



OFFICIAL REPORT
AITHISG OIFIGEIL

Environment, Climate Change and Land Reform Committee

Tuesday 6 December 2016

Session 5



The Scottish Parliament
Pàrlamaid na h-Alba

© Parliamentary copyright. Scottish Parliamentary Corporate Body

Information on the Scottish Parliament's copyright policy can be found on the website - www.parliament.scot or by contacting Public Information on 0131 348 5000

Tuesday 6 December 2016

CONTENTS

	Col.
DECISION ON TAKING BUSINESS IN PRIVATE	1
SCOTTISH WATER'S ANNUAL REPORT 2015-16.....	2
SUBORDINATE LEGISLATION.....	39
Air Quality Standards (Scotland) Amendment Regulations 2016 (SSI 2016/376).....	39

ENVIRONMENT, CLIMATE CHANGE AND LAND REFORM COMMITTEE
14th Meeting 2016, Session 5

CONVENER

*Graeme Dey (Angus South) (SNP)

DEPUTY CONVENER

*Maurice Golden (West Scotland) (Con)

COMMITTEE MEMBERS

*Claudia Beamish (South Scotland) (Lab)
*Alexander Burnett (Aberdeenshire West) (Con)
Finlay Carson (Galloway and West Dumfries) (Con)
*Kate Forbes (Skye, Lochaber and Badenoch) (SNP)
*Jenny Gilruth (Mid Fife and Glenrothes) (SNP)
*Emma Harper (South Scotland) (SNP)
*Angus MacDonald (Falkirk East) (SNP)
*Mark Ruskell (Mid Scotland and Fife) (Green)
*David Stewart (Highlands and Islands) (Lab)

*attended

THE FOLLOWING ALSO PARTICIPATED:

Johanna Dow (Scottish Water Business Stream)
Peter Farrer (Scottish Water)
Douglas Millican (Scottish Water)
Lady Susan Rice CBE (Scottish Water)

CLERK TO THE COMMITTEE

Lynn Tullis

LOCATION

The Robert Burns Room (CR1)

Scottish Parliament

Environment, Climate Change and Land Reform Committee

Tuesday 6 December 2016

[The Convener opened the meeting at 10:03]

Decision on Taking Business in Private

The Convener (Graeme Dey): Good morning, everyone, and welcome to the 14th meeting in session 5 of the Environment, Climate Change and Land Reform Committee. We have apologies from Finlay Carson.

Before we move to the first item on the agenda, I remind everyone present to switch off their mobile phones and electronic devices, as they may affect the broadcasting system.

Agenda item 1 is a decision on taking business in private. Do members agree to take items 4, 5, 6 and 7 in private?

Members indicated agreement.

Scottish Water's Annual Report 2015-16

10:03

The Convener: Agenda item 2 is evidence on Scottish Water's annual report for 2015-16. I welcome our panel of witnesses: Lady Susan Rice, chair of Scottish Water; Johanna Dow, chief executive of Scottish Water Business Stream; Douglas Millican, chief executive of Scottish Water; and Peter Farrer, chief operating officer of Scottish Water.

We move immediately to questions.

David Stewart (Highlands and Islands) (Lab): Good morning. It is nice to speak to you all again. You previously reported to the Infrastructure and Capital Investment Committee—we had a number of questions for you then.

Today, I want to ask a bigger-picture question. How do you decide between setting charges at the right level and investing sufficiently in the business for the longer term? Those are very difficult decisions, but the committee would find it very useful if we had some understanding of how you make them.

Lady Susan Rice CBE (Scottish Water): That is a very important question. I ask Douglas Millican to give details, but I assure members that there is an iterative process of deep thinking behind those decisions.

Douglas Millican (Scottish Water): The process works over a medium-to-long-term planning cycle. We used to operate with five-year planning cycles, but we are now in a six-year one. I will start at the end and work back.

At the end of the process, ahead of the start of any new regulatory period, the Scottish Government issues a direction to us on the improvements that we have to make in the upcoming six years and the principles to be applied in the way that charges are levied on customers. That is all in the context of a regulatory settlement or final determination that is provided by the Water Industry Commission for Scotland, which is our economic regulator.

To work back to the start, it is clear that there are many inputs into that, such as customers' priorities in terms of the existing service and improvements to services, and charge levels and the extent to which customers are willing and would choose to pay more—or less—for different levels of service.

There is then the dynamic of what we need to spend to invest just to maintain the existing infrastructure to deliver a broadly comparable level

of service into the future. There are then legal compliance issues to consider: what we need to do, primarily in terms of investment, to comply with drinking water and environmental legislative requirements.

The final aspect is the role that we play in supporting economic growth and extending the infrastructure to cope with new housing and additional business demands.

All those inputs go in over a two or three-year period. As Susan Rice said, there is an iterative process involving us, customer groups, the economic regulator and ministers. Ultimately, a settlement is set.

We are in a six-year period that started in April 2015 and which runs until March 2021. The priorities were really all confirmed at the end of 2014.

David Stewart: Thank you for that comprehensive answer.

I have another wide question. Scottish Water is a public body that is answerable to the Scottish Government. Does your current model work well for you as chief officers and board members? Obviously, there are different models across the United Kingdom. I am not recommending a model—I merely note that there is a private model in England. I also refer members to my interest as a member of the Co-operative Party, which would argue that mutualisation is another model. Have you had any discussions with ministers about a different way of operating and running?

Lady Rice: I will give a general view. Douglas Millican can speak about any specific conversations with ministers.

Scottish Water's track record speaks for itself when we compare its customer service ratings, effectiveness, productivity and use of investment funds with the track records of the other companies in the UK. It is absolutely outstanding. It was not always outstanding, but Scottish Water has worked to achieve that. That suggests that the current model has great merit.

Delivering in that way depends on the right people being in the executive roles, as is always the case in any business. I can say that because I am not an executive of the company; I chair the board.

If a water company or utility is owned by investors who are looking for shorter-term returns, that can put pressure on that organisation when it has to look to the long-term future. Infrastructure projects take a long time to build. We have to look 25 to 50 years ahead to ensure that we understand what Scotland might be like in the future and that we will be able to deliver safe and adequate water and waste water services. There

is something positive about the ability of the structure that we have to take a long-term view. So far, it has worked well.

Douglas Millican can speak about alternative structures.

Douglas Millican: There has been no discussion at all about alternatives with ministers. I echo Lady Rice's comments from an executive angle. The model that we have, in which the Scottish Government's interests as Scottish Water's owner are strongly aligned with the interests of customers, means that, in effect, everything that we do is orientated towards delivering for our customers.

For example, when we engage our people to drive ever-higher performance, the rationale is that the benefits—whether a higher level of service or greater efficiency—all go back to our customers and to our communities.

From our perspective, the model works extremely well. As every day and year goes by, we look at how we can enhance the way in which we operate to deliver ever-higher levels of service and to become ever-more efficient.

David Stewart: I will move from the bigger picture to the very specific. What will happen to domestic charges after 2018?

Douglas Millican: I will put that question into context. When answering your earlier question, I explained the ministerial principles for charging that were set for this six-year period in the context of the regulator's determination that, across the six years, the prices to customers will fall by 1.8 per cent relative to the rate of inflation. Price changes have happened over the past two years and will happen over next year, and between 2018 and 2021, prices per year will fall on average by 1.5 per cent relative to the rate of inflation. The change will depend on precisely where inflation is at, but we are looking at continuing very modest levels of price change. That is rooted in the work that we did on agreeing our business plan with the customer forum. A key issue that came out of our customer research is that customers value price predictability and stability, with Scottish Water not lurching to make sudden price changes from one year to the next.

David Stewart: On a technical point, the level of inflation that you are monitoring is the consumer prices index. There is a bit of a debate about which measure of inflation we use in a variety of areas. I do not want to go down a pedantic line; I just want to make that point on the record.

Douglas Millican: Yes; to be very clear for the record, the commitment to customers is that price increases are rooted relative to CPI.

David Stewart: Some of my colleagues will look at the overall performance in 2015-16 in more detail, but the general scorecard is very good on every indicator bar one.

I have a customer service point about water leakage, which relates to climate change; as you may know, I have raised the issue in the past. I think that the figure three years ago was that roughly a third of all your water was lost in leakage. That figure may well have changed, but the current target figure for leakage is 500 million litres a day. It is hard to understand what that figure means, so I looked up it up to make it easier for me to understand. It means that the equivalent of 100 Commonwealth pools is lost every day in water leakage. That has huge implications for climate change, because you provide energy for that lost water.

The target seems to be extremely high. I acknowledge that there has been improvement over the past three years, and that the figure is no longer a third, but why is the target so high? Five hundred million litres a day is a phenomenal amount of water.

Douglas Millican: Peter Farrer will pick up the specific details on leakage management. The target of 500 million litres a day is based on the economics. Behind that high number is a good-news story that is rooted in history. Scotland is blessed with a lot of gravity-fed water supplies, which means that—relative to other parts of the UK—Scottish Water consumes far less energy when taking water from source to customers' taps. That factor drives what is, effectively, the economic level of leakage.

My other overview point is that we take leakage very seriously. That is why last year we achieved our target for the end of this regulatory period—in effect, our target for 2020 was achieved in the very first year. There are still the winter months to go, but at the moment we are in a better position than we were at this time last year. We are continuing to bear down on leakage.

Peter Farrer (Scottish Water): Douglas Millican said that we are working to the economic level of leakage—effectively, the point at which the cost of reducing the leakage any further becomes greater than the costs of producing the water in the first place.

However, as technology changes, we are continually developing new and more efficient means of fixing leaks, and the economic cost of leakage is coming down. Progress in the industry will therefore drive further leakage reductions.

10:15

We have been focusing on leakage for a number of years, and we have been extremely successful in dealing with it. Since 2006, when we started to do that, we have reduced our leakage by about 500 million litres per day, which is the equivalent of four times the amount of water that is supplied to the whole of Edinburgh. The big benefit of that, apart from the reduction in energy use and chemical production, is that it provides headroom for growth at our treatment works. By reducing leakage, we can increase the amount of water that we can provide for businesses and household customers. If we had not reduced leakage, we would have had to invest more to do that.

David Stewart: I am sure that the whole committee welcomes those improvements. However, the point that I am making is that it is still a horrendous amount of water to be losing. The figure for 2013 was a third of all the water—I think that your total production at the time was 1.3 billion litres; I am not sure what the current proportion is, but it is probably at just about the equivalent level. Do you take my point that the loss of 100 Commonwealth pools per day is a climate change issue? What are your aspirations for three or four years' time?

Douglas Millican: As Peter Farrer says, it is a dynamic calculation that is kept under review. The main issues from a climate change angle in the Scottish context—the issues in Scotland can be different from those in other places—are the energy and chemicals that are consumed in treating water and the extent to which the water needs to be pumped. We have done a huge amount of work to drive efficiency in the use of energy, to reduce the amount that we consume and to increase the amount of energy that we generate ourselves. For example, by March next year, through our own renewable generation—either what we do directly or what we enable on our land—we will provide as much electricity as we consume. Rolling that on into 2018-19, we expect to be generating, or supporting the generation of, double the amount of electricity that we consume.

In the whole area of carbon reduction, there are a bunch of things that we do. It is an important topic.

The Convener: For the record, is it correct that the improvements that you are talking about relate to the public water supply, or does the figure take account of leakage from private or farmland supplies?

Peter Farrer: The leakage that we measure is everything that is lost from the system, from the

treatment works to the point of use by the customer.

The Convener: Okay. Thank you.

Angus MacDonald (Falkirk East) (SNP): For the record, I declare that I have a family member in the Western Isles who is currently in dispute with Scottish Water in the Court of Session over the alleged poisoning of livestock. We may turn to the issue of spills on farmland later.

For the moment, I will continue to look at investment. A few months ago, the convener and I were pleased to see at first hand the progress that is being made at the Shieldhall tunnel in Glasgow. It is an impressive feat of engineering. Given the number of investments that you are making, and given the diverse and sometimes competing ministerial objectives, how does Scottish Water prioritise its investment decisions?

Douglas Millican: I refer back to my first answer. A huge amount of work has been done over many years through what is called the quality and standards process, which is a ministerial-led process that looks at all the potential different demands from the angles of customer service improvement, asset maintenance, drinking water quality and environmental protection. Those are all assessed and then, having gone through due process, it is ministers who determine the overall objectives that we need to achieve in a period, after looking at the issues relative to, for example, availability of borrowing and what customer charges should be.

Sitting underneath that are details of all the individual projects we need to deliver or the outputs that we need to achieve. An output might be improved drinking water quality to a particular community, or an upgrade to a waste water treatment system. Effectively, the root of the prioritisation is that ministerial-led quality and standards process.

Angus MacDonald: Okay, thanks. We know about the Shieldhall project, but where in Scotland has the most investment taken place during the year, and on what projects?

Douglas Millican: One of the really strong features of the whole Scottish Water model—by which I do not just mean Scottish Water but the industry model that sits behind it and the process of setting ministerial objectives—is that the heart of it is the ambition that every customer in Scotland, irrespective of where they are, should receive the same level of service for the same price. Looking back at the history, I see that that has meant that in different investment periods some communities have had significantly more investment than others. I can look back to periods when we had a huge amount of investment in the Highlands and Islands, for example.

In the current period, the area that is getting the biggest investment is Glasgow. The genesis of that is in the work that has been done on environmental upgrades in Glasgow, partly to comply with the various legal requirements for improvements to discharges into the Clyde and its tributaries, but also to deal with the challenges of flooding from sewers.

That programme of work has been long in the making, and has involved a lot of study of the interdependencies of flows in our sewers with other surface water flows in the Glasgow area, leading to, in this period, about £250 million of investment in Glasgow. Over a 10-year period, we will probably be investing about £500 million in environmental improvements in Glasgow. That is the largest at the moment, but it varies from period to period.

Angus MacDonald: Thanks. How long will it take to get a return on the investment in renewables that you mentioned?

Douglas Millican: We have different forms of investment. On what we are doing directly, we have a lot of hydro turbines in water pipes, small-scale wind, large-scale wind—we invite private developers on to our land to develop large-scale wind schemes—photovoltaic cells, energy that is generated from food waste and even a scheme where we take heat from the sewers to provide the energy for a local college.

There are a bunch of different ways of investing and different commercial models. We are investing directly in some of those models; typically, the return might come in over a four to seven-year period. In other models, in which it is effectively the commercial developers that make the investment, we may take the return in the form of a rental stream or reduced prices for the power that we buy.

The Convener: A proposal for a very substantial wind project in my constituency at Blackwater reservoir was shelved. Is that project permanently shelved or is there a possibility that it will be resurrected?

Douglas Millican: From a technical perspective, the developer still has an option that it pays us an annual fee to keep live. However, on the basis that the project has not got planning consent, I think that it is a long way from ever being developed. If you are asking whether we think that it is likely to be developed, the answer is no.

The Convener: Okay, thank you. That is useful.

Alexander Burnett (Aberdeenshire West) (Con): I refer to my entry in the register of members' interests. I have had a number of dealings with Scottish Water on construction,

development, fishing, private supplies, troughs and a few other matters.

The witnesses mentioned supporting economic growth. In my dealings in the private sector previously and since being elected, I have had a number of conversations with public bodies such as councils, people who work in infrastructure and groups such as the Scottish Futures Trust. They all say that the biggest impediment to growth and delivering projects is Scottish Water. A particular concern is transparency on the delivery of some of the projects. Projects that are talked about as being delivered in the next two years are listed but not scheduled, which does not give clarity to people who are coming in behind that to deliver other projects. How do the witnesses respond to that?

I see that Scottish Water has decided to enter into three new strategic alliances to deliver investment. I believe that the process has taken longer than envisaged. Has any investment slipped because of that and, if so, how does Scottish Water expect to make up some of that ground?

Douglas Millican: I will give you a bit of an overview. I will talk about our investment programme and then Peter Farrer can talk about the work that we do to support development.

At an overall level, our investment programme is absolutely motoring. Last year, we delivered about £480 million of investment, which was consistent with the prior years. This year, it will be up at around £600 million. We are consistently delivering around £50 million a month, so the investment programme is moving throughout the country.

Three new alliances are in place and they are operating really successfully. They work with a number of contractors, including 58 contractors in rural areas. It is quite an elegant hybrid model. For example, a few months ago, I visited a project in Stromness in Orkney. It is a challenging scheme to upgrade the waste water infrastructure in the very tight streets of Stromness and our alliance partner aBV Alliance is working very effectively with a Kirkwall-based contractor to deliver that investment.

Supporting economic growth is an absolute priority for us. Various complexities sit around that space. Sometimes it can be down to certainty about what developments will progress or clarity about who pays for what, but we are absolutely committed to supporting economic growth. If you or any other members want to pass any specific cases our way for us to examine, we will happily consider them. However, we have done a huge amount of work to up our game in that space. I will let Peter Farrer address that.

Peter Farrer: As Douglas Millican said, we want to ensure that our processes are not a barrier to any economic growth and development. Over the past 12 months in particular, we have completely remodelled the part of the business that deals with that.

We can impact on economic growth and development through normal connections to our network. We are starting to see a significant increase in the number of connection applications and there is no doubt that the housing market is starting to heat up. We are considerably above our predictions for household connections for this year. We had predicted in our business plan that there would be about 16,500 and we are now forecasting that there will be about 21,500 for this year. That is an indication of what has happened over the past 18 months since we set the plan. We have completely redeveloped the group to address that because we got some feedback from developers that our processes were not the easiest. We have taken that seriously and turned it around.

Over the regulatory period, we are investing about £220 million in our treatment works to facilitate growth and support economic development. About £80 million of that is from increasing the capacity of our strategic assets—our water and waste water treatment works—to provide the new water capacity or waste water treatment capacity. A further £108 million contributes to developers' costs of providing what we call part 2 and part 3 infrastructure, which is the pipes and the sewers in the ground. Therefore, there is a significant amount of investment.

In terms of the improvements that we have focused on in the past 12 to 18 months, we are working closely with Homes for Scotland. In fact, Susan Rice and the chair of Homes for Scotland have signed a memorandum of understanding, and we are focusing on providing as good a service as we can to the community. We have made improvements to our customer relationship model to ensure that we have the right people speaking to developers, particularly the big developers who have significant strategic schemes across the country. We have also made significant improvements to ensure that we are facilitating all the big strategic schemes that are on the go at the moment, such as the A96 corridor and those in Aberdeen, Shawfair, Perth and Dundee, and we have changed our model to deal with them in a much more customer-focused way than we have done before.

10:30

Alexander Burnett: I welcome that answer and the opportunity to ask about individual cases affecting my constituency. I should note that the

Institution of Civil Engineers gives you a B for delivery, which is a good mark. Do you think that the problem is wider than that, in that it relates to the planning process in Scotland and to when projects in either the public sector or the private sector become live so that you can consider them in your planning? Is there a problem that goes beyond your statutory consideration?

Douglas Millican: I am not sure that we would define it as a problem. The reality is that there are lots of complex and competing priorities between what a local authority might want to achieve, what a developer might want to achieve and the wishes and preferences of a particular community that might be affected. For me, it is all about how we can work most effectively and in the most integrated and anticipatory way with local authorities, which play various different roles as planning authorities, enablers of growth and developers themselves. I try to ensure that I have a regular dialogue with the chief executives of all the local authorities. I was with the chief executive of Stirling Council on Friday, looking at the council's plans for development in the Stirling area, both through the local authority and through the prospective city deal, to ensure that we are totally joined up and that we do all that we can do to support the ambitions and aspirations in that part of the country.

Mark Ruskell (Mid Scotland and Fife) (Green): I should declare an interest as a councillor in Stirling, but I have a question that is slightly different. I was interested in your response to Alexander Burnett about alliances. Does that point towards more outsourcing of services to private contractors over time? That relates to David Stewart's point about mutualisation, because one of the criticisms levelled at Welsh Water is that it is effectively a shell company, and that although it acts ostensibly in the public interest and has public stakeholders involved in the company, pretty much all its services are delivered by private contractors.

The other point that I wanted to make relates to the WIC's report, which, although it is positive in all areas, picks up on the underperformance of completing projects from previous Q and S investment rounds. Do you have any thoughts on the reasons for that? I am aware of one project in Kinghorn that has been delayed for quite complex reasons and is going to be pushed forward to a later timescale, but are there general lessons that can be learned about underdelivery of projects so that future Q and S investment rounds deliver in a timely fashion?

Douglas Millican: I will start with that example and then address the outsourcing question. There is always an opportunity to learn. We have got to be a learning organisation and we can always

learn from things that go well or things that go less well. On the investment programme, and to put the commissioner's comment into context, I should point out that, in answer to an earlier question about ministerial objectives, I referred to a set of defined projects. At the start of the previous regulatory period there were 1,080 of those, and at the end of that regulatory period, in March 2015, we had 37 left to deliver. That was slightly more than we had expected to have at that time, and that is why the commission called it out. I am pleased to note that, of those 37 projects in March 2015, 27 have now been completed. We had completed 22 by March 2016 and we have now taken that up to 27, leaving 10 to go.

I will link that to the next point. We have always had a bit of a mixed-economy model: some things we do in house and others are done by delivery partners in the private sector. We keep under review what should be done by private companies and what we should do internally.

Probably the most significant change that we have made, coming into this period, is that we have brought back in house the up-front thinking and decision making around investment planning. A lot of that has come out of the learning that we have had from lessons in the last investment period. That is incredibly key. We maximise the value in projects by getting the thinking right and trying to get the right scope, understanding all the ground conditions and so forth before we go to site and start working. We have brought a lot of that work in house.

Beyond that aspect, we always keep under review where things should be delivered. We have a pretty stable balance, in which we recognise that our core competence is very much in customer service and in looking after the whole water supply system and the waste water supply system.

Looking to the future, probably the most significant question that we will get into in the next decade is what happens when our various private finance initiative contracts come to an end. Nearly half of our waste water treatment and about 80 per cent of our sludge disposal is handled through nine PFI contracts. The first of those expires at the end of 2021. We have to go through quite a careful thought process there. Do we extend those contracts, continue with some form of private sector participation or bring them back in house, because, fundamentally, waste water treatment is part of our core competence?

Peter Farrer: I will build on that by giving some information on customer service, which Douglas Millican mentioned. Our whole mantra is about putting customers at the heart of our business. We have developed customer end-to-end processes and that work has been carried out by in-house resources, so all the operational response to

customer issues is in house. About 90 per cent of that work in total is carried out by in-house resources. We use some contracted resource as a peak lopping when volumes go up too much, but primarily it is in-house resource.

If we look at that over the years, we see that the WIC report is a perfect example of a situation in which the WIC is calling out that we are delivering a leading level of service for one of the lowest costs in the UK. That has been brought about by a real focus on driving up customer service, reducing costs and improving efficiency of our in-house people as well as the external contractors.

Kate Forbes (Skye, Lochaber and Badenoch) (SNP): Going back, just briefly, to the six-year investment programme, Scottish Water has stated that those three new alliances that we have discussed have

“inevitably impacted on our rate of investment delivery”

and there has been rephasing. Has that rephasing had a budget impact on any individual project? Are any of those now over budget?

Douglas Millican: We look at that in terms of the programme as a whole. The financing that we have is for delivering the programme. The marginal change in phasing—and it is very marginal—has absolutely no impact at all on the total amount of financing that we are able to access to deliver that programme. There is no impact for Government or for customers.

Inevitably, within a portfolio of projects, we are able to deliver some for much less than originally anticipated and others, for whatever reasons, are inherently more challenging. You have swings and roundabouts within individual projects but our whole focus is about delivering the programme within the available financing.

Kate Forbes: On the comment that it has

“inevitably impacted on our rate of investment delivery”,

why have the three new alliances had that impact?

Douglas Millican: It is not so much the three new alliances. The impact is so marginal that, notwithstanding the re-baselining that was done, we still hit our end-of-year overall measure of delivery target on the original profile for delivery. Last year, things got off to a bit of a slow start, and that triggered the re-baselining, but by the time we got to the end of the year, we were in effect back on track when looking at an aggregate level.

What sat behind the recognition that the re-baselining would be a sensible thing to do was that we have made a major change in our approach to investment planning and delivery. We have a move to bring the investment planning activity back in house so that we get the right solutions and understand all the various conditions

before we get to site. That is a big change in itself. For example, we brought in additional resources for business and got people trained up, and then we got the alliances on board.

The worst thing that we could do in delivering an investment programme such as ours would be to rush to site too quickly. It is much better to take time to get the scope right and then go to site. With the glorious benefit of hindsight, we maybe should have allowed more time in our early thinking about how long it might take to make this major change in our mode of planning and delivery but, in reality, we are still broadly on track in relation to the original expectation.

Claudia Beamish (South Scotland) (Lab): Good morning to you all. I have some questions on core competency responsibility and investment. Previously, in the Rural Affairs, Climate Change and Environment Committee, we had dialogue with Scottish Water about the purity of water for shellfish. Will you comment on that competency and how it is developing? Is it still a responsibility? Connected with that, do you have any responsibilities in relation to the aquaculture industry? I do not know whether you do—I am sorry that I have not done that research, but I have not made the time. The Scottish Environment Protection Agency has expressed concerns about pollution in that regard.

There has been a members' business debate in the Parliament on sewage treatment, which you mentioned earlier. Do you have responsibilities in relation to the spreading of sewage sludge on farmland? If so, what are they? Do you have investment plans to upgrade from only drying to heating so that the sewage sludge is more guaranteed not to have pathogens in it?

I have put all those questions out there for whoever wants to answer them. I apologise if they are not within your competency, but they are water related.

Douglas Millican: We will do our very best to answer them. If there are specifics—

Claudia Beamish: If you cannot answer them today, you could write to us.

Douglas Millican: Let me kick off on the shellfish question. Again, I will refer back to some of the stuff that we covered earlier. On the waste water side, ahead of any investment period, SEPA in particular will look at areas where we need to upgrade either our waste water treatment facilities or our networks to improve the quality of discharges to the aquatic environment. It is very much SEPA that has the responsibility for understanding the environmental capacity of any particular water body, and it will ask what Scottish Water, landowners or others need to do to play their part to ensure that the water is protected.

On shellfish water, SEPA will look at the quality of our existing waste water discharges and determine whether the current licence is fit for purpose or whether it needs to be enhanced. If that licence needs to be tightened, we will assess whether we need to make further investment in our waste water facilities to meet the licence standards that will enable SEPA to be satisfied that the shellfish can be protected.

Peter Farrer can talk about what we do from an operational perspective to ensure that we comply, and he will also pick up on the issues on sludge.

10:45

Peter Farrer: In terms of the sludge itself—

Claudia Beamish: Sorry, could you first clarify the point about the shellfish and the quality of water? Have there been any instances of the sort that I was talking about? If you cannot tell us today, could you write to us with that information? The issue of the quality of water is of concern to constituents of mine who work in the industry, but it is also of more general concern with regard to the estuary and marine environment.

Peter Farrer: I do not have any specific information on the impact on shellfish waters, but I can tell you that, in general, the compliance of the waste water at point of discharge has been improving significantly over the years. We have 1,827 waste water treatment works, all with discharge points, and, last year, only six of those failed a part of the SEPA compliance assessment. I am not aware that any of those instances had any impact on shellfish waters.

Claudia Beamish: The compliance level that must be achieved is high—I think that it is level A.

Peter Farrer: We will look into the issue in a bit more detail and get back to you.

Claudia Beamish: Thank you. The issue could have implications for investment.

Could you talk further about the sewage sludge issue?

Peter Farrer: Sewage sludge has for a long time been a part of Scottish Water's sludge strategy and has long been recognised in our industry as one of the best environmental options.

At the moment, land provides an outlet for about 60 per cent of our sewage sludge. Of that 60 per cent, about 80 per cent goes to agriculture, and the remaining amount is used as a fuel—we used it at Longannet power station and we now use it as part of a different process.

We do a lot to ensure that the quality of the sludge is of the right standard, but we are considering making a significant number of

improvements. We are working in conjunction with Water UK, which has implemented what it is calling the UK biosolids assurance scheme, to ensure that the industry is improving procedures and protocols for sludge management so that, when the sludge goes into agriculture, it is of the right standard and quality.

We are considering different processes. We have been trialling a process called bio-thermic digestion, which involves high-temperature anaerobic digestion. That ensures not only that the sludge is of the right quality but that the volume of the sludge is reduced—it can bring the volume down by about 85 to 90 per cent. That reduces the impact of transportation to fields and lessens other environmental impacts.

Angus MacDonald: When the PFI contracts that you mentioned earlier come to an end, what is the likelihood of the incineration of sewage sludge pellets being increased? Figures that I have seen from Sweden and the Netherlands show that we are behind with regard to the number of incineration plants that we have. What percentage of sewage is incinerated in Scotland at the moment, and what is the prospect of increasing the number of incinerators around the country?

Douglas Millican: As I said earlier, about 80 per cent of our sludge is treated under PFI contracts. The biggest contract is with a plant on the east side of Glasgow, which takes half of Scotland's sludge. The plant uses a dryer process, which creates a pellet that is used as a fuel in kilns by a major manufacturing company. That is a good example of sludge being used effectively as a fuel source.

That contract comes to an end in 2026, and what is the right way to progress beyond then will be a major question for us. That is 10 years away. For example, how might technology moving over the next five to 10 years have an impact on what is the most sustainable way to operate, and how do we get the most value from that?

One of the longer-term challenges is that we have to move away from seeing waste water as waste to be treated to seeing it as a resource. How can we maximise the value of what we recover from the various waste schemes? An obvious starting point is to ask how we maximise the energy-generation capacity of sludge. What scope might there be in the future for waste water treatment plants to remove higher levels of nutrients? Some of the elements that sit in waste water are naturally occurring chemicals of which there is a finite supply in the world. Can we, for example, start to recover phosphorus from waste water streams?

There are some really interesting areas for us to look at in the future to try to enhance effectively

the contribution that we can make to greater sustainability.

The Convener: Johanna Dow has been waiting patiently for the last wee while, so we will now move on to Business Stream.

What has been the full impact on Business Stream of the loss of the public sector framework contract? To what extent will profits be impacted going forward? Alongside that, I am interested in hearing how you are preparing for the opening of the English market and what benefits that might bring for Scottish consumers.

Johanna Dow (Scottish Water Business Stream): We had a significant period of time to prepare for the outcome of the loss of the public sector contract. There was an extended period during which the contract was considered, which allowed us the opportunity to prepare for all outcomes. We used that time wisely and took the opportunity to restructure the business and to design processes that are more customer focused. We positioned ourselves to be ready for the opening of the English market, but also to be able to compete more effectively within the Scottish market. There is no doubt that the loss of the public sector contract will have a significant impact on the business in the short term. However, we had prepared for that as one potential outcome.

Regarding our readiness for the English market, the market in England opens in four months' time, on 3 April 2017. That creates a huge opportunity for Business Stream. The size of the market is roughly eight times that of the market that exists in Scotland. I believe that we are ideally placed as an organisation to secure market share in the south. We have eight years of experience of operating in a competitive market here in Scotland, we know what customers want, we have learned from things that we have not done quite so well over the past eight years and we will plough those into compelling propositions for the south.

At the moment, we are going through a period of significant transformation as an organisation; we are particularly focused on the quality of the customer experience that we deliver. I am very cognisant of the fact that we are quite different from Scottish Water in that we operate in a commercial environment within Scotland. If a non-household customer is not satisfied with the level of service that they get from Business Stream, they can choose to go to one of our 23 competitors. Since I took on the role of chief executive of Business Stream two years ago, my focus has been firmly on how to raise the quality of the customer experience that we are delivering for our customers across the UK.

To go back to the question about England, I feel that we are ideally placed to secure market share,

but we will do so in a very targeted manner. We must recognise that there are some segments of that market for which we have a very strong, unique selling point. The geographical dispersion of the customers that we secure will be very important as well.

The Convener: You touched on what you might not have done well over the past eight years. A very large proportion of the complaints that you received relate to bills and charging. How do you respond to that statistic? What are you doing about it?

Johanna Dow: Let us look at our performance over the past two years, and more specifically over the past six months. We have had about 1,000 complaints over the past 12 months. That is from 100,000 customers, so the level of complaints that we receive as an organisation is quite low. Having said that, my position is that we want to seek to deliver a quality of customer service that means that we get it right for customers all the time.

If I look at our customer complaints statistics, I see that in the first six months of this year, relative to the same period last year, we have reduced the number of customer complaints by 53 per cent. In the Scottish Public Services Ombudsman's latest figures, it is reporting a 50 per cent reduction in the number of complaints that have been escalated to it on behalf of Business Stream.

To return to the point that I made earlier, the key focus for me in my role is on enhancing the customer experience. I would love it if we could do that overnight, but the reality is quite different: it takes time to embed processes and systems and to train individuals. However, I would say that all the indicators are moving in the right direction. We measure customer satisfaction independently, on a biannual basis, and the most recent set of results, which was published two months ago, shows a continued upward trajectory in the customer experience.

The Convener: You said that the indicators are moving in the right direction, but you will be aware of the evidence that has been given to the committee by NFU Scotland and Scottish Land & Estates, which chimes with what many of us who represent rural areas have heard about your agricultural customers' experience of the company. How do you respond to the evidence that we have received?

Johanna Dow: I take the concerns that have been raised really seriously. I have reached out to NFU Scotland and asked for specific details on the five cases that it has identified, and I have offered it a single point of contact to deal with any issues that it has in the future. I have followed that up by saying that I am keen to meet it to understand exactly what concerns its constituents are raising.

Without going into the detail of those five cases, by and large the details that are being drawn to our attention in them are fairly complex. We find such details particularly in the agricultural community, where there is often lengthy infrastructure that sits on the farmer's land. Instances of leaks are mentioned, and there are shared supply issues, where a joint supply provides the domestic element in the farmhouse and the agricultural side. Without wishing to make excuses, those particular issues are quite contentious and difficult to resolve. From that perspective, we are working much more closely with Scottish Water to seek resolution of those particular issues.

The Convener: I accept that, but there is a commonality to some of the complaints, particularly around the number of times that meters are read and whether people receive a leakage allowance—as I understand it, in the days of Scottish Water they did. Can we get some clarity on the record on those points? They are at the centre of much of the disgruntlement in the agricultural sector.

Johanna Dow: I will take the point about meter readings first. Over the past 12 months, we have attempted to read 84,000 meters and, of those, we have been unable to read only 9,000. The reasons for not being able to get a read vary, but there are three common themes. If a meter is located internally in a premise, we might not get access to read it, because the premise might be vacant. There can be access issues: there might be a health and safety issue that prevents safe reading of the meter. The third category is where we are unable to locate the meter.

We have an obligation under the market code that governs the non-household market to provide for every customer at least two reads per annum. Although the requirement is two, one of those reads can be provided by the customer. We endeavour to read all our meters at least twice a year.

We recognise the challenges and the fact that we are not able to read 10 per cent of those meters, so we are introducing a series of improvements. We have introduced an improved meter read schedule; we have appointed a third party to recalibrate it to increase the likelihood of being able to get a read. We have introduced an online portal that allows customers to log in and provide details of a time that is most suitable for them to be in the property, so that we can access it and get a read. We have also introduced customer calling cards. When we are unable to get a meter read, we now leave a card with the business customer, to give them alternative routes for sending us a meter read or to enable them to contact us to arrange a time and place that suits.

That is everything that we are doing on the meter read side, and our performance in that area has significantly improved in the past 12 months.

Leaks are always a contentious issue. The policy that we apply for leak allowances is a Scottish Water policy: Scottish Water maintains the assets and grants the leakage allowance. That policy was formalised in 2008, but there was no change in practice. In summary, the customer is responsible for the pipework inside the boundary of their property and Scottish Water is responsible for maintaining the infrastructure between the water main and the property boundary.

Where a leak occurs on a customer's property and it is found to have been caused by Scottish Water or one of its contractors, the customer is eligible for a leak allowance on the full amount. If the leak occurs within the boundary and it is the customer's responsibility, the leak allowance is applied only to the waste water element and not to the water element. Many farmers who have septic tanks have no connection to the waste network, so they will find that they are not eligible to apply for a leak allowance.

11:00

The Convener: How does that approach by Business Stream compare with the previous approach under Scottish Water? Has there been any change at all?

Douglas Millican: We would need to check that out.

The Convener: You can write to us on that. The public believe that there is a different approach, so it would be useful to get clarity on that.

Douglas Millican: Johanna Dow referred to the Scottish Water policy. All those policies impact market rules about how we deal with licence providers—not just specific cases—and we keep them under review. The whole policy of the allowance applying purely to the waste water element is currently being reviewed to consider whether it should be extended to the water side.

The Convener: Thank you. I want to take the discussion in a slightly different direction, but I will let Emma Harper ask a question about metering.

Emma Harper (South Scotland) (SNP): I was at an NFUS Dumfries and Galloway meeting last night and the members brought up similar issues about meters. One of the farmers said that his meter had been moved from the steading to a more remote area—you had to climb a bank and go over a dyke to get to it. That seems odd, especially given the alternatives that you have been describing. The farmers' main problems were poor communication, aggressive debt collection and meter placement. Do you have any

update on that? You said that you have taken a different approach in the last 12 months, so perhaps they have not yet received that information.

Johanna Dow: I will leave the issue of meter location to Peter Farrer, but I will address the debt recovery process. We have had feedback from customers about our debt recovery process. We have worked extensively with Consumer Futures on that process to try to make the debt recovery policy much more equitable for customers and to make them aware of alternative payment options. I am happy to pick up on that specific issue if Ms Harper would like to drop me a note on it.

Peter Farrer: The meters should be put in places where they are easy to read. I am concerned to hear that a meter has been put somewhere that makes it more difficult to read. However, we have to take into account the fact that the meters need to be placed close to the point at which Scottish Water's pipework finishes. If a farmer had a long, private supply pipe to the steading and that was where the meter was, there would be a significant length of pipe where there could be no measurement of any potential leakages or loss. Meters are generally placed at the interface between the Scottish Water pipework and that of the farmer. I can look into that specific case because the meter should not have been put in a place where it is not easy to read.

Emma Harper: Okay, thank you.

The Convener: Johanna Dow, you said that you would take a note of the particular cases highlighted by the NFU. I would be grateful if you would also look into the SLE issue, which relates to a constituent of mine—I declare an interest in that case.

It is clear from the evidence that there is a disconnect in the relationship between Scottish Water and agricultural customers. It would be reassuring to hear that that is a more general point that will be considered in more detail. I hope that you can give us that commitment.

I want to add something else. I have been contacted by a farmer who tells me that Business Stream is sending out reminders on the same day as invoices requiring payment within 14 days. Is that right?

Johanna Dow: If that is happening it will be an isolated incident. Our debt recovery process does not trigger a first recovery letter until 14 days after the bill has been issued. If the two things are landing consecutively that is an isolated incident and is not our intention.

The Convener: I will discuss the specifics of that case with you later, but 14-day payment terms seem rather short for businesses.

Johanna Dow: In the market rules that we operate under, there is a default service standard and a default price that goes with it. Unless water customers negotiate different payment terms, the terms are typically for payment to be due on demand. We allow a grace period of 14 days before we start the debt recovery process, but the invoices are due and payable on demand unless the customer has negotiated different terms with us.

The Convener: Is that laid down for you to follow?

Johanna Dow: That is the default service standard that applies for the default price, which is regulated by the industry.

The Convener: I suspect that Scottish Water and Business Stream take longer than 14 days to pay their suppliers.

Johanna Dow: If I am perfectly honest with you, we allow tolerance around that, so we start with a very gentle reminder on day 14. The actual debt recovery process itself is very extended.

The Convener: Set against that procedure, how long do your organisations take to pay suppliers?

Johanna Dow: That depends on the particular supplier that we contract with. However, our average payment timescale is probably about 28 days.

Douglas Millican: The precise number is set out in our annual report and accounts—I am trying to find it at the moment—but it is very prompt. I recruited my finance director from the private sector three years ago and he was struck by how promptly we pay our suppliers, which is an interesting reflection.

It is absolutely right and proper that we do that, it is part of our duties as a public body and it is part of the commitment that we have made as a business in signing up to the Scottish business pledge.

The Convener: That is welcome. I am just drawing the comparison between how quickly you pay your suppliers and how quickly Business Stream customers are required to pay up.

Claudia Beamish: Johanna Dow, you said that that is the default situation, but I am not quite sure what you mean by "default". If there is more evidence than what has been provided today about people's concerns regarding the expectation for speedy payment, is there any way in which Scottish Water might review that?

Johanna Dow: I referred to the default set of retail charges that exist in the Scottish water industry. I return to my earlier point about Business Stream being one of 24 competitors in that market. Each year, the regulator sets a default

price for retail charges with the expectation that retailers will charge less than that if they can. There is a default set of service standards that go along with the default price—that is the default position that I referred to.

As I said before, we have been working proactively with Consumer Futures to look at particular concerns that customers have expressed about debt recovery practices and payment terms. We would happily take on board any additional feedback that you have to put into that process.

Mark Ruskell: If the WIC sets the default service standard, to what extent are the commissioners open to customer concerns and to the incidents that we have heard today? Do they take on board the views of customers and stakeholders, or is there a role for ministerial direction?

Johanna Dow: The commissioners very much take on board the views of customers, and customers can contact the WIC directly if they have specific concerns. I have already mentioned the SPSO—the ombudsman who also operates in that space—so there are numerous avenues for customers to explore. We are more than happy to address the issues directly, if we understand exactly what the concerns are.

Mark Ruskell: That is an issue for the WIC; it is not an issue for you, because you are in a regulated market and the WIC sets the standards.

Johanna Dow: There are set default standards but, to retain customers, we need to constantly raise the bar from the service perspective. There is nothing preventing us from doing something different from the default standards.

Maurice Golden (West Scotland) (Con): I will ask about the non-regulated businesses and the wider economic impact, first in relation to Scottish Water Horizons. You mentioned a number of renewable technologies that you are involved in, from hydro turbines to heat from sewers. There have been lower profits over the past year, compared with previous years. What are the prospects, not just for profit but—more important for this committee—for investment in renewable technologies and for such technologies to impact positively on climate change?

Douglas Millican: Scottish Water Horizons is, in effect, an umbrella body, through which we develop all the activities that exploit the organisation's assets, resources and intellectual property that sit outside our core, regulated service of water supply and waste water services. There is quite a diversity of activity in that regard. There is quite an entrepreneurial culture; Horizons is always in the business of looking at new

opportunities. I can tell you about what is currently on the horizon, but that can change over time.

Horizons has played a significant role in renewables in recent years, putting in photovoltaic panels, small-scale wind turbines and hydro turbine facilities. In the past year, the new activity for Horizons has been heat from sewage. The pioneering scheme—it is a UK first—is in Galashiels. In effect, the sewer that feeds the town's waste water treatment works is intercepted and heat is taken out of it to power Borders College Galashiels.

What has emerged from the project is that we have entered into a much wider partnership with the developer, SHARC Energy Systems, to consider where else in Scotland we might apply the approach. The short answer is that there is lots of scope. The preconditions that make such schemes work from the technical and commercial angles are access to a waste water pipe or sewer that is in close proximity to customers, and the approach probably works best with public sector customers, where there is the prospect of longevity and the investment can be made in the heat-transfer technology against a secure income stream.

I mentioned my meeting with the chief executive of Stirling Council. In Stirling, a very live scheme is being considered. There are a number of possible schemes across Scotland; only time will tell how many will come off, but wherever there is scope to deploy the model in a commercially successful way, we will pursue the opportunity.

Equally, we will pursue opportunities as innovations come in over time and we get access to new technologies or the cost of technology drops, so that something that was not commercially viable yesterday becomes commercially viable. I think that, in the medium term, heat from sewage is the most exciting prospect ahead of us in the next few years.

Maurice Golden: That is interesting. You said that the payback period can be four to seven years. Many chief executives in more commercial environments would think that that was too long. It seems that you are willing to take a longer-term approach and extend the payback period for water-based heat pumps and heat from sewage. Will that reflect on the overall profitability of Horizons?

Douglas Millican: The model is that, in effect, Horizons is an enabler, and it is SHARC Energy or another company that invests in the technology and does all the hook-up—if you like—with the heating systems in the public sector body. It is for that company to take a view on the period over which it requires a commercial return. There is no doubt that if it has a public sector client who is

signing up to a long-term contract and has a secure revenue stream, some of the risks that are associated with the scheme are inherently reduced, which allows the company to take a much longer-term view of the required period for payback. That is the commercial model that we currently have.

Maurice Golden: I was interested to read about Scottish Water International's four strategic target markets. I also note that profit before tax is down. I wonder how you see those markets expanding. Also, some nations in those markets have individual statutory bodies that are undertaking consultancy services of their own. Former colleagues of mine are in one such body: the Murray-Darling Basin Authority, previously a commission. How do you see that Scottish Water International work expanding and how can you export across the globe the environmental technologies that you lead in?

11:15

Douglas Millican: Looking at it from a profit angle, our historical profit streams have come from two sources: the fees for the people whom we deploy and, to a degree, the sale of intellectual property in the form of operating manuals and the like. That is what can contribute a wee bit to the lumpiness of the profit stream. However, the profits in relation to turnover are strong.

We have been operating the Scottish Water International business for four or five years, and we will refine the approach that we take for it as time goes on. Scottish Water's unique selling point is that we are a commercially successful water company in public ownership. In most places in the world, water continues to be in public ownership and therefore there is quite a degree of interest in how to run a commercially successful water company in public ownership with a focus on customer service and efficiency. Responding to that interest does not usually mean having lots of people on the ground for extended periods; it is about sharing knowledge and expertise over often quite short periods.

We might change our model so that it might involve fewer people being permanently overseas and more people going there for shorter durations on assignment. We have been working in Qatar, for example, for the past four or five years, but that contract comes to an end in March next year. Ireland is a growth area for us at the moment because a body called Irish Water has been created, which has certain similarities to Scottish Water in that it is in public ownership, albeit that its operations are currently spread through the local authorities. We are engaged in a number of different contracts in supporting Irish Water, with

the core challenge being how it becomes commercially successful while in public ownership.

Maurice Golden: Would you consider link-ups with Scottish-based small and medium-sized enterprises or businesses with regard to the export market, so that you can provide not only the people and expertise but technological solutions that maximise the benefits that we have in terms of Scottish Development International and building up the export portfolio?

Douglas Millican: Absolutely. There are many ways in which that could develop. It is about how we can maximise the value and benefits that we have across the broader water sector in Scotland to maximise in turn Scotland's export potential.

Jenny Gilruth (Mid Fife and Glenrothes) (SNP): Douglas Millican, you talked about taking a longer-term view and I will ask about the future of your workforce. I understand that you offer a number of training opportunities for young people in the science, technology, engineering and mathematics—STEM—subjects and that you also offer training opportunities to women. However, you will be cognisant of the fact that only just over a quarter of your workforce is female. How does Scottish Water seek to tackle that gender segregation in the workforce? Is any of your work on training in STEM subjects tagged to the Scottish Government's ambitions on closing the attainment gap?

Douglas Millican: We do a huge amount of work in that area on many levels and I could pull many themes from it. We have a huge focus on recognising and valuing diversity in our workforce. For example, twice a year the executive team gets face to face with everybody in a leadership position in Scottish Water—we have about 600 people in leadership positions across our business—and probably the single biggest topic that we focused on in our sessions in November was diversity and inclusion. We encourage diversity not only in gender but in all the protected characteristics.

Sticking specifically to the gender issue, the figures that you cited are for the workforce as a whole. If I look at some of our first-level professional roles, 40 per cent of the people at that level are female. If I look at our future leadership development programme, 63 per cent of the participants are female. There is a huge amount that we do to encourage that.

To come back to STEM subjects, we have a real focus on that in relation to the bias for our graduate intake, as we particularly look to recruit people from STEM backgrounds. As part of that, we do quite a lot of work right down into schools, to try to encourage young people to consider careers in engineering.

The Convener: Claudia Beamish has a brief supplementary on Scottish Water International.

Claudia Beamish: Have you considered, or would you consider, opportunities to support countries, states or regions internationally, in dialogue with the Scottish Government—for instance, in relation to the climate justice fund? I appreciate that that would be a challenge, especially in the context of slightly lower profits for the international aspects of your role. I think that it is important for a public body to send that kind of message, and an international opportunity might be available.

Douglas Millican: I absolutely agree with that, but there are two or three different aspects to tease out. For a long time, we have had a strong commitment through the charity Water Aid. We do a lot of work through Water Aid to support international development work; in fact, we had a team out in Zambia in the last year or so.

We are actively in dialogue with the Scottish Government about what else we might formalise through Scottish Water International and Water Aid to support work in a particular country. It is a rich area to pursue, but we need to recognise that, clearly, the specific needs in many developing countries are quite different from the areas where we have our core expertise, so it is appropriate that we work in partnership with people in those countries.

Mark Ruskell: I know that one of your key international target markets is Canada. To what extent have you analysed the opportunities and the threats that may arise from the comprehensive economic and trade agreement?

Douglas Millican: I am not going to comment on that latter point because it is not something that I am personally familiar with. The work that we have done in Canada to date has all been in Alberta. Some years ago, we helped to develop drinking water safety plans there and, more recently, we have worked with the city of Calgary on a review of how it could improve the efficiency of two different aspects of its water service activities.

We are setting up our international activities to respond to opportunities where they genuinely exist. We are not resourcing Scottish Water International with lots of people who we then have to find work for simply to employ them and cover their costs. We are responding to where there are real market opportunities and bringing people in on secondment from Scottish Water to fulfil real needs.

Mark Ruskell: Could your public sector status be challenged under CETA? Have you done any analysis on that?

Douglas Millican: I would need to take that question away and give a response afterwards.

Mark Ruskell: CETA will be signed in a couple of weeks' time, so time is running out if you think that there are opportunities or threats with it.

The Convener: It would be useful if Mr Millican could give us a view on that as quickly as he can.

Douglas Millican: That is fine.

The Convener: We will move on to the issue of vulnerable customers.

Jenny Gilruth: I appreciate that Scottish Water does not bill its customers directly—that is done through the local authority. However, I think that there is a level of confusion among those who are exempt from paying council tax, for example, who assume that they are equally exempt from paying water charges. Indeed, the Citizens Advice Scotland report that was published last year flagged up that some authorities have been applying to the Department for Work and Pensions to make additional deductions from people's benefits through the water direct scheme. First, what do you see as Scottish Water's social responsibility in relation to protecting vulnerable people? Secondly, are you aware of the extent to which the water direct scheme is being used by local authorities across the country?

Douglas Millican: There are probably a number of different points to tease out here. First, I go back to a point that I made at the beginning. It is ministers who set the principles of charging that apply. At the heart of that is something powerful about how we ensure that water charges are as low and as affordable as possible for all our customers. A huge amount of protection is built into the charging structure, partly because it mirrors the council tax structure but also because of the discounts that can be accessed. Over 20 per cent of our household customers qualify for some form of support. That is not free. It comes at a cost of about £36 million, which is borne by all our other customers.

Secondly, to make things as affordable as possible, it is in all our customers' interests that we maximise the level of collection of water charges, because any uncollected water charges fall as a burden on those customers who do pay their bills. That is why we have been very successfully working with local authorities over many years to drive up the level of collections.

On the specifics, the water direct scheme has been piloted in a couple of local authority areas and it is being rolled out to a few others. The feedback that we have had from one of the pilot areas is that there has been little complaint, but this will all be closely monitored by us and indeed by the Scottish Government, and the findings will

feed into the long-term charging review that will inform the principles of charging for the period 2021 to 2027.

Claudia Beamish: The next subject is climate change. I will start by asking the panel some questions on mitigation before Mark Ruskell asks questions on adaptation.

As you will know, part 4 of the Climate Change (Scotland) Act 2009 places duties on public bodies, and in 2014 Scottish ministers gave Scottish Water additional direction on climate change mitigation, which focused on both direct greenhouse gas emissions and energy use. I am not sure who would like to answer this question or whether a range of members of the panel will want to comment, but what emissions reductions has Scottish Water achieved to date and how do they compare with Scotland's target to cut emissions by at least 42 per cent by 2020?

Where you consider that investment decisions might need to be made that have potential to reduce climate change emissions, over what timescales do you consider the cost effectiveness of such decisions and what payback periods do you consider to be cost effective?

Those questions are broad but also detailed. If you want to write to us on some of the issues, you can do so, but it would be helpful for us to understand the position, especially in view of the sharing of information between public bodies. You will know that the public sector forum that you were represented on in the previous session of Parliament has made a big contribution on that.

Douglas Millican: You have raised a number of different points. We will do our best to address them.

The starting point is to recognise that the very act of providing really high-quality drinking water and the quality of treatment that we now provide to waste water discharges is inherently energy consumptive.

I refer back to our earlier discussion about the protection of shellfish waters. We had to make major investment in Stranraer to improve the quality of waste water discharges to Loch Ryan, partly to comply with the urban waste water treatment directive but also to protect the shellfish waters there. That scheme has ended up taking the treated waste water up over the hill and down to the Irish Sea, and that alone has an energy consumption cost of half a million pounds a year. It is important to recognise that energy consumption is inherently built into our efforts to improve drinking water and the quality of discharges to the aquatic environment.

11:30

Notwithstanding that inherent increasing demand for energy over many years, we have achieved year-on-year reductions in the carbon that is consumed in our activities over a 10-year period. For example, in the past year, we achieved a further 3.5 per cent reduction in our carbon footprint.

Attempts to improve the energy efficiency of our activity are at the heart of the work that we do in this area. Leakage reduction is a good example of that. We also think about what we can do to increase the amount of renewable energy that we consume, particularly renewable energy that is generated close to the point at which we need to consume it.

Peter Farrer can expand on that.

Peter Farrer: We are doing a significant amount on energy efficiency, particularly at treatment works. For example, we can put in far more energy-efficient pumps and motors than we could a number of years ago. When we do capital maintenance to upgrade works, we can produce a significant benefit if we put in energy-efficient pumps and motors. We are putting in place a number of control systems to control our processes so that they come on only when they are absolutely needed. More automation of treatment works drives significant energy reductions. We are doing significant things to reduce energy use over our whole stock of assets.

Johanna Dow: Business Stream is aware of its environmental footprint but, over the past eight years, we have also helped our customers to focus on using less water. That has enabled them to achieve a 24 billion litre reduction in the amount of water that is used, which equates to a carbon saving of 42,000 tonnes.

Claudia Beamish: Has an assessment been done of reducing energy use in demanding buildings and in your fleet? Do you intend to carry out projects to increase awareness of these issues in your workforce? If you cannot answer those questions today, you could answer them in writing.

Douglas Millican: A lot of activity is going on across the board in that regard. Scottish Water is in the business of protecting public health and the environment. The sustainability aspects that sit with that flow right through our activities. There are many examples that we can give you in response to your question, and we can provide something to you in writing on that.

Claudia Beamish: And there might be good stories to tell in terms of your profits, as well—the two aspects are not mutually exclusive.

Douglas Millican: Absolutely, and the great benefit of the model that we have is that the savings that we make flow back to customers.

Mark Ruskell: Turning to the flipside of the issue, which is climate change and adaptation, what is your approach to assessing what risks there are in that regard? Clearly, there are a number of high-profile ones such as the capacity of the sewerage system, water shortages and the good ecological condition of our water resources. I see those as the main ones. What long-term thinking are you undertaking on those issues?

Douglas Millican: The changing climate is already bringing us many challenges, never mind the ones that will come in the years and decades to come. The most obvious one is the impact of more intense storms. Obviously, the adequacy of the capacity of our sewerage systems is relevant in that regard, as you note. However, there is also an impact through the run-off from our hillsides into the water bodies from which we abstract water for drinking-water purposes. For example, our two water treatment plants that serve Aberdeen abstract the water from the River Dee. When there are more intense storms upstream in the catchment, more organic material can be washed down off the hillsides and into the river, and that can create a greater load that we have to treat and deal with. Over time, that will cause changes and we will need to put additional filtration in place to take out that organic load before it goes through the full treatment process.

The main issue is probably sewer capacity. Glasgow was the first area that we looked at in earnest. Earlier, I referred to all the investment that we are doing in Glasgow. The genesis of that was storms back in the summer of 2002, when the east end of Glasgow was inundated with excess surface water. Since then, we have worked in partnership—that is a key aspect—with other public bodies, such as Glasgow City Council, SEPA and Clyde Gateway to assess the different issues that need to be looked at on a multi-agency basis to come up with the right holistic solutions, whether we deliver them on our own or the council does, and what preventative measures could be taken to hold surface water at source, as Clyde Gateway, for example, has done as part of its development.

Taking the success of that partnership model, in the 2010 to 2015 period we developed five integrated catchment studies in five other major urban areas in Scotland. We took a lead role working with the local authorities in looking at the interplay between the sewer systems and surface water flows. Having done that in the 2010 to 2015 period, we are doing a further 15 integrated catchment studies in the 2015 to 2021 period. Once all those studies have been completed, the

next stage will be to look at the options that could be developed and then to progress them in future investment plans.

Assessing the flood risk to some of our critical assets is another area that we have looked at in the past and will need to keep looking at. We have done a lot of work to improve the ability of our water treatment plants and pumping stations to withstand major flood events, but it is clear that, in the context of climate change, what might be appropriate in 2016 might not be appropriate in 2026 or 2036. Therefore, we will need to keep that under review.

The other issue to highlight is what we need to do from a drought resilience angle. We have done quite a bit of work in recent years to improve the security of supply in a lot of our water resource zones. It is clear that the work that we have done to reduce leakage, for example, has helped that, but we have also raised dam levels in some of our reservoirs to give us greater storage and resilience in extended periods of drought. That is another area that we will keep under review.

Mark Ruskell: There is a wider holistic benefit from some of the projects that you have pointed to. I am thinking in particular about forestry work that you have done at Loch Katrine. Is there a danger that the WIC could turn round and say, “That is all very well but, at the end of the day, it is not delivering the lowest cost to consumers or investing in what we want you to invest in, which is the water supply system”? How do you square that? Are there challenges in your being an economically regulated industry that clearly has the opportunity to spread wider benefits into other areas of public policy?

Douglas Millican: That is quite an easy question to deal with. It goes back to the elegance of the Scottish water industry system. In effect, the ministers sit at the pinnacle of the decision-making tree. They set the investment objectives, the priorities and the service standards that we must achieve. The economic regulator’s responsibility is to determine the lowest reasonable overall cost of delivering ministers’ objectives. Its economic assessment does not relate to its view of priorities; it relates to ministers’ views of priorities.

Claudia Beamish: On adaptation, your 2015 water resource plan, whose summary report I have looked at, has 11 different scenarios for the risks of climate change to water. It might seem to be a bit odd to talk about the lack of resource in Scotland, but let us hope that we do not get to the most serious scenario, which has serious implications. I wonder how you are able to rationalise planning for something that may never happen. If it did, it would be very serious for the people of Scotland and their access to water.

Douglas Millican: At the heart of all this is risk assessment. It is very important when we look at water supplies to think not about Scotland but about individual areas. For example, in areas that tend to have naturally high rainfall such as the Western Isles, in recent years when we have had extended dry periods, we have come across particular challenges. We have to look at appropriate solutions for particular areas.

However, over time—certainly on the mainland—we will be looking at how we can join up different water supply areas. Currently, we are investing in linking up the water supply system in Ayrshire to that in Glasgow. We are doing that to meet a number of different resilience objectives, recognising the risks, which can take different forms—and indeed the events can take different forms.

It is about how we build more resilience into the system to deal with weather issues or infrastructure failures. At the heart of our business, we plan to deliver consistently great service, but two challenges are ever before us—the climate and infrastructure failure. Both those issues will affect us to different degrees. Our job is to work out how we can cost effectively build as much resilience into the system as possible. However, at the end of the day, we will never be able to afford to invest as a country to cater for every possible eventuality. It is just something that we, together with other regulators and the Government, need to keep under review as we go forward. We always need to keep determining what it is appropriate to do, looking at the next five to 10 years.

The Convener: To move to a slightly different subject, peatland restoration is accepted as having climate change as well as biodiversity benefits, but it can also benefit water quality. I want to explore briefly whether Scottish Water helps to fund peatland restoration projects in the vicinity of reservoir catchments.

Peter Farrer: We have not yet undertaken any peatland restoration, but we have done significant investigations into areas that may be suitable for restoration projects. In SR15, which is this regulatory period, we have a project on the go to survey and monitor 21 of our water treatment works with regard to the condition of peatlands, because that can have a big impact on organic carbon and trihalomethane—THM—production at our treatment works.

We have identified a few sites that we will take into our IR18 regulatory process. There was a chunk of money that was not allocated to particular projects in our regulatory programme. We will take various issues to a review as part of the IR18 process and we will make sure that we can get funding to deal with restoration issues in the latter part of this regulatory period.

The Convener: That is good and welcome news.

Maurice Golden: We have heard a bit about some of your circular economy activities, but will you say a bit more about any work that you have been conducting on phosphorus and priority substance recovery and on anaerobic digestion?

Douglas Millican: That is all fairly early-stage work that is about looking at the art of the possible, particularly in relation to cost effectiveness. There are countries that are further advanced in nutrient recovery than we are. From an economic perspective, it would be quite challenging for us to do at the moment, but it is absolutely something that we are looking at as we plan for the 2021 to 2027 period. We are looking at what scope there is, including how we might design waste water treatment plants to support such nutrient recovery.

11:45

Peter Farrer: To facilitate that, we have created two development centres in redundant assets that we have—one is at a water treatment works and one is at a waste water treatment works. We have opened those places up to technology companies to work with us on finding and piloting new technologies to deal with such issues, but we are at an early stage in the process.

Maurice Golden: There is a small business research initiative that is funded by the Scottish Government, Highlands and Islands Enterprise and Zero Waste Scotland—I declare an interest in that I helped to set it up—that is looking at recovering phosphorus and priority substances. Scottish Water is ideally placed to support that initiative and Scottish small businesses that are doing such work. It is welcome that you are incorporating that into your planning. At Deerdykes, there were issues to do with odour in 2012, but they are now firmly in the past. Will you continue to look at that technology as a solution to food waste, particularly in our island and rural communities?

Douglas Millican: It is always important to recognise and exploit the core competence of a business and to recognise when other people may be better placed to meet a particular market need or opportunity. The waste facility at Deerdykes converts food waste into energy. We have learned a lot about that operation over the past few years and we are increasing its efficiency and output. However, I am not sure that we would ever view it as a core competence of Scottish Water that we would choose to invest in to scale up; I think that there are places where we can get a better return.

The genesis of the Deerdykes facility was a redundant waste water treatment works, which we

converted into the current facility. If we came across similar circumstances in the future, we would look pretty hard at whether we were best placed to exploit them or whether we should bring in private sector partners to exploit them.

Maurice Golden: It is more difficult than it looks to get AD facilities right.

Is there any support or legislative provision that might help you to deliver a more circular approach? I am thinking of planning measures, of separate collections of food waste in rural communities or of other areas. Would you like to highlight anything to the committee, given that a circular economy and zero waste bill is coming up?

Douglas Millican: I do not think that we see any legal impediments to what we need to do. The challenge for us is partly in how innovative we can be and, crucially, partly in how well connected we can be with other partners—whether they are public sector partners such as academia or private sector companies such as early-phase entrepreneurial companies—to make sure that we work in as collaborative and joined-up a way as we can to maximise the opportunities that we have.

I may be slightly pre-empting another area that the committee will want to address later, but you have asked a question on legislative change and, from a legal angle, the only thing that strikes us as being maybe a bit out of step with where we need to be is the current allocation of legal responsibilities to do with sewage spills on farmland. The issue is on our radar; we recognise that the legislation is probably a bit out of step with where it needs to be in 2016, because it is rooted in 1968 law. We will address that in discussion with the Scottish Government.

Peter Farrer: On the circular economy, Maurