the scourge of litter in their communities. Things do go better with Coke.

We need to see the behaviour change to which Bruce Crawford referred. Education is the key in that respect. I support the efforts to engage with

primary and secondary school children on the impact of litter on their communities.

Education can help to alter adult behaviour, as well. ASH Scotland's briefing for today's debate says that almost 50 per cent of our streets have some form of tobacco-related litter, including cigarette butts, matches and packaging, and that that rises to 70 per cent in urban areas. Many smokers think that butts will biodegrade, but they do not. Discarded butts can also end up leaking harmful toxins into our water systems that can harm marine life and the environment. We need to get the message out that tobacco-related littering is unacceptable, as indeed all types of littering are. In my region, Highland Council is to be congratulated on its stub it, bin it campaign, which it launched last year.

I sometimes wish that some local councils would be more generous in aiding litter collection by volunteers. I have been chairman of the Loch Awe Improvement Association in Argyll since 1992. During that time, we have organised many clean-ups by volunteers, and our wardens pick up bags of rubbish off the loch shore every week. However, the association has to pay £380 each for the large bins, of which we have several, and we have to pay hundreds of pounds for black bags. We are then charged £2,300 for uplifting them. The association is doing a good job, and it feels that it is performing a valuable voluntary service by running a litter collection service locally. We feel that we should be helped by the council rather than charged for what we do. I would like to know the minister's opinion about that.

The Scottish Conservatives are happy to give our backing to Bruce Crawford's motion, which rightly has cross-party support. We recognise the continuing efforts of Keep Scotland Beautiful and all the volunteers throughout the country and the excellent work being undertaken. However, we acknowledge that the challenge that we face is to change the behaviour of some people and move towards the situation where littering is socially and culturally unacceptable.

17:35

Chic Brodie (South Scotland) (SNP): I, too, welcome Bruce Crawford's initiative in bringing the debate to the chamber today. I share his passions for tourism and having a litter-free country. I welcome the efforts and campaigns of Keep Scotland Beautiful and volunteers across Scotland to clean up individual communities.

When I entered Parliament in 2011, I was minded to bring in a member's bill on litter, but I withdrew that intent because the Government committed to bring in extensive proposals to deal with the issue. As the motion points out, some

steps have been taken, particularly via the clean up Scotland campaign, which is effective and good news. However, Mr Crawford's motion rightly points out the scale of the remaining problem and the fact that significant further progress requires to be made on litter levels. I accept that that requires significant behavioural change, but I believe that further legislation is also required to support our objectives. I welcomed the significantly increased penalties in the Litter (Fixed Penalties) (Scotland) (Order) 2013 for littering, fly-tipping and so on. That seems to have had some effect, but we need more than that.

As has been said, litter is a blight on our beautiful country of Scotland. However, litter is one of the few factors—it is a major factor in some cases—that impact not just on the beauty of Scotland but on its economy. We do not want litter to be a bad experience for our tourists or, indeed, our citizens. The £60 million of public money that is spent on tackling litter and fly-tipping each year could be spent on other services. One tonne of litter represents 20,000 items, which spread nose to tail would extend for 12.5 miles. Nowhere is the extent of the litter problem more obvious than in our town centres. I wish that Ayr,

“wham ne'er a town surpasses,”

was known more

“For honest men and bonny lasses”

than it sometimes is for the litter on its streets.

I will dwell on two suggestions to add to the debate on litter, particularly in our town centres. The dropping or spitting out of chewing gum is an offence under section 87 of the Environmental Protection Act 1990, but the pavements and streets of our town centres still suffer from a chewing gum pox. That has to be eliminated, so I repeat my previous suggestion that, in the obvious absence of the application of penalties, the local sale of non-biodegradable chewing gum should attract a levy of, say, 10p a pack, which could be contributed to local authorities to allow them to clean up the chewing gum mess.

The second suggestion is to encourage the creation of a social enterprise in each locality—I have had discussions on this proposal locally—that would use rickshaws with bins aboard to ensure that litter louts got the message and had the opportunity to deposit their litter appropriately. Each rickshaw rider would have a webcam-bearing helmet to record and immediately fine those who continued to drop their litter in the streets.

Christine Grahame: Are you serious?

Chic Brodie: I am very serious.

The funding for that could come from the £60 million that we currently spend on tackling litter. Singapore we may never be, but I believe that we can make even greater strides.

Again, I congratulate Keep Scotland Beautiful. We have certainly done well and have made progress, but a lot more needs to be done.

17:39

The Cabinet Secretary for Rural Affairs, Food and Environment (Richard Lochhead): I congratulate Bruce Crawford and thank him for raising this important issue in Parliament, and I thank all members who have spoken in the debate.

We heard that many members have been angered by the scale of littering in Scotland: woe betide any litter lout who comes across Christine Grahame, in particular. She is understandably angered by what we sometimes see in our communities and across Scotland's beautiful landscapes.

I look forward to welcoming many people from across Scotland who are involved in the issue at the reception that will be hosted after the debate.

We all agree that litter is a disgusting blight on our communities and our coasts. It tarnishes our beautiful landscapes and, as members have said, it harms public health and our wildlife. Extreme examples of littering can drag down the morale of Scotland's communities, as well. We all agree that the problem must be addressed.

Many members will identify with what I am going to say, and I will do my best to reflect on some of the points that members made in the debate. First and foremost is the fact that many different people are responsible for dealing with the issue. Our local authorities must, of course, be at the forefront of the fight against litter. Many local authorities in Scotland are doing a grand job; others could perhaps do more, as some members mentioned. I hope that they will do that.

There are other issues—this is not just about bottles, cans and fag packets. Members including Jackie Baillie mentioned dog fouling, which is a blight on some of our communities. Again, local authorities have powers to deal with that, so I urge those that are not using the existing legislation to explore whether they can do more to address the problem using the fines that are available.

Jackie Baillie: The cabinet secretary and I have exchanged correspondence. My understanding is that the legislation does not cover farm land because it is private land. There is concern about the scope that local authorities have to enforce. I wonder whether we can do something clever to try to help farmers with the problem.

Richard Lochhead: I was referring to dog fouling in general, but I take the point that we should perhaps explore whether there is more that we can do in relation to farm land. I will have a look at that.

I hope that local authorities will use the existing fines that are available. A responsible dog ownership consultation took place recently and we are currently considering the responses. Dog fouling was part of that, and one of the clear messages that came across was that more needs to be done at local level with existing legislation.

Jamie McGrigor: Should organisations or councils wish to give out plastic bags to dog owners for them to pick up excrement, will the 5p tax be charged on those plastic bags?

Richard Lochhead: I make the obvious point that responsible dog ownership means that people get their own bags and look after their own dogs' fouling on our streets and in our communities. I find it appalling that nowadays, when we go out into the countryside, we find little doggy bags on fence posts. They should be taken home and disposed of appropriately by dog owners. I hope that that message gets across in the future.

Another point that we agree on is that the total cost of littering is unacceptable to society. As members said, it is £78 million a year. At least £53 million of that is the direct clear-up costs and the other £25 million relates to its effect on a range of other issues such as crime, health and reduced property values. Over and above that, there is a further cost to the marine environment of £16.8 million each and every year, and that in turn impacts on our environment, wildlife, industry and tourism.

As Jamie McGrigor said, marine litter is not just about the impact on marine wildlife. It is also a significant issue for the fishing industry. Vessels participating in the fishing for litter initiative landed more than 374 tonnes of litter between 2011 and 2014, and it is estimated that the problem costs every vessel in the Scottish fleet as much as £17,000 a year. That is a considerable sum. All that cash could be better spent on other things.

We should also consider that the discarded plastic bottles, aluminium cans and other materials that we see would have been worth an estimated £1.2 million if they were recycled. If we reuse the resources that are dumped on our pavements, in our communities or at sea, we could get millions of pounds back, given the value of the materials.

In addressing the litter problem, the national litter strategy and the marine litter counterpart strategy, which were launched last summer, also seek to boost our economy. The priority, of course, remains prevention: there is a focused strategy for which all of us should take

responsibility over the next four years, supported by our delivery partner, Zero Waste Scotland, which has already made £500,000 available to Keep Scotland Beautiful's clean up Scotland campaign. Keep Scotland Beautiful has many challenges to deal with, not the least of which is cleaning up the mess that is left by litter louts. Quite rightly, it relies on local action being taken by individuals, groups, business and councils.

I am particularly pleased that clean up Scotland is celebrating local champions such as young Bronagh Dallas from Elgin in my constituency, who picks up litter every day on her way to and from school. *The Northern Scot* reported that

"the first thing she does when she gets home, before she does her homework, is go on a litter pick of the streets around her home".

The article goes on to say that she

"even drags her mum and other family members out on litter picks after school and at weekends."

Bronagh is an inspiration to her generation and to the rest of us, and is a worthy local champion, as are the many people who have been mentioned by other members.

I should also mention Pete Miners from my constituency. He patrols the River Lossie, and has done for many years, picking up marine litter. He posts on Facebook the pictures of what he finds; it is absolutely phenomenal to see the piles of marine and other litter that he collects on his daily walks along the banks of the Lossie.

With about half a million volunteer clean-ups taking place across Scotland, tens of thousands of tonnes of litter have been removed, so we owe a huge debt to the many hundreds of thousands of volunteers across the country. That is a great achievement, but we still have a situation in which one in five adults admits to littering, so the problem persists.

We must remember that Keep Scotland Beautiful and our local authorities are not the only organisations with interests and responsibilities in the area. It is something that we all have to be part of—organisations, individuals and the private sector. I recently visited a McDonald's restaurant in Elgin which undertakes activities around the restaurant and in neighbouring streets to collect litter. It is really important that the private sector continues to play its part as well.

In summary, the strategy that the Government has launched has three routes for dealing with the problem of litter. First, there is communication—highlighting what to do and explaining that litter is unacceptable. Secondly, we must ensure that the appropriate infrastructure is available for people to deposit their litter. Thirdly, there is enforcement as a deterrent to make people stop and think. We

have already introduced higher fixed penalties—£80 for littering and £200 for fly tipping—to strengthen the deterrent, and we now have the carrier bag charge, which we hope will keep bags from being discarded in our streets, because people will be using bags for life and there will be fewer bags circulating. We also had a national marketing campaign in 2014, and there are on-going communications to keep the issue in the public eye. Finally, we are rolling out recycle-on-the-go points across some of Scotland's busiest places.

I welcome this debate on a really important issue for Scotland. I hope that we can continue to work and collaborate across society to make littering socially unacceptable. As many members have said, it is socially unacceptable and it is a vandalism of Scotland's environment and communities, so we have to deal with it. Let us keep working together, as Bruce Crawford says, to keep Scotland beautiful.

Meeting closed at 17:48.

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