OFFICIAL REPORT
AITHISG OIFIGEIL

Environment, Climate Change and Land Reform Committee

Tuesday 31 October 2017

Session 5

The Scottish Parliament
Pàrlamaid na h-Alba

Tuesday 31 October 2017

CONTENTS

ENVIRONMENT, CLIMATE CHANGE AND LAND REFORM COMMITTEE
26th Meeting 2017, Session 5

CONVENER

*Graeme Dey (Angus South) (SNP)

DEPUTY CONVENER

*John Scott (Ayr) (Con)

COMMITTEE MEMBERS

*Claudia Beamish (South Scotland) (Lab)
*Donald Cameron (Highlands and Islands) (Con)
*Finlay Carson (Galloway and West Dumfries) (Con)
*Kate Forbes (Skye, Lochaber and Badenoch) (SNP)
*Emma Harper (South Scotland) (SNP)
*Richard Lyle (Uddingston and Bellshill) (SNP)
*Angus MacDonald (Falkirk East) (SNP)
*Mark Ruskell (Mid Scotland and Fife) (Green)
*David Stewart (Highlands and Islands) (Lab)

*attended

THE FOLLOWING ALSO PARTICIPATED:

Graham Applegate (Scottish Environment Protection Agency)
Roseanna Cunningham (Cabinet Secretary for Environment, Climate Change and Land Reform)
Craig McLaren (Royal Town Planning Institute Scotland)
Stephen Thomson (Transport Scotland)

CLERK TO THE COMMITTEE

Lynn Tullis

LOCATION

The Robert Burns Room (CR1)

Scottish Parliament

Environment, Climate Change and Land Reform Committee

Tuesday 31 October 2017

[The Convener opened the meeting at 09:18]

Decision on Taking Business in Private

The Convener (Graeme Dey): Good morning and welcome to the 26th meeting in 2017 of the Environment, Climate Change and Land Reform Committee. I remind everyone present to switch off mobile phones and other electronic devices, as they might affect the broadcasting system.

Agenda item 1 is to consider whether to take agenda items 9, 10 and 11 in private. Are we agreed to do so?

Members *indicated agreement.*

Subordinate Legislation

Public Appointments and Public Bodies etc (Scotland) Act 2003 (Amendment of Specified Authorities) Order 2017 [Draft]

Land Reform (Scotland) Act 2016 (Supplemental Provision) Regulations 2017 [Draft]

09:18

The Convener: Agenda item 2 is to hear evidence on two Scottish statutory instruments: the draft Public Appointments and Public Bodies etc (Scotland) Act 2003 (Amendment of Specified Authorities) Order 2017 and the draft Land Reform (Scotland) Act 2016 (Supplemental Provision) Regulations 2017. I welcome the Cabinet Secretary for Environment, Climate Change and Land Reform, Roseanna Cunningham; Andrew Ruxton, who is a solicitor in the Scottish Government; and Jillian Gardner, who is community assets action officer in the Scottish Government.

Does the cabinet secretary wish to make any comments?

The Cabinet Secretary for Environment, Climate Change and Land Reform (Roseanna Cunningham): There is not really very much to say about either instrument.

The Convener: Do members have any questions on either instrument? I suspect that this will be nice and easy.

Emma Harper (South Scotland) (SNP): It would be a shame to have brought the cabinet secretary here and not to have asked even one question.

Roseanna Cunningham: Do not feel obliged.

Emma Harper: The draft Scotland Act 1998 (Specification of Devolved Tax) (Wild Fisheries) Order 2017—

The Convener: I am sorry, but we will come to that order later.

Emma Harper: All right. Am I jumping the gun?

The Convener: Yes. It has been an early start for everyone this morning.

Do members have any questions on the two instruments under item 2? I see that they have none at all. That being the case, we will move to agenda item 3, which is consideration of motion S5M-07898.

Motion moved,

That the Environment, Climate Change and Land Reform Committee recommends that the Public Appointments and Public Bodies etc. (Scotland) Act 2003 (Amendment of Specified Authorities) Order 2017 [draft] be approved.—[*Roseanna Cunningham*]

Motion agreed to.

The Convener: Agenda item 4 is consideration of motion S5M-07897.

Motion moved,

That the Environment, Climate Change and Land Reform Committee recommends that the Land Reform (Scotland) Act 2016 (Supplemental Provision) Regulations 2017 [draft] be approved.—[*Roseanna Cunningham*]

Motion agreed to.

The Convener: We will have a brief suspension to allow the cabinet secretary to change her officials.

09:22

Meeting suspended.

09:23

On resuming—

Scotland Act 1998 (Specification of Devolved Tax) (Wild Fisheries) Order 2017 [Draft]

The Convener: Agenda item 5 is to hear evidence on the draft Scotland Act 1998 (Specification of Devolved Tax) (Wild Fisheries) Order 2017. We are again joined by the Cabinet Secretary for Environment, Climate Change and Land Reform, who is accompanied on this occasion by Katie Joshi, who is a solicitor in the Scottish Government, and Simon Dryden, who is a marine superintendent in Marine Scotland.

Do members wish to ask any questions?

Emma Harper: Okay. We are taking things in the right order now.

This question is a bit tangential. Can the cabinet secretary provide an update on when the wild fisheries bill will be introduced? Where are we in the process?

Roseanna Cunningham: There will be a place for the wild fisheries bill in the current parliamentary session, but I do not want to pre-empt a future programme for government. It was never intended to be a year 1 bill, so it is not imminent. I would have expected it to be introduced in around year 3, potentially. A lot of the legislative programme is subject to Brexit consequentials, which we are looking at carefully.

John Scott (Ayr) (Con): As the bill is about raising tax, do you have any understanding or knowledge of what level the tax rate would be set at, even at this early stage?

Roseanna Cunningham: The bill is not about raising tax; it is about reforming fisheries management. The order that we are discussing is about the transfer of a power to raise a levy, but it is not about the raising of the levy itself. It will simply allow a Scottish Government to do so in the future if it felt that it was appropriate. We have indicated that we do not consider that to be the case at the moment. I made it clear earlier this year that I was not minded to introduce a rod licence or other form of levy. We are talking about the devolution of a power to raise a levy that will be available to a Government in the future, should it feel that it was necessary.

John Scott: But that is not your intention.

Roseanna Cunningham: That is not my intention. The actual raising of a levy will not form part of the bill, which will allow for a reformed management structure. Only if there was a failure in an area of the management structure much further down the line might the Government have to step in, but that is not in our minds.

John Scott: Thank you.

The Convener: As members have no further questions, we move to agenda item 6, which is consideration of motion S5M-07900.

Motion moved,

That the Environment, Climate Change and Land Reform Committee recommends that the Scotland Act 1998 (Specification of Devolved Tax) (Wild Fisheries) Order 2017 [draft] be approved.—[*Roseanna Cunningham*]

Motion agreed to.

The Convener: I thank the cabinet secretary and her officials for their brief attendance. I suspend the meeting to allow them to leave.

09:27

Meeting suspended.

09:41

On resuming—

Public and Private Water Supplies (Miscellaneous Amendments) (Scotland) Regulations 2017 (SSI 2017/321)

The Convener: Agenda item 7 is consideration of a negative instrument on public and private water supplies. Do members have any comments on the instrument?

There being none, is the committee agreed that it does not wish to make any recommendations in relation to the instrument?

Members *indicated agreement.*

Air Quality

09:42

The Convener: Agenda item 8 is our inquiry into air quality in Scotland. We were to hear evidence from two panels of stakeholders. Unfortunately, our first evidence session, which was to be held via videoconference, will not proceed because of technical problems that are outwith our control.

Therefore, we will now take evidence from what would have been the second panel of witnesses. I welcome Graham Applegate, who is the principal policy officer for air quality at the Scottish Environment Protection Agency; Craig McLaren, who is the director of the Royal Town Planning Institute Scotland; and Stephen Thomson, who is the head of environment and sustainability at Transport Scotland. Eric Owens, who is the head of planning and sustainable development at Aberdeen City Council, was to have joined the panel, but he is unavailable because of transport difficulties.

Members have a series of questions, which Mark Ruskell will kick off.

Mark Ruskell (Mid Scotland and Fife) (Green): Good morning, everybody.

We are breaking the law in Scotland. We have dozens of areas that breach European Union legal limits for nitrous oxide. What are your thoughts on "Cleaner Air for Scotland: The Road to a Healthier Future" as a strategy? Will it bring us into legal compliance before 2020? Is it fit for purpose, given the High Court ruling on the adequacy of the Department for Environment, Food and Rural Affairs and Scottish Government plans that were announced earlier this year? What, if anything, needs to be changed in "Cleaner Air for Scotland" to bring us into legal compliance?

The Convener: Who wishes to kick off?

Graham Applegate (Scottish Environment Protection Agency): I will, convener. "Cleaner Air for Scotland" is fit for purpose, and it will assist in bringing us into compliance with the EU legislation. It needs to be remembered that CAFS is less than two years old. As a national strategy, it is putting in place much of the groundwork to allow us to meet the legal limits in the shortest possible time, and by 2020.

09:45

This is the first time that Scotland—or, indeed, any of the devolved Administrations—has taken such an approach to air quality, and I think that the strategy needs to bed in; it needs time to mature. It is also the case that the work that is being

carried out under local air quality management is allowing us to move towards achieving legal compliance, too. The two measures need to be taken together. We have an existing mechanism in place, which should ensure legal compliance; CAFS is complementary to and supportive of that.

CAFS is definitely fit for purpose. It may be the case that, in future years, it needs to be reviewed to see what progress has been made and whether parts of it need to be changed, but SEPA is fully supportive of CAFS and the work that is being undertaken. We are definitely supportive of the strategy in principle and in implementation.

Mark Ruskell: Before the other panellists answer, I have a follow-up question for you. As the regulator, do you think that we will achieve legal compliance on nitrous oxide by 2020?

Graham Applegate: It appears that we will achieve compliance in three of the non-compliant areas—north-east Scotland, central Scotland and the Edinburgh agglomeration. Glasgow is being remodelled following some of the road system changes that have taken place where the potential for non-compliance was likely. I think that we will be well on the way to legal compliance by 2020, and we may even be fully compliant by then.

Mark Ruskell: You referred to three areas. What about the rest?

Graham Applegate: The only other area is the Glasgow agglomeration, which is subject to remodelling. It may well be that, after the remodelling, it falls into compliance.

Stephen Thomson (Transport Scotland): CAFS should be viewed as a live document. The air quality issues are moving so fast that what was written in good faith towards the end of 2015 could be updated. For example, what is in the programme for government on low-emission zones is not explicitly stated in CAFS. If we were to review CAFS, it is fair to say that it would pick up the elements that have been published in the likes of the PFG. We will also see what comes out of the committee's inquiry and parliamentary statements, which will need to be captured in the updates to CAFS.

I agree with Graham Applegate that, as a strategy, CAFS is on the right path.

Craig McLaren (Royal Town Planning Institute Scotland): The institute was part of the reference group that took forward the CAFS document. We have quite a lot of faith in it—we think that it is a good document and I hope that it will move us towards compliance.

One of the things that we need to be reminded about from a planning perspective is that many of the actions in CAFS will be more fruitful in the medium to longer terms. It includes short-term actions, too, but changing the built environment will not happen overnight. We must bear that in mind as we move forward with CAFS.

The other good thing about CAFS is that it looks to various other disciplines, professions and organisations to do stuff: it acts as a co-ordinator, which is useful.

I like the diagram on page 11 of CAFS, which sets out the need to focus on placemaking and transport. CAFS is not just about the immediate action that must be taken; rather, it takes a longer view. We need to try to create places where the environment is much healthier and where people want to live, work and spend their leisure time. We need to keep an eye on that longer-term aspiration, as well as on the shorter-term gains.

Mark Ruskell: You have commented on the CAFS approach as an exemplar, but how confident are you that all the actions in it can be delivered, particularly given that we have issues with the capacity of local authorities and the many stakeholders on which CAFS will rely to get to the point at which we can confidently say that we are legally compliant and people will stop dying?

Craig McLaren: From the RTPI perspective, a number of actions have already been taken. We have undertaken work to ensure that planners are aware of the air quality issues, and we published guidance on that in January last year with Environmental Protection Scotland. We are also trying to roll out an awareness-raising programme for planners to ensure that they are in on it.

As Stephen Thomson said, it is a bit of a movable feast. There are opportunities that we can grasp, for example the new national planning framework, when it is looked at again in 2020, and Scottish planning policy, which could be a bit stronger on air quality. Just now, air quality tends just to be given a nod in planning policy, rather than anything specific being said about the role of planning for air quality.

As the committee knows, there is currently a review of the planning system, and a planning bill should be with you by the end of this year, so there will be opportunities to look at the issue from a planning perspective, and to come up to speed and hit the mark.

Stephen Thomson: The challenge is two-fold. There is a resource challenge for the organisations that are here today, and there is also what I think is a positive challenge to bring together various professions that move at different speeds and have different visions or ambitions, and to have them on the same page at the same time. For example, the Government engages with the freight and bus sectors to make sure that we are listening to what those sectors are saying.

Graham Applegate: I reiterate, as Stephen Thomson said, that CAFS brings together a wide range of partner organisations that operate under various individual constraints. The amount of work that has been done since CAFS was initiated in 2015 has been extremely good, and we have maximised the resources that each organisation has brought to the table. There will always be constraints on each organisation and, probably, on CAFS as a whole, which is just a practical reality of life. However, we have brought the right people together around the table and we utilise resources as best we can.

Craig McLaren: One of the things about CAFS that has been incredibly useful is that it has given us, as different professions in different organisations, something to gather around. I am not sure that we would have worked together so closely without CAFS or the work that was done in the lead up to it. From the planning perspective, it has given us a better understanding of the issues that we face, the role that we—and others—can play, what we can and cannot do, and how we should all try to complement one another.

Mark Ruskell: Is there enough focus in CAFS on active travel?

Stephen Thomson: There is a focus on active travel just now that is based on what we knew towards the tail end of 2015—which is where the idea of CAFS being a live document comes in. Things have moved on quite substantially on active travel, and there is always scope for widening elements such as active travel in a document like CAFS.

Very recently, promotion of active travel in the budget has shown where ministers' ambitions are going. CAFS was produced at a particular point in time, and what we knew about active travel was included in it. Perhaps viewing it as a live document could bring what we know now, towards the tail end of 2017, to fruition. However, that is not to say that the actions in CAFS are the active travel actions and policies that we are delivering now; CAFS has to follow that, rather than the other way around.

Craig McLaren: Active travel is included in CAFS, which is good. As I said earlier, I like the fact that CAFS talks about the role of the built environment and having active travel as a key component of that environment. In another role, I chair the national walking strategy delivery forum, so I am always keen to see more being done on active travel. Although it is in CAFS, I would like there to be more; I would like greater recognition of the role that active travel can play. As Stephen Thomson said, the doubling of the budget for active travel is a step in the right direction, but we need to make sure that it is used in the right way and that it has the maximum impact.

Stephen Thomson: I will just say, to finish off on that, that at the Cycling Scotland conference yesterday, we talked about the role that active travel can play in improving air quality.

As Craig McLaren said, CAFS has brought a number of professions and organisations together to talk on a common theme. No one to whom I have talked since CAFS was put together has said that challenging air pollution is a bad idea.

Mark Ruskell: If the programme for government has overtaken CAFS and the Supreme Court is saying that plans need to be updated at Scottish Government and United Kingdom levels, what commitment does Transport Scotland have to update CAFS? From everything that I have heard this morning, it seems that a logical and urgent update is required.

Stephen Thomson: CAFS is overseen by a governance group that is co-chaired by the Scottish Government, SEPA and Transport Scotland. The governance group meets every six weeks or so, and has the potential to review where CAFS is sitting at the moment. It has not been on the agenda so far because we feel that CAFS is allowing actions to be achieved. However, if, following the meeting today, the view is that we need to go back and review CAFS, that can be done. I think that it is fit for purpose now, but there is always scope to review it.

Graham Applegate: I will add that CAFS is reviewed annually and an annual progress report is produced. It may well be that the things that have happened in the past year will be taken account of in that report, and that they will provide a springboard for what will be included in future years.

The Convener: When does that annual review take place?

Graham Applegate: This year, the report that covers the previous year was produced in June, I think.

Stephen Thomson: It was published in the past few months.

Graham Applegate: It was published around June or July. The report is publicly available on the Scottish Government website.

John Scott: I relation to spatial planning, how much of the CAFS document and other evidence suggests that there is an emphasis on modal shift? I am, of course, a supporter of modal shift, and appreciate that it is very much an urban problem. However, the document does not take much account of rurality and peripherality, or the difficulty of achieving modal shift in relation to general air quality across the whole of Scotland, rather than just in particular urban black spots. Do

you have any comments to make on modal shift and spatial planning?

Craig McLaren: You are right that modal shift is easier to achieve in urban areas because of the circumstances there, but that does not mean that we should not try to achieve it in rural areas. Modal shift relies a lot on making sure that we link better to public transport. We can also look at how we can better locate some new developments. The idea behind a sustainable development or place is that it does not add to the number of people who have to use their cars to travel to work or to the shops. We should look at ways to make that happen by making sure that new developments are linked to public transport services—ideally train services, but buses as well, where possible.

We should also see whether we can build at a scale that creates viability for the services that are required in a particular location, so that there is a local shop, a chemist and a doctors' surgery or whatever. That is not always easy, because not all the developments for which applications are made are on such a scale. There is a job to be done to build that up and to think about how developments work cumulatively, as well.

John Scott: Excellent, thank you. I wanted to make certain that that is part of the thinking. It is a different approach to planning.

Craig McLaren: That approach is in there, but it is probably not as strongly articulated as it could be.

Donald Cameron (Highlands and Islands) (Con): Last week the committee visited Corstorphine, where there is a well-known problem relating to air quality. There are also housing pressures: there is, for example, a need for more housing in that area. There are much-loved green spaces around Corstorphine, and there is the airport, of course, and a number of transport interchanges between road, rail, trams and so on. How, as planners, can you ensure that the multiple and diverse pressures of development are adequately balanced against each other?

10:00

Craig McLaren: We do that with difficulty. I would like to see a move away from planning being thought of as simply involving the processing of planning applications. That is an important part of what planners do, but it tends to be rather reactive. Through the review of the planning system, we are trying to promote a much more front-loaded approach that involves stakeholders, communities and all the other people who are responsible for, or have an interest in, an area coming together to consider the opportunities for that area and the constraints on the vision for the area, and then working out how that vision can be delivered through some sort of route map.

That means saying to people that they have responsibility for doing certain things and for putting resources into certain places. That approach provides a much more holistic view of how that community will work over time. The development plan—or master plan, or whatever—for that area would provide the context for processing planning applications, which gives a more rounded approach to development of the area, with the planning application being just one part of the process rather than being almost all of it.

Donald Cameron: I am pleased to hear that because, in Corstorphine for example, when people hear of a new planning development, they immediately think that it will add to their problems, and their hackles rise at once. That is what they told us last week: they need reassurance. Do any of the other panel members have anything to add on that? How can we nip that concern in the bud and reassure people?

Graham Applegate: We have to encourage people to believe that the planning system can be the solution to a lot of their problems. We have to sell that message by convincing people that the planning errors and things that did not add up in the past will not be repeated in the future and that, instead, the planning system will work beneficially for communities and populations. We need to ensure that people understand that if they embrace the process and become involved in it, they can help to steer and educate the planners, at the same time. There should be two-way communication and full engagement with communities.

Claudia Beamish (South Scotland) (Lab): A challenging issue that we face is in encouraging the involvement of communities that do not necessarily get involved in such issues, either because the people in those communities are too busy or because they face problems relating to low incomes and so on. How can the planning processes be made more inclusive? When we look at who engages and who does not engage, it is quite alarming. I am not criticising organisations that are represented here today; I simply want to hear any thoughts that you have on the issue, because they might be valuable.

The Convener: Before you answer that, I have another question. In the context of new developments, to what extent can incorporating green infrastructure mitigate the impacts of developments, and how well sighted of that opinion are the people who are in charge of new developments?

Craig McLaren: Green infrastructure is becoming a much more mainstream part of development. Planners and local authorities generally try to promote it as much as they can through the local development plan and assessment of planning applications. Developers are starting to think more seriously about green infrastructure when they put in their planning applications, but I think that more work could be done in that regard, to be honest. We are seeing more and more sustainable urban drainage schemes and so on in planning applications, but there is a bit of work to be done to ensure that the original applications that come in think about green infrastructure as a mainstream part of what they do. We are on that road, and the issue is starting to become quite important.

On the issue that Claudia Beamish raised, it is incredibly hard to engage with communities, but it is important that we do so. Community engagement has been a part of the planning system since 1969. Over the past decade or so, planners have moved away from the old traditional approach, in which we used to organise a meeting in a draughty church hall on a Wednesday night when the football was on, so nobody turned up. More creative approaches to engagement are being used now, involving social media and increasing use of charrettes. A number of charrettes have been organised and funded by the Scottish Government; they are a useful way of getting people to talk about what they want for the community at the start of the process, rather than about what they do not want for the community at the end of the process. As far as I can see, people who are using charrettes are trying to engage people who do not generally get engaged. I note that they last for three or four days, which means that people can drop in and drop out of them.

There is still much work to be done on getting to some of the harder-to-reach groups, but the profession is considering how it can do that. As part of that, we support organisations such as Planning Aid Scotland that work with communities and are doing more work with harder-to-reach communities. It shows the depth of commitment to community engagement in the profession that about 20 per cent of RTPI Scotland's members volunteer with Planning Aid Scotland, which is a phenomenal amount for any profession. The will to engage with communities certainly exists, but there are logistical issues that we are still trying to overcome. We are getting there bit by bit and are trying to become more creative, as we take that forward.

Was there another question?

The Convener: We will return to Mr Cameron's question.

Donald Cameron: I will ask a different question about policy integration. A number of layers of government are involved in the matter: local government, the Scottish Government, the UK Government and the EU. What are your observations on that integration? Is it working? How do you deal with a situation in which, for example, a local authority takes a different approach to a neighbouring authority, or if there is, for instance, a different approach taken in Dumfries to that which is taken in Carlisle? How do we deal appropriately with transboundary issues?

Graham Applegate: Policy integration is getting much better than it was. Because air quality is, in effect, devolved to the Scottish Parliament, we have been able to take our own path and are considerably ahead of other parts of the UK in what we do, what we propose and, indeed, pollution levels.

The legislation has pretty much all fallen from the EU and been fully implemented throughout the UK. We have had a UK air quality strategy since 1997, and it has been updated twice since then. The latest version was published in 2007. The broad policy framework is in the background and Scotland has decided to move ahead and to be more proactive in implementing air quality measures and, for example, in imposing stricter limits for particulate matter. That is effective and, because we have that individuality, we have been able to do what we want.

Will you repeat the second question?

Donald Cameron: How do you deal with the situation in which, for example, Glasgow City Council takes a different attitude to low-emission zones than North Lanarkshire Council?

Graham Applegate: One of the main aims of CAFS is to ensure consistency throughout Scotland. The four largest cities have expressed an interest in implementing low-emission zones; initially, the CAFS process will oversee that consistently. We have a national modelling framework that is applied consistently, so that although it provides individual results for each of the cities, the results are comparable.

On the non-low-emission zone local authorities, which are the more rural ones, SEPA and the local authorities are in constant dialogue. There are various liaison groups where best practice can be shared and the fundamentals of CAFS can be brought to the table. The local air quality management process has recently been streamlined to ensure that authorities all report in the same way, and that the data are presented in the same way. SEPA sees the reports from each local authority, so if there are inconsistencies, we

can comment back to the authorities to try to align them better with best practice.

That is challenging with 32 separate authorities, but we have in place a process that ensures wide consistency. Many of the solutions for air quality problems are common: there is nothing wild or wacky out there. People know the solutions and know where they need to be implemented. In most cases, local authorities are doing that.

Stephen Thomson: It is a good question, regarding the relationships between the different levels of government. To take it to the next tier down from what Graham Applegate has been talking about in relation to CAFS, we are in the process of putting the low-emission zone delivery groups on the ground. We have been clear in stating that we want them to be partnerships between central Government and local government. The LEZ delivery groups are set up so that they have members from both levels of government.

In the LEZ delivery group for Glasgow, a suite of professions are bringing their expertise into the room, so the group is not just reliant on environmental professionals—there are people from transport, planning, legal, procurement and equalities. That is happening right now, which can give the committee confidence that that level of engagement between national Government and local government is happening.

To flip it round the other way, we are in contact with the joint equality unit in the UK Government, so that we are at least sighted on the path that it is taking on what might seem like minor topics such as signage for low-emission zones. Even for the best low-emission zone in the entire universe, if there are no signs for it on the way in, no one knows what they are entering. Those signs have to be consistent for anyone travelling, for instance, from London to Manchester to Edinburgh. We are working across national Governments for consistency, which must the key in all this.

Craig McLaren: We have a very useful planning hierarchy. Planning is totally devolved to the Scottish Parliament and Scottish Government, and the hierarchy allows us to consider what happens at national level through the Scottish Government, the national planning framework and Scottish planning policy in another suite of documents. At regional level, in the four city regions we have strategic development plans and strategic development plan authorities, which are a useful way of working across some of the more urban areas to consider the issues and to get agreement on how to develop a strategic development plan. At the local level, we have local development plans. There is a clear hierarchy.

The current review of the planning system is seeking to repurpose—I think that is the term that is used—the strategic development plan authorities and the strategic development plans themselves. The idea behind that is to create much better horizontal integration among planning, transport, infrastructure, regional city deals and so on, which could be useful, although we still have to keep something that gives us a strategic overview of the city regions, because that is what gives us the biggest bang for our buck.

Angus MacDonald (Falkirk East) (SNP): There are 34 distinct actions to be carried out by 2020 in relation to section 14 of CAFS. We have perhaps touched on this in Mark Ruskell's questioning, but can you tell the committee what work each of your respective bodies is carrying out to ensure that the actions that are set out in section 14 of CAFS are being implemented?

Stephen Thomson: From the transport perspective, there are three components to CAFS. The first is linked to existing actions across the likes of active travel, low-emission vehicles and suchlike. That is being taken forward by officials in Transport Scotland.

The second component is linked to the work that is being done under the national low-emission framework and the development of low-emission zones, and I am leading on that work.

The third component is a relatively small set of actions around air quality management areas associated with the trunk road network, one of which is focusing on the A85 in Crieff. We are working with Perth and Kinross Council on its air quality action plan, reviewing that as it is about to go to committee.

Craig McLaren: The RTPI is on the advisory group—the reference group. We were charged with improving the understanding of air quality among planners and ensuring that there is a link between planning and other professions.

As I mentioned, one of the key parts of that work has been to publish guidance for planners, which we did last year with Environmental Protection Scotland. We also held a conference to bring together air quality people with planners, to break down some barriers and to allow people to get different perspectives and an idea of who has done what and what the constraints and opportunities are.

10:15

In the past, we have also worked with SEPA to look at training, although that is not yet where we want it to be. We want to make sure that it is understood that planners do not sit in isolation, which is how they are portrayed, but that they

work with others across local authorities and community planning partnerships. There is a bit of work to be done on that.

We have tried to publicise that within the profession as well, through the journal *Scottish Planner*. We wrote an article on the guidance, and we generally try to tie in air quality much more to the way that we work as a profession. There has been some movement in our doing that.

We also need to make sure that air quality is seen as a key component of the review of the national planning framework and the review of Scottish planning policy, both of which were originally going to happen in 2019 but have been pushed back to 2020. There are references to air pollution in the current versions of both of those reviews, but, as they were published pre-CAFS, we need to make sure that CAFS is mainstreamed into the review documents. We will work to do that as far as we can.

Graham Applegate: SEPA has been charged with delivery of the national modelling framework, which provides the evidence base for the four cities that are currently looking at implementing a low-emission zone. There has been a lot of construction of scientific models, input of data and analysis of outputs, and that information is now feeding into the LEZ proposals for each of those cities.

We have been assisting the Scottish Government in the development of guidance and policy. That has included the revision of the local air quality management system and of policy guidance for local authorities. Through the local air quality management system, we have also been helping local authorities to implement the aspects of CAFS that are appropriate to them, so we have been viewing their reports to see where CAFS is linked in and informing them of where further benefits or gains can be achieved.

Craig McLaren mentioned the training package that SEPA is leading and working on at the moment. The aim is for it to be delivered by the end of this calendar year and to be ready for roll-out in 2018.

As a member of the CAFS governance group, we are also charged with assisting the Scottish Government in overall delivery of the CAFS objectives. Although we might not have regulatory responsibility, we are still providing that assistance.

Angus MacDonald: Would you say that all those actions are being delivered on time and within budget, or are you hitting barriers in the implementation?

Craig McLaren: We did not have a budget for the work, to be honest—we have just done it. We have used staff time more than anything else for what we have done.

As I said, I think that CAFS has acted as a focus. Certainly from the planning profession's perspective, it has focused the mind. In the new iteration of development plans, we will probably see much more emphasis on the role that planning can play in air quality. I am keen to see that.

It is important to say that, although planning is not the silver bullet and is not going to have an immediate impact, it has a role to play. I think that we can all see that.

Having scanned some development plans from different parts of Scotland yesterday, I think that planners have air quality in their minds although they do not necessarily cite it specifically within a policy. Some policies do not go into a plan at all, but air quality does. For example, development plans talk about the quality of public places and public place making, and they talk about whether reducing car travel is necessary. The idea is not specifically mentioned, but improving air quality is part of what they are trying to do.

Mark Ruskell: My question is specifically on local development plans. The process behind the production of an LDP is pretty robust—it involves different stakeholders and the plan goes through a Scottish Government examination at the end of the process. Have there been any examples of SEPA or Transport Scotland stepping in on a local development plan and saying that a major housing allocation or a transport development in a certain place would worsen air quality and that the council therefore has to remove it from its local development plan?

Stephen Thomson: I am not aware of that having happened in relation to transport. That is not to say that it has not been done, but I am not aware of it.

Craig McLaren: I have not seen anything. Statutory consultees have a role in commenting on planning applications and in processing development plans. As I said, there is probably more value in trying to have an up-front policy in place through the development plan. There is a role for Transport Scotland, SEPA and other organisations in engaging at the start of the process so that we get the right policies that present the framework for assessing planning applications.

Graham Applegate: I am not aware of that having happened, but I can certainly check on that and get back to the committee on whether SEPA has commented.

Mark Ruskell: That would be useful. In Perth and Kinross, the director of public health at NHS Tayside objected to a major housing allocation for

800 houses because of a potential impact on the air quality management area. However, the local development plan was approved and that objection is still sitting there. I am curious about that. We talk about good practice, but what is the role of the regulator and Transport Scotland in deciding to go over the heads of local authorities if serious impacts at the national level can be demonstrated?

The Convener: You can come back to us on that in due course.

Angus MacDonald: My question follows on from that and is directed to Craig McLaren. Are planners able to effectively evaluate the cumulative impacts of emissions and develop spatial plans that reduce human exposure?

Craig McLaren: Not all planners, including me, will know about the science of air quality. To be honest, we do not need to. Planners take advice from colleagues who deal with air quality to see the impacts.

The guidance that we published was very much about raising awareness. It talked through the planning process—particularly the processing of planning applications, what should be done at certain times, who should be talked to and what should be thought about in the process. That guidance has raised awareness, but planners will not know the science and mathematics behind it all, because the art and science are quite specialised. When we launched the guidance, we tried to bring together planners with those who are responsible for air quality in local authorities in order to break down the barriers and bring people together to work out whose role it is to do what.

Angus MacDonald: Do you agree that the cumulative impact is becoming more of an issue?

Craig McLaren: Absolutely. The cumulative impact was mentioned in the guidance. We are trained to think beyond the here and now and beyond the immediate geography of an area; we think about how things add up and about their impact over a period of time and within a broader geography. That is one of the key mindsets that planners have. Planners are well suited to think those things through, but they need to work with air quality colleagues as well.

The Convener: It strikes me that airports are magnets for vehicles, whether those be cars, buses or freight vehicles. They attract a great many vehicles in the course of a day and they are often surrounded by housing, but they have little green infrastructure by necessity. To what extent are air quality and pollution around airports a concern?

Craig McLaren: To be honest, I do not know the answer to that question. We try to ensure that airports or any major hubs that attract people are served better by public transport and that we minimise the need for people to travel to them by car. You will have seen that at airports across Scotland. Various initiatives have tried to provide people with facilities and services to enable them to get to airports, an example of which is the Edinburgh tram network. Places such as Glasgow and Edinburgh have also introduced fees for short-stay parking and dropping people off. Those approaches are part of trying to encourage people to use public transport to get to airports.

The Convener: Given the number of car parks that there are around airports for people who are flying off on holiday, there is encouragement to bring vehicles to airports. Is there any statistical information out there about the extent to which airports are a problem in that regard?

Stephen Thomson: I can take a guess at that. To my knowledge, there are no airports within air quality management areas, although I might be wrong about that. Certainly, airports have not been part of the main dialogue in the evidence on air quality management areas that we have looked at.

By their nature, airports tend to be in open spaces whereas the air quality management challenges that we have in Scotland tend to be in urban spaces where there are street canyons and the poor-quality air does not have anywhere to go. By their nature, airports are the opposite of that. For that reason, I would guess that air quality management areas do not have airports within them.

Graham Applegate: I agree. The main problem is access to and from airports and the volume of traffic. For the purposes of local air quality management, an airport would not be included in an air quality management area, because it would not meet the criteria. There would not be human receptors within the grounds of the airport; there would be just a terminal building.

Nevertheless, access is a big issue. I do not think that the effect of airport car parks has been quantified, but a significant amount of traffic is going to the edges of airports, and that may well need investigation in the future.

The Convener: That is what I am getting at. Should that be looked at?

Graham Applegate: It possibly should be looked at, but who would look at it? The local authority must look at the access roads within its area as part of the air quality management process, but, if a problem is not identified, an air quality management area is not required.

It may be that, because the volume of traffic for Scottish airports is not of the same magnitude as the volume for some of the larger ones, an air

quality problem does not currently exist. However, that does not mean that a problem may not exist at some point in the future if airport traffic increases.

John Scott: I want to go back to Stephen Thomson's point. One thing that struck us—it struck me, at any rate—on our visit to Corstorphine and the intersection at St John's Road, where there is a monitor, was the architecture of the buildings around that area and the fact that, unless the wind is blowing down the Glasgow to Edinburgh corridor along Corstorphine Road, there is a problem. Will climate change, as predicted, mitigate the effects of that pollution, given that we are expecting more wind and rain—or fewer high pressure systems, shall we say—in Scotland?

On architecture and planning, I presume that you would no longer want to have high-rise buildings around such intersections, given that they trap the air in those areas instead of allowing it to disperse as it does around airports, as we have just discussed. Will that be a feature of future planning considerations?

Stephen Thomson: I will take your first question. You make a fair point in saying that the impacts of traffic on air quality are somewhat determined by the local meteorology. If the wind is blowing along a street canyon, it will clean out air pollution. If the wind moves and blows at, say, 90 degrees, it will create a vortex, which will do the opposite and hold air pollution in.

I would not say that we are reliant solely on the meteorology to solve our air quality challenges, and that is absolutely not where we want to be. However, the meteorology will play a part, which is why you will see trends on a 24-hour, weekly or even yearly basis depending on the meteorology in Scotland. Even if we did absolutely nothing, the meteorology might contribute to either improving or worsening the air quality.

Craig McLaren: Street canyoning effects were probably not well known among planners until recently. The guidance that I mentioned, which we published with Environmental Protection Scotland, raises the issue for planners to consider as part of their assessment of planning applications and when they put forward development plan policies. Awareness of the issue has been raised and we will wait to see how that is implemented.

Stephen Thomson: Technology is being tested around materials that can be added to buildings or infrastructure to attract pollution and make it stick. The biggest challenge—again, it is linked to the meteorology—is that the result depends on how much time the pollution has to adhere to the material. The theory in the labs is that the pollution will stick to the adhesive material. In reality, with meteorology moving the pollution around, it literally does not have enough time to adhere to the infrastructure.

John Scott: In the design of buildings that are close to areas where air pollution might be a problem, are there cladding materials that should be avoided in order to reduce the problem?

10:30

Craig McLaren: I do not know the answer to that question. I echo what Stephen Thomson said: the guidance says that green spaces and more vegetation can help with stickiness. We and our partners will continue to encourage that as much as possible in new developments.

Stephen Thomson: Highways England is looking at the technology that I have just mentioned with regard to the materials that can be put on to noise barriers, as the issues are a mix of noise and air quality. The work that I have done for the World Road Association involves a technology that is being looked at in Korea. In Europe, there are examples of the use of vegetation as an absorbent for air pollution, which goes back to the role that green infrastructure can play.

Angus MacDonald: On the subject of active travel, do you reckon that the cycle action plan and the national walking strategy are adequate? Has progress been made towards the target of 10 per cent of all journeys being made by bike by 2020?

Stephen Thomson: Colleagues in Transport Scotland seem confident about working towards that target. I am not aware of any updates to the cycle action plan or the national walking strategy, so I take it that the plans are sufficient for where they want to go to in the short to medium term.

Finlay Carson (Galloway and West Dumfries) (Con): How are sources of air pollution that are outwith the control of local authorities, such as trunk roads and areas under SEPA's control, effectively controlled? You mentioned the A75. How do you control, monitor and police it?

Stephen Thomson: For monitoring, we rely on the national network of sensors that the Scottish Government provides for local authorities. We rely on those on the A75. They run through Crieff, and they are fit for purpose. For the mitigation on that scheme, we have been involved from the outset in the co-development of the air quality action plan with Perth and Kinross Council. We have mentioned what can and cannot be done in a place such as Crieff, which has a traditional set-up with a high street, relatively high buildings of three or four storeys and a tight street canyon effect where the pollution does not really have anywhere to go.

For monitoring on the main trunk road network, we have trialled sensors that are low cost relative to the reference equipment that SEPA provides. The reference equipment might cost £20,000 to £30,000, but a low-cost sensor might cost in the region of £500 to £3,000 or £4,000. We have trialled that technology on the trunk road network. For example, when the Forth road bridge was closed, we deployed those sensors at relatively high speed, within a week, just to the north of the Kincardine bridge to see whether there were any trends in the air quality as a result of the bridge closure.

The low-cost air quality sensors are not meant to replace the reference equipment but are simply to highlight whether there is a trend in the movement of air quality. We are more than interested in using low-cost sensors on the trunk road network.

Graham Applegate: In relation to industrial activities, SEPA issues permits under the various legal regimes, such as the pollution prevention and control regime, for operators to carry out their activities within specified limits and controls. A permit will, in all likelihood, have emission limit values for discharges into the atmosphere. Most operators are required to monitor frequently in accordance with the terms and conditions of their permits, and SEPA assesses compliance with those permits via inspections that monitor such things.

Activities that do not fall into SEPA's remit can potentially be regulated under the Clean Air Act 1993. That covers the activities of small-scale emitters of potential pollutants such as smoke, dust and grit, and the local authority is the enforcing agency for those. Taking it down a further level, I add that local authorities also have powers to investigate what are called statutory nuisances where air pollution may be considered to be a nuisance under the Environmental Protection Act 1990. Those involve localised, small-scale emissions.

SEPA does not have a regulatory remit under the 1993 act or statutory nuisances. There is a clear legal break between our regulatory duties and those of the local authorities.

Finlay Carson: I want to go back to the monitors on the A75. New attitude traffic lights are going to be installed in the middle of a village that the A75 travels through. I imagine that there will be some impact from traffic starting and stopping where it does not do that at the moment. Does anyone get involved in looking at the air quality implications of installing such schemes?

Stephen Thomson: "Pass" is the answer that I would start with. The solutions that we would look at for places such as Crieff require us to look at not just the traffic light signals but the road alignment, the speed at which traffic is going through and the parking arrangements, which may be incredibly unpopular and might not be deliverable. There is also the element of looking to the east and west and asking whether there is a way that the traffic can be managed so that the flow of traffic going through the town is such that pollution levels can be reduced, purely because of the density of vehicles that are moving through. We get involved in the management of the trunk road asset where required.

Finlay Carson: It is somewhat disappointing or surprising that there is not a trigger for a consideration of the impact on air quality. I go back to the A75, which is a major trunk road that carries a far higher than average number of heavy goods vehicles, which are considerable emitters of pollutants. A scheme is going to be installed there that, on the face of it, is supposed to help with the health and wellbeing of the community by stopping traffic from speeding within yards of buildings, but there has been no consideration of the impact of a potential increase in pollutants from the starting and stopping of vehicles. Is there no trigger for that when other consultations are going on? You have talked about the situation in Crieff, but it has obviously not happened in Dumfries and Galloway.

Graham Applegate: I am not familiar with that situation so I will not comment on the specifics of it, but when a local authority conducts its annual assessment of air quality, it has to assess any significant proposals or developments that may have an impact on air quality.

I can certainly check Dumfries and Galloway's report for the current year to see whether that scheme has been mentioned. It may have taken account of it and it may be that the emissions are not significant enough to require additional measures. As I say, I do not know the specifics, but I can certainly report back to the committee.

Finlay Carson: My final question is about the powers that you have under section 85 of the Environmental Protection Act 1990. Have you ever considered using those, and do you believe that enforcement provision should be created to allow you to do that?

Graham Applegate: To date, SEPA has not approached the Scottish ministers to use the section 85 powers, primarily because we have always tried to work in conjunction with local authorities in a partnership approach.

As there are no specific enforcement or penalty provisions associated with section 85, the question becomes whether there is any point in using them because, ultimately, SEPA has no recourse to take action against a local authority. It is possibly

the case that we have not used the provisions because there is no penalty provision, but I am not sure whether having such penalty provision would make things more effective.

SEPA has very good relations with local authorities, and it is always better to work in a more constructive way. At this time, there are no local authorities in relation to which we would even consider using section 85 powers, because their performance is very good in relation to the provisions of the act. I do not think that specific enforcement provisions would be beneficial.

Emma Harper: The convener mentioned airports and air quality and Finlay Carson talked about the freight on the A75. I am aware that the air quality at the port of Cairnryan is being monitored and I am waiting on a response from Dumfries and Galloway Council on the level of pollution there. What is being done or can be done around ferry ports as far as freight, idling lorries and the high numbers of vehicles are concerned?

Craig McLaren: That is a difficult one, because ports are there to take road traffic. I am not sure whether we could minimise use of the roads—that is what a planner would try to do—and I do not know whether other things could be done.

Stephen Thomson: Purely on the engine technology that the haulage industry uses for freight, the Euro 6 engines that are used are a lot cleaner than engines have been historically. They have been proven to work in the real world at the level that they should work at, rather than at the theoretical level based on laboratory work. Those in the freight sector who are not using Euro 6 engines are moving towards that type of exhaust technology, which is as clean as it can be.

I will pass on the question about idling vehicles.

Graham Applegate: If a local authority, after conducting monitoring, finds a potential or actual exceedance of standards and is required to declare an air quality management area, that will kick into place the development of an air quality action plan that looks at the specific measures that are required to bring the area back into compliance with the Scottish objectives.

Once a problem is found, the measures kick in. Before that, it is up to the local authority to implement any measures, potentially to avoid the creation of a local air quality management area.

The Convener: Let us say that I am a member of the public who sees an older lorry or bus chugging along a road, apparently spewing out a lot of fumes. What scope do I have to report my concerns that that vehicle is damaging air quality? Who would I go to? What would happen next?

Graham Applegate: I think that that is within the remit of the local authority, but I have to confess that I am not aware what procedure is in place to enable a member of the public to report that.

Stephen Thomson: I think that they would report it to the environmental health section within the local authority in order to get their voice heard.

The Convener: What powers do local authorities have in this area? It is important to get that on the record.

Stephen Thomson: Such reports are the starting point for the monitoring regimes that local authorities have, albeit within the existing air quality management areas. The challenge is for those areas that are not declared as air quality management areas to act as a catalyst to get the local authorities to look at those spaces.

The Convener: To be clear, let us say that a fleet of lorries or buses that is owned by a particular company appears to be problematic. Is there no direct opportunity to address that? Does it have to go through the whole process?

Stephen Thomson: That is my understanding. The matter would have to go to the local authority, which would have to make a call on the level of impact.

10:45

The Convener: Okay. Let us explore the bus issue. We hear about the need for incentives and public support to bring about changes to buses. We have the green bus fund and we hear about incentives for retrofitting, mostly from national Government. I think that Glasgow City Council introduced a retrofitting scheme some years ago, although it had little uptake. That is all well and good, but what about the moral obligation on the bus companies? I acknowledge that there are some great examples, but what about the moral obligation? Why should the public purse be used partially, largely or completely to tackle air pollution that has been created by private businesses?

Stephen Thomson: From what we can see, the bus sector is doing its fair bit to improve the fleet across Scotland. Over 10 per cent of the buses in Scotland are at Euro 6 standard or better in terms of their emissions. A number of operators are actively looking to improve their fleet and move to Euro 6, hybrid or, in Edinburgh's case, fully electric vehicles.

A combination of work has been done through the green bus fund and the submissions that have gone to Mr Mackay for the spending review to support work on low-emission zones, and a big proportion of that would go to the greening of the fleets.

The bus sector is extremely aware of the challenges that it faces with air pollution. I know from speaking to operators that they have talked among themselves about their obligations to increase their patronage by offering an efficient service that meets the environmental credentials of the passengers that they want to carry.

The Convener: What do you say in response to the concerns that have been raised with us during our inquiry that, where we introduce a low-emission zone, we could in theory have the bus companies ensuring that the vehicles that operate in those zones are compliant while they move the polluting vehicles into other parts of major cities, for example?

Stephen Thomson: The design of low-emission zones across Europe has been focused on particular geography. For example, buses that move in and out of low-emission zones tend not to operate only in those zones; they also move out into the suburbs. The gains from having emission standards set within LEZs ripple out beyond their boundaries. We have seen that in many cities across Europe. That is one of the approaches that we are looking to introduce into Scotland's four big cities, and that was stated in the programme for government.

The second aspect is the emission load that certain spaces can carry. In the centres of the big cities where LEZs might be set up, there will be LEZ mitigation to create access restrictions because the pollution load is at a certain level outwith and beyond the zone. There is a carrying capacity within the natural environment to dilute the polluting effects of not just buses but any type of vehicle.

Mark Ruskell: What modelling has been done to look at the number of buses that will have to be retrofitted in order to meet the needs of the initial tranche of four low-emission zones? What budget will be required to deliver that?

Stephen Thomson: Graham Applegate has already mentioned the work that the national modelling framework has put in place. We have collected quite detailed traffic data for four cities in Scotland—Glasgow, Edinburgh, Aberdeen and Dundee—to underpin that air quality modelling.

I will use Glasgow as an example because it will have the first LEZ. The modelling has suggested that we could be looking at upwards of 1,000 buses, depending on the space and how the LEZ is set up. If we focus specifically on buses, the cost of upgrading an old Euro 3 bus to a modern Euro 6 diesel could be anywhere from £200,000 to £230,000. For retrofitting, we could be looking at anywhere from £10,000 to £16,000. The average cost per bus seems to be £15,000. We can start to multiply those numbers up to get an idea of what we could be looking at for the bus sector—assuming that all the money comes from the public purse. It is a substantial figure.

Mark Ruskell: It would be useful if the committee could get hold of exact details of the number of buses that might need to be retrofitted and the potential budget.

Stephen Thomson: We can certainly provide that. It is somewhat dependent on the size of the LEZs. If they start small but grow in size over a period of time, the number of buses that will have to be retrofitted over that time will expand as the LEZs grow.

The Convener: Along with providing what Mr Ruskell has just requested—it was a good idea to ask for that—it would be good if you could provide any evidence of the bus companies playing their part in the costs of retrofitting so that we can get a handle on the extent to which that is going on.

David Stewart (Highlands and Islands) (Lab): I have a few more questions that concentrate on LEZs.

In the view of the panel, will there be a pilot LEZ next year?

Stephen Thomson: Yes.

David Stewart: Why?

Stephen Thomson: First, because there is a stated programme for government commitment to put the first LEZ in place by the end of 2018. That is what my Transport Scotland team has been tasked with doing and we are now setting up the LEZ delivery and leadership groups, which will be chaired by ministers, to make sure that it is delivered on the ground. We have been tasked with delivering it on behalf of ministers so we will aim to do that.

David Stewart: What are the views of the other panellists?

Craig McLaren: I will take Stephen Thomson's word for it. [*Laughter*.]

Graham Applegate: I also believe that there will be an LEZ in place by 2018. SEPA is working closely with Transport Scotland and the Scottish Government in providing the evidence base for various scenarios. I do not see any particular barriers to our achieving the stated aims.

David Stewart: I am looking at some of the evidence that the committee has received from local authorities and others, and I will give you a snapshot of some of the comments received, which include "a lack of guidance", "needs more time", "timescale challenging", "no information in implementation plans" and, obviously from a bus company, "Euro 6 not possible at this time".

I support LEZs. The policy is very ambitious and I have looked carefully at what has happened in London. However, I have concerns about one happening next year. Stephen Thomson has been forthright because that is part of his responsibility, but there are worries in local authorities about LEZs actually happening, and some of the correspondence that I have had with local authorities shows that they are not sure what they are bidding into. Will you comment on their worries about what the scheme will be about and what their role is in devising LEZs?

Stephen Thomson: I have heard the phrase "This is the new new" mentioned several times in relation to low-emission zones in Scotland, and that is correct, given that this will be the first low-emission zone that is put in place in Scotland.

The timescale for delivering LEZs is in three parts. The timescale starts when a local authority publishes the design for the LEZ; the second part is when the LEZ goes live—in Scotland, we have committed to putting one in place by the end of 2018; and the third part is when the LEZ enforcement begins. In the development of lead-in times, it is crucial that there is no confusion between the LEZ going live at the end of 2018 and the beginning of enforcement, which might be a penalty regime and which we do not believe will start immediately on the same day.

There is a three-stage approach to the roll-out of LEZs, and the lead-in time is one of the components that is being discussed in the building Scotland's low-emission zone consultation, which is live just now. I would be worried if local authorities did not have concerns about LEZs and I am relying on them to come up with as many questions as possible so that we can iron them out before the first LEZ is rolled out.

David Stewart: I would like to ask about technology. London has been leading the way on the issue in the UK. It is unfortunate that we could not go ahead with our first panel today but, if my understanding is correct, the system in London, with vehicle number plate recognition technology, has cost about £100 million to set up. That is very expensive. Glasgow has been mentioned as a pilot. Does such technology exist here? If not, do we have the budget to get technology that recognises vehicles automatically as they enter an LEZ?

Stephen Thomson: I have a couple of points. First, automatic number plate recognition—ANPR—technology is used well in Scotland, and it is widespread. It is used for bus lane enforcement. Glasgow is one of many cities that already have bus lane cameras. The technology itself is not new: it is pretty mature, and it is well understood by local authorities. In setting up LEZs, the cost of the technology is not the biggest component—the biggest cost is that of supporting the upgrading of the fleet. The physical construction cost—the cost of the ANPR cameras and the wiring that the system is based on—is not the biggest component of LEZ costs.

That said, the bus lane technology is used solely for that purpose, so if ANPR is the method that Scottish ministers decide to use for LEZs—that is what we have proposed in the consultation—there will be a need to roll out that camera technology in the spaces that we are talking about.

There is then the question whether that technology is fixed, whether it can be mobile or whether it is a mix. I hope that we will find out during the consultation whether the need is for permanent cameras or for a mix, with mobile cameras being used as well.

David Stewart: A key issue that has been of greater controversy is whether older polluting private vehicles should be included. We have seen examples such as the referendum on congestion charging here in Edinburgh, which was defeated. I am not making the argument one way or the other; I am merely making the point that, although I think that all of us in the room understand the worries about pollution in Scotland, there is also the question of how we implement measures. By including private vehicles, which are obviously polluting, we also raise the bar when it comes to opposition. What is Transport Scotland's take on that issue?

Stephen Thomson: In the discussions that we have had with ministers, it has been clear that they want LEZs to be bold and ambitious and to cover a mix of vehicles, including private cars. There has to be a reason for such vehicles not to be included in low-emission zones. That is what we have stated in the consultation.

The bold and ambitious element links into the science that backs up the rationale for a particular vehicle to be included within a LEZ. There are additional secondary elements that could be included to encourage modal shift, which we have heard about this morning. Part of that involves moving people out of private cars and on to other forms of transport. Those in the bus sector are clear that they want journey time reliability to improve. Part of that means having fewer cars on the road and getting the people in those cars on to public transport.

David Stewart: On decision making, we are talking about Glasgow as the pilot next year, with the other three cities having LEZs in 2020. Will local authorities have the power to have a local referendum to decide whether to go ahead with a LEZ, or will the decision be made at Scottish

Government level, so that it will happen and the local authority just has to go along with it?

Stephen Thomson: It is for local authorities to make decisions about the control of transport in their local space. The representatives of the local authorities for the four big cities to whom we have spoken so far, especially in Glasgow and Edinburgh, have publicly committed to low-emission zones. That is what we believe elected members want to push forward. We have meetings planned with Aberdeen City Council and Dundee City Council to gauge their interest in moving from the feasibility of a LEZ to a published political commitment to a LEZ.

David Stewart: So there is no suggestion in your discussions with local authorities that they will require a local referendum in order to go ahead.

11:00

Stephen Thomson: It is not quite a referendum that they will need. The discussions that we have had with Glasgow City Council and the City of Edinburgh Council have been about the need for further consultation on the city-specific designs for LEZs. The consultation that is under way at the moment is on the guiding principles for national standards for LEZs, but I imagine that there will be a desire for a local consultation by Glasgow City Council on the design of the city-specific LEZ that is being worked on for Glasgow.

David Stewart: Should we be aiming to reduce emissions per passenger or per vehicle?

Stephen Thomson: We have to do what is measurable, and that is reducing emissions per vehicle. It is the emissions that come out of a vehicle's tailpipe that we can measure with the equipment that we have at the moment.

In the past year, there have been several publications by Professor David Begg that have made an extremely strong case for looking at the additional metric of emissions per head. That approach looks at the issue from a bus sector perspective, which is about moving 70 people out of 70 cars on to one bus. There is a rationale for looking at the metric of emissions per head, too.

Richard Lyle (Uddingston and Bellshill) (SNP): Before we move off low-emission zones, I have a question for Graham Applegate. I believe that SEPA has done some modelling of LEZs. What are the findings of the SEPA model? Do other classes of vehicle need to be included in LEZs from the outset? Stephen Thomson touched on that.

Graham Applegate: SEPA has conducted modelling for the four cities, and it has concentrated on Glasgow as the first city to have a low-emission zone.

I can submit a report to the committee on the specific findings of the modelling but, in general terms, we found that, in Glasgow, the buses are the greatest contributors to NO_2 pollution and that reducing the emissions from buses would have the greatest immediate impact on air quality in the city. The inclusion of cars would potentially have benefits for congestion and the number of journeys taken, but the air quality benefits would not be as significant as they would be for buses.

The model can run various scenarios based on the vehicle fleet and the levels of pollution, and can determine which are the most appropriate vehicles to target in the first instance. Although the initial focus might be on buses, other vehicle classes will come into a LEZ in the future.

Richard Lyle: As has been said, we visited Corstorphine last week. Corstorphine community council has been busy on this subject, and it is not too happy. It said:

"we have seen no meaningful reduction in the persistent air quality issues in our local community."

In the part of St John's Road that we visited, there has been a monitor in place for some time. Donald Cameron mentioned North Lanarkshire Council, and there has been a monitor at the civic centre in Motherwell for 20 to 25 years, but a lot of councils do not have many monitors.

Are the existing monitoring stations in the right places? Are they collecting the right data to provide a broad picture of air quality across Scotland? Should there be more monitors and broader coverage? Some councils monitor emissions in only three or four areas. Of course, Transport Scotland monitors might not be included among those.

Graham Applegate: At the moment, there are 95 automatic monitors in Scotland.

Richard Lyle: If there are 95 monitors for 32 councils, that is roughly three per council.

Graham Applegate: That is true, if you want to cut it that way, but those monitors fulfil two different purposes. We have monitors that are in place as a requirement of the EU directive, and we have monitors that are required to monitor air quality in local authority areas.

The reporting mechanisms are slightly different. There are strict criteria for where the monitors for EU compliance are placed, whereas local authorities have more discretion about where they place their individual monitors. There are distinct criteria for the siting of the monitors. They are very expensive installations, so the local authority will place a monitor that is not specified under the European criteria in the most appropriate place within its area. There are limited funds for monitoring, although the Scottish Government

makes additional money available each year for local authorities to install further monitoring if they need it, or if they need to look at other aspects.

Local authorities can also conduct what is called non-automatic monitoring. That involves things such as diffusion tubes, which measure the concentration of nitrogen dioxide. They are smaller devices that can be placed on lamp posts. There is a huge amount of data from local authorities, which they then use in their review and assessment of air quality in their areas.

The local authority has to determine where monitoring is required and the extent of monitoring required. In most cases, SEPA is content with the levels of the monitoring that takes place. More monitoring can always be done, and we would welcome more being done, but we recognise the practicalities. Local authorities are doing the best job that they can do within the financial and practical constraints that they have.

The Convener: Before I allow Stephen Thomson in, I would like to clarify something. Is it not the case that, in addition to all of that, SEPA has a number of monitors that local authorities can access for temporary monitoring—outside schools, say? Was SEPA not going to purchase additional monitors?

Graham Applegate: SEPA has two trailer monitors that are used for the airborne hazard emergency response capability that we provide in Scotland for large-scale industrial incidents such as the Buncefield incident. I think that those trailers are available, but whether they are available to a local authority will depend on the uses that SEPA has for them at a particular time.

We have also implemented a volcanic emissions network, which is an early-warning network, mostly of rural air quality monitoring sites in the north-west of Scotland. The local authority has access to that data as well.

The Convener: I thought that smaller-scale equipment was going to be available, too, for example so that temporary monitoring could be set up outside schools.

Graham Applegate: SEPA has various pieces of monitoring equipment available. I am not involved in the process, so I am not aware of how a local authority would request it, but I can certainly find out about that and report back.

The Convener: Before Richard Lyle continues, Claudia Beamish wants to come in.

Claudia Beamish: In its written evidence, SEPA raises a concern about the potential difficulties with assessing local systems' compliance with air quality requirements given the differences with the EU directive. If the data sets are different, I wonder how that can be tackled in the future.

Graham Applegate: The EU directive has very specific reporting requirements that are outlined in the directive itself. Local air quality management works to fulfil a lot of the requirements of the EU directive, but there are slight mismatches between the two. They almost fulfil the same obligations, but they cannot be considered to be directly comparable.

More than anything, it is just about the context in which we view the monitoring data from the two regimes. They are broadly comparable, but it must be recognised that there are significant differences as well.

Stephen Thomson: Going back to the previous point, I note that there is potential to use modelling to underpin and maybe even go beyond what site-specific monitoring can achieve. I think that the approach that has been taken in legislation in the Netherlands uses strategic air quality modelling to identify whether air quality requirements are being breached. We actually do that in Scotland, but from a noise perspective, with the strategic noise mapping that we undertake. We do not measure site-specific noise levels to undertake noise mapping. We do that through modelling.

We could adopt a similar approach in Scotland and use modelling across the spaces. That would potentially have a lower cost than monitoring but cover a much wider area. Again, there are a plethora of data sets that could underpin that. The robustness of that approach would arguably underpin or support the site-specific monitoring regime that we already have.

Richard Lyle: Basically, you are telling the committee that Scotland has a woeful number of pieces of monitoring equipment. We have 95 monitoring stations and two major units. I do not know how many Transport Scotland units there are. Can you be certain that actions that are taken to improve the air quality near known hotspots are effective?

A question that the convener asked reminded me that, sometimes, you drive along the road and see people from the Driver and Vehicle Licensing Agency, an environmental officer, someone from Transport Scotland and, perhaps, a policeman all stopping cars and checking the exhaust fume quality and so on. I only see that occasionally, and I have not seen it recently. Perhaps we need more of that sort of thing.

Might visible air quality information next to monitoring stations be better at Corstorphine? I asked one of the committee members to put their phone near the unit, and the data showed up right away. Should we not have signs above the admittedly woeful number of monitoring stations

that say what the air quality reading is, so that people can understand the situation? It would be similar to what we have with the signs that tell people to reduce their speed or that they are doing 40mph in a 30mph zone.

Graham Applegate: That is probably a matter for the Scottish Government and local authorities. However, the one caution that I would hazard is that the data that comes from those monitoring stations is always provisional, and it eventually has to go through a validation and ratification process, which can result in the data changing. The kind of information that you are talking about would be indicative until such time as it was ratified. I do not know what the practicalities of the costs of the proposal would be, but I know that SEPA has something similar on the Ayrshire coast to indicate the quality of the bathing water.

Stephen Thomson: I might be wrong, but I think that the app for the air quality website has access to the monitoring stations across Scotland. The information is not presented at the location, but it can be accessed, although I think that there might be a time delay of perhaps 24 hours or so.

Richard Lyle: The weather forecast on the television tells you certain information. We do not need to have a number. The sign above the monitoring station could just say whether air quality was good or bad.

Graham Applegate: As Stephen Thomson said, the Scottish Government's air quality website has an air quality forecast that covers the coming four days. However, due to the variability of things such as meteorological conditions, that forecast is subject to change, and should be taken only as an indicator. That data is available in the same location as individual monitoring data is. Along with that, there is guidance on the health impacts and what members of the population should do when air quality is not in the highest category.

The data has to be treated with caution because it can be subject to change. Air quality forecasting is not comparable to weather forecasting.

Richard Lyle: We certainly do not want to become the same as China—we do not want to be walking about with masks.

I want to ask about an issue that has not been addressed. What further can we do to improve air quality? Surely it is not just down to transport.

11:15

We still have factories in this country belching out stuff from their chimneys. The chimneys may be high but, on a cold day, we can see all the fumes belching out. What can we do about that? Remind me—SEPA stands for the Scottish Environment Protection Agency, does it not? It is your job to protect Scotland's population from environmental harm. How are you doing your job? Are you checking factories, particularly on industrial estates, that people are complaining about? Do you have concerns about incinerators? I am sorry to bring up that issue, but it is something that is coming to my area shortly—although I hope not. Do you consider the impact of incinerators in relation to planning in order to protect people from forms of pollution other than transport pollution?

Graham Applegate: SEPA protects and enhances the environment in as far as our legal duties allow us to do so. For example, we are not responsible for local air quality—local authorities are responsible for that. In terms of what we can do, I would like to think that we are doing a very good job.

As I have mentioned, for each specific industrial activity that falls under the terms of the legislation—it is important to remember that some activities do not fall within the legislation and therefore are not regulated by us—we issue licences and permits, conduct compliance inspections and monitoring and respond to public complaints and concerns. What we do is strictly defined in the legislation. That covers the larger-scale industrial activities, including waste management activities.

The Convener: On smaller-scale domestic activities, it has been suggested to the committee that the growth in wood-burning stoves, particularly in urban environments, is a contributory factor worthy of consideration, but no one could quantify the scale of the issue. Is that on your radar?

Graham Applegate: Not really, no. The legislation defines the capacity under which combustion is regulated by SEPA. Where it falls below that level, the regulation enforcement falls to local authorities, because it is seen as being too small for SEPA to worry about.

The EU medium combustion plant directive is being transposed. That should close up some of the gaps in relation to biomass combustion, but very small-scale domestic activities are ultimately the responsibility of local authorities under either the Clean Air Act 1993 or the Environmental Protection Act 1990.

The Convener: I am sorry—I should have phrased that question slightly differently. I was not asking whether that area was your responsibility; rather, I want to know whether it is an issue on which you are sighted. Are you aware that wood-burning stoves, for example, might be a contributory factor that you might want to consider?

Graham Applegate: There is quantification of the potential impact of biomass emissions through local authorities' reviews and assessments of air quality in their area. At the moment, I do not think that the impact is anywhere near the scale of the impact in, for example, London, but there is the potential for such activities to expand considerably. It is definitely an issue on which to keep a watching brief, but at the moment it is just there.

The Convener: Thank you—it was useful to get that on the record.

David Stewart: I have an additional point to make about air quality. The panel may have seen the recent BBC news article "How toxic is your car exhaust?", which found that official estimates of vehicle emissions that were produced under test conditions are not replicated on the road. That affects the London and Paris cleaner vehicle checker. Does that have any implications for your work?

Graham Applegate: Not from SEPA's perspective, no, but it will have implications on the CAFS process, and also the modelling, because we are feeding data into the model based on either real-world or laboratory testing, so we need to be cognisant of where the disparities may occur. I hope that, with the change in the test cycles over the forthcoming years, the gaps will close and we will get a greater understanding of the real-world driving conditions.

Stephen Thomson: We have spoken to the Greater London Authority and Emission Analytics, which are combining to create what is called the EQUA index. That analyses the disparity between real-world emissions by vehicles that might be very new through to those that are quite old in comparison with what the emissions standards say on the tin, so to speak. I know that the GLA is looking to publish the EQUA index, so that individuals can type in their registration number or vehicle type and get an indication of how their seven-year-old Ford Focus, say, compares with a brand new one. We are exploring what that might bring to Scotland.

There is a second tier that relates to the setting of emissions standards within low-emission zones. We base those on the Euro standards, which apply right across Europe. That is in the interests of fairness—it is how we are able to judge everyone's car fairly—but we are curious to explore what the EQUA index could bring to the table.

David Stewart: That would tell you about the seven-year-old Ford Focus under lab conditions, but in reality it might have a much higher emission level—that is the problem.

Stephen Thomson: Potentially, yes.

David Stewart: What are the implications for the Glasgow pilot next year, if that goes ahead then?

Stephen Thomson: The modelling that we are using just now is based on a combination of the traffic data that we have collected and the air quality data that we already have. There is a need for on-going monitoring to prove that what can be achieved in the real world is realised in the real world. One of the underlying tenets of any form of air quality mitigation will be proving that it works in the real world.

Finlay Carson: I was interested in what you said about the use of modelling. We now have monitors all over the country for air temperature, pressure, humidity and whatever, which can give us an idea of what the air pollution is and even things such as pollen counts. We have databases that contain lots of information. There is also the information in the EQUA index, and MOT information is also recorded centrally through a database. Automatic number plate recognition systems are relatively cheap, and they are portable, so they can be moved around and installed at short notice. Is there any joined-up thinking between all those different agencies? There are the MOT reports, speed detectors in the cars and so on, so you could do far more modelling that would rule out the need for expensive air quality monitors. Ultimately, we have computers and lots of data.

That could be used even in the smallest communities. For example, in Springholm it could be very quick—almost instant—to work out what the air quality implications are depending on the way the traffic light sequences work or whatever. Is that something that the different agencies, such as SEPA, Transport Scotland and the DVLA, can work together on?

Stephen Thomson: There is more to be done. The fact that we put CAFS together several years ago shows that we are starting to work together, but more can be done. One of the biggest challenges is to get hold of the big data sets, by which I mean, for example, the ANPR data sets that Police Scotland holds. Those data sets probably have well over 100 million data points, which are rightly protected under privacy rules, but could that data be used in a form cleansed of private information to underpin the modelling? Potentially—I do not know.

Private companies such as TomTom and Uber have data sets; Uber has real-time data on the way its vehicles move. The transport minister had a meeting with Uber several weeks ago, and it said that in theory it could provide such data in a private and confidential manner.

There is data from the bus companies on how the buses move around. The modern ticket machines that have been installed are all global positioning system based, so that is another form of data that could be used to underpin the modelling. In Scotland, the big data sets are there. There are questions about privacy, but if we could get access to those, the granularity in the modelling would be far superior to what we have just now.

Finlay Carson: We are obviously moving towards having digital cities, where congestion charges, air quality charges and parking charges could all be done automatically. Who is leading on that? Who is facilitating the discussions that would see that come about?

Craig McLaren: The digital cities or smart cities agenda has been led by lots of different people. That is probably one of the problems. Some parts are being led by private companies and some by the public sector.

There is an interesting London-based organisation called Future Cities Catapult, which gave an interesting presentation last week that looked at how we use data, how we can use it much more effectively, how we can map it, and some of the ethics around that. We need to see how we can do that.

I know that, as part of the planning review, the Scottish Government has put in place a digital transformation task force that involves such organisations to look at the data issue and see how we can use it in a much smarter way than we do just now. It could be game changing.

Claudia Beamish: I want to focus minds on tackling air quality hotspots. We have had interesting written evidence on a range of measures around prioritising air quality improvement in areas that have seen persistent breaches of NO_2 values. I do not really like the phrase “quick wins”, but I cannot think of a better one. In terms of air pollution, are there initiatives that could be implemented that are not necessarily included in the CAFS or the local air quality action plans?

I will not raise things that have already come up today, but there have been a couple of suggestions, such as including the planting and installation of green infrastructure in planning, the use of dust suppressants, and issuing subsidised public travel passes. I understand that a lot of that is not within the gift of those who are on the panel today, but could you comment on those suggestions and on the setting of expectations that local authorities and planners should take forward those types of initiatives?

Craig McLaren: On the suggestions that you have mentioned, such as temporary planting and green infrastructure, you will have seen the rise of pop-up parks, for example, in cities. Such things are all incredibly useful. They can raise awareness of the issue as well as having an impact.

I would guard against thinking that the quick wins will be the total solution. As I have already said, from the planning perspective, we need to realise that a lot of this will be in the medium to longer term. We should not lose sight of that and get frustrated by the fact that it is taking a wee bit longer for some of these things to turn around.

I am also keen that we realise that we need to work in a proactive way to minimise travel issues at the start rather than dealing with them reactively.

Graham Applegate: There will never be just one solution to improving the air quality problem; it will always require a suite of measures, whether they be hard measures or softer measures. I do not think that the quick wins are there. Given the levels of pollution that we are now trying to get below, the quick wins have gone, because they related to industrial sources and large-scale activities. As Craig McLaren said, this is a medium to long-term problem and a multitude of solutions and measures will require to be implemented to solve it.

The question about expectations is interesting. When CAFS was launched in 2015, everybody expected there to be an overnight improvement in air quality and that was never going to be the case. It is a long-term process. Had it been easy, somebody would have done it before now. We are bringing together new people around a new table to find new solutions for an old problem. Expectation management is important, because we need to communicate the medium to long-term focus of the strategy and not tell people that everything will get better overnight when, in reality, it will not. We are all working towards the common goal over the longer term.

Stephen Thomson: If we cast our view beyond Scotland and the UK and look at some of the C40 cities, we see that they have taken the very aggressive and immediate approach of banning cars. That is one of their solutions; maybe it is just for a day a week or once a month. That is extremely aggressive, but it is effective, and it moves people on to the forms of public transport that we want to see.

11:30

Claudia Beamish: When it comes to the medium term, a possibility that has not come up today is consolidation hubs. My colleague David Stewart visited one of those hubs in Holland, where larger vehicles take goods that are

transferred to be taken into cities. Has any work been done on those at all?

Stephen Thomson: Yes. I know that colleagues in Transport Scotland—not me specifically—are looking at freight consolidation centres and that they have had on-going discussions with the Freight Transport Association and the Road Haulage Association. There are several stages, including bringing larger vehicles to those locations and the so-called last-mile logistics being undertaken in lower-emission or zero-emission vehicles. Transport Scotland is actively looking at that topic.

The Convener: Would you get your colleagues to send us something about that? That would be useful.

Stephen Thomson: Yes.

Claudia Beamish: Finally, we have had interesting discussions this morning about a joined-up approach. Some of the written evidence that we received from councils was helpful. Have there been any discussions about accountability, or is it appropriate to consider accountability being written into the single outcome agreements or the joint health protection plans, for instance, in setting the vision for the future and expectations?

Craig McLaren: I would certainly like single outcome agreements and local outcome improvement plans or whatever to look at such issues. That is the way to get corporate buy-in. From a planning perspective, we have found that we have tended to be out of the loop in respect of such documents, and we have tried to push for a statutory link between community planning and spatial planning in the planning review. That would be very useful. If we want to broaden the number of players involved who have a role to play in that, corporate instruments are useful ways to try to do that.

A slight problem with SOAs and local outcome improvement plans is that every man or woman and their dog tries to get their priority into them, and I know that the people who draw them up find it very difficult to prioritise what should come first and what should come after that. However, there is certainly a case for air quality to be in them.

Stephen Thomson: I echo that. It was not by chance that the Minister for Public Health and Sport was included in CAFS. That was intentional because, ultimately, the dialogue must go towards the role of directors of public health and the national health service. We want fewer people turning up at their front doors. The engagement of those practitioners has a role to play over the coming year or so.

Richard Lyle: I have a quick question. I am sorry, Mr Applegate, but I am going to put you on the spot again. In light of your comments, do you believe that SEPA's powers with regard to air quality should be increased?

Graham Applegate: No, I do not. The legal system that we have is robust as it currently stands and, in the past, the local air quality regime has always been very effective in assessing air quality and identifying where the problems are. The issues have always been about implementing solutions and measures. CAFS now provides the bridging point to implement solutions, and I do not think that SEPA's having additional responsibility would necessarily make the approach more effective.

John Scott: Claudia Beamish articulated very well the vision for the future on integrated healthcare and other things, which I applaud. I have been given a series of questions to ask about the barriers that still exist.

In particular, Aberdeen City Council said in its submission that

"Barriers to successful delivery include a lack of financial and staffing resources within the partner organisations responsible"

for

"implementing the Strategy and local 'buy in' to potentially unpopular measures such as LEZs. Resistance from fleet operators, local business, the public and negative local press may also cause conflict".

Is that a view that you share?

Stephen Thomson: The natural starting point for me is resource.

John Scott: That was going to be the subject of my final question.

Stephen Thomson: From a personal point of view, the resource issue is very real. The actions that we want to take are somewhat dictated by the people hours that we have available to put into them. That is not an excuse; it is just a reality. The funding is being proposed within the spending review, and we are looking for new moneys to address air quality that were not there before. I think that that is a result of CAFS coming together. There is a funding pressure there.

There is a role for the media to play in communicating accurate and concise information. We spend a portion of our time providing press lines that we know are accurate. Whether they are reported is another matter. Messaging can sometimes lead to people being uninformed or misinformed, so the media have a responsibility to ensure that that information is put across concisely. I agree with Aberdeen City Council on all those points.

John Scott: I am not really trying to tempt you into agreeing with things if you do not want to, but McGill's Buses has stated that

"Glasgow wants what London has but does not want to do what London has had to do to get it."

That seems like a real-world statement. Are we trying to do this on the cheap here in Scotland? That is certainly what McGill's Buses appears to be implying in its evidence. Do you agree with that statement? It essentially follows on from the funding issue.

Stephen Thomson: I think that funding is essential—that is black and white. Funding is essential, and I agree with what the likes of McGill's Buses have set out in evidence. Without appropriate funding, we will not be in the place that we want to be. It requires hard cash and hard investment along with behaviour change.

Craig McLaren: I know that planners are not the be-all and end-all when it comes to air quality, although they play an important role, but we said in our evidence that resourcing is a key issue. We have done work that shows that, between 2009 and 2015, we lost 23 per cent of planners in local authorities.

If there is a job for planners to do in this area in terms of development planning and development management, there are fewer of them to do it and they are focusing more on the statutory functions that they have to perform—processing planning applications and publishing development plans. Sometimes, that does not allow for creativity and bits of work around the edges, such as talking to their air quality colleagues. They should be doing that, but they cannot because they are faced with significant resourcing issues.

John Scott: So there is a lack of planners and a lack of money—that is not a good combination. Do you see other barriers as well, since we are on that point? I do not ask from the point of view of being negative. If there are problems to be solved or barriers that need to be overcome, it is better that we as a committee know about them. Does anything else occur to you that you can articulate easily?

Craig McLaren: On resourcing, there are three elements: there is a lack of people, as I have said; there is a lack of budget—£40 million has been taken out of planning services between 2009 and 2015; and there is a need to grow expertise in this area. As I have said already, we have tried to do that within the limited resources that we have. I know that other disciplines and professions are trying to do that as well.

It is about breaking down those silo barriers and making sure that people know how they can work with others, which is a big issue for us all. I think that we are definitely getting there, but sometimes the capacity-building element is put to the bottom of the pile, whereas it can often be the key game changer.

Graham Applegate: CAFS looks at the potential multiple benefits that are available. Where another policy area or source of funding might have positive impacts on air quality but that is not immediately apparent, it tries to tease that out and to embed air quality into other, non-traditional areas. It tries to piggyback on as many relevant policy areas as possible, recognising that although air quality might not be a major consideration, there could be demonstrable benefits to air quality. Its identification of potential co-benefits and multiple benefits is a really positive aspect of CAFS.

John Scott: Indeed.

The need to build new houses is another area in which there is an understandable conflict of interest within the Government. We all aspire to that goal; the figure required in Scotland used to be 35,000 a year, but I am no longer certain what it is. We are not delivering on our housing targets, but if we were, the new housing would be not in our towns but largely in our city areas, where air pollution is already the highest. In city areas, one part of Government would be seeking to improve air quality while another would be seeking to build more houses, which would add to the problem. Will the potential for greater use of electric cars be sufficient to offset the rise in air pollution around city areas from house building?

Stephen Thomson: A couple of points immediately come to mind. The first is to make sure that the charging infrastructure for every property is in place at the front end, when new developments are designed—not when they have been built. We are looking at a game-changing approach to how we move around our spaces. I would like new developments to have that approach as an absolute, rather than an add-on or a nice-to-have.

Secondly, the bus sector wants to be involved in dialogue on the transport design of developments from the outset, so that there is an economic reason for a bus route to go through a development rather than loop round it. Bus operators rightly want to make a profit and have economic routes, but new developments have sometimes been designed in a way that unintentionally causes a bus operator to have to loop back, which doubles the journey.

There are some relatively easy wins that can be achieved at the front end of the design process.

Craig McLaren: You are right that the planners have many different priorities chucked at them and

they have to try to make the whole thing work. That is not always easy, but it is part of the job.

If we want to increase the housing stock while not impacting on air quality, the key is to get houses in the right location, so that they have the right connections and minimise car use, and do not add to it in the first place. We can consider a range of factors, such as the scale of developments, the range of uses within a development—people should not always have to travel to get something—and the density. The design can have an impact, as can the materials that are used; we have touched on that already. The siting is important, and we need to consider the spaces between buildings and how they can be used to soak up—if that is the right term—some of the air quality issues.

Planners face many different priorities. Housing is the one that is being thrown in our faces at the moment. Our job is to come up with a solution that makes sure that what we build is sustainable and has positive rather than negative impacts.

John Scott: The convener has already touched on another conflict: the development of biomass plants and wood-burning stoves in urban areas, which is not improving air quality but reducing it. People in one part of Government are trying to achieve one objective while people in a different part of Government—who might be in the same office—are trying to achieve a conflicting objective. Should more thought be given to avoiding such conflicts? That used to be called "joined-up thinking", which was never an expression that I liked, but it had a point. Should there be more of that?

11:45

Craig McLaren: On several occasions, I have raised with Scottish Government officials and ministers the fact that a number of the 14 bills in the programme for government will affect air quality and planning. There are bills coming up on planning, transport and climate change, and we already have the Islands (Scotland) Bill. Before those bills become acts, we need to make sure that they have been thought through. A conversation needs to be held to make sure that they do not contradict one another and that they complement and support one another. I have been told that that happens and, as the bills come through during the parliamentary session, I hope that that will be the case.

Emma Harper: I have a similar point to the one that John Scott raised. It is about research on air quality. Although someone in Scotland dies from a lung condition every five minutes, people do not realise that air quality impacts their health. I am curious about research into the promotion of knowledge on lung health. Who would conduct such research and who would fund it? I think that the British Heart Foundation spent £6.9 million on medical research in 2015 and came up with some interesting data.

Craig McLaren: The research itself is not the issue, as we probably have the evidence; it is the communication or the articulation of that evidence that is the issue. We have to get better at that.

A big part of the issue is behaviour change. We have been talking about it as being about a change in behaviour by the private sector and the public sector, but there is a responsibility on individuals and people such as ourselves to think about how we change our behaviour. For example, do we need to jump into a car to go to the shops, or should we walk there? We need to push the idea to individuals that they have some responsibility for addressing the issue and that they should not just wait for the Government or someone else to do it for them.

Stephen Thomson: I agree with that. The data in the published research is strong and individual studies are grouped together to give a cumulative effect. I understand that Health Protection Scotland is aware of that research and that it is used to provide advice to ministers.

The evidence is there but, as Craig McLaren said, it is about communicating it in sensible, simple, non-technical language to everyone in Scotland so that they make the right choices, particularly on how they travel and move between their home and work or wherever they have to go. One thing that springs to mind immediately is "attributable deaths", which is very technical, medical-based language. How do we distil that down into something that makes sense to the layperson?

Mark Ruskell: As we draw the session to a close, I am trying to get something clear in my mind. Earlier in the session, Graham Applegate said that he is very confident that we will achieve legal compliance by 2020, and Stephen Thomson said that he is very confident that the Scottish Government will meet its walking and cycling targets—we discussed the 10 per cent target—by 2020. At the same time, throughout the session, you have said that we need to take a longer view and to manage expectations, and that it is all about medium to long-term action and cultural change. How do you square those two ideas? Will we meet the targets or not? Is now the time for you to manage expectations?

Graham Applegate: I was talking specifically about the EU legal targets. The domestic targets are probably the longer-term aspiration and, because the two systems run together but are different, we have to make that separation.

Looking at the EU aspect first, we will be compliant in the three areas in question by 2020, and the likelihood is that Glasgow may also be compliant by then.

Looking at domestic legislation, the AQMA aspect will be a longer-term approach, because those air quality problems are far more localised. The aspiration of CAFS is to remove all those air quality management areas over time. We have a further issue arising, in that the adoption of the $PM^{2.5}$ objective for 2020 is likely to create more air quality management areas, because it will find more problems. That will always be a movable feast and the work of CAFS on local air quality management should, ultimately, end with all those air quality management areas being removed.

The distinction between the two regulatory regimes needs to be clarified, but I am hopeful that the EU compliance will be achieved.

Mark Ruskell: Will we be compliant in terms of nitrous oxide—the NO_x?

Graham Applegate: We will be compliant on NO_2 and, if we are not, compliance will be achieved not very long after 2020.

Stephen Thomson: My mind goes back to the medical evidence that there is no safe limit for particulate matter. Even if we achieve the short-term targets, those targets could well be tightened, and tightened again. For our medium to long-term actions, we should have half an eye on where the air quality needs to be, given that there is no safe level on particulate matter. On the short-term actions, mention has been made several times of the cumulative effect. It is a case of making all the short-term actions support the achievement of the medium and longer-term aspirations.

Mark Ruskell: On your point about walking and cycling targets, 2 per cent of journeys are cycled at the moment. Will we get to 10 per cent by 2020?

Stephen Thomson: That is what my colleagues at Transport Scotland say and I have not read anything that says that that is not the journey—pardon the pun—that we are on.

Craig McLaren: Perhaps I can come in there and put on my hat as the chair of the national walking strategy implementation forum. Walking is on an upward trajectory and we are starting to get some benefits from the strategy and the delivery plan that are now in place. The increase in the active travel budget will also go some way to helping. If we can build on that, I am hopeful that we will meet the targets.

The Convener: I thank all three of you for the evidence that you have given this morning, which has been very helpful to the committee in its consideration of the issue. I remind you to submit as soon as it is convenient any follow-up written evidence that you have undertaken to submit, as there were some things that we will need to look at.

Our next meeting is on 7 November, when the committee will continue to take evidence as part of its inquiry into air quality in Scotland. As we agreed earlier, we will now move into private session.

11:52

Meeting continued in private until 12:36.

Published in Edinburgh by the Scottish Parliamentary Corporate Body, the Scottish Parliament, Edinburgh, EH99 1SP

All documents are available on
the Scottish Parliament website at:

www.parliament.scot

Information on non-endorsed print suppliers
is available here:

www.parliament.scot/documents

For information on the Scottish Parliament contact
Public Information on:

Telephone: 0131 348 5000
Textphone: 0800 092 7100
Email: sp.info@parliament.scot

The Scottish Parliament
Pàrlamaid na h-Alba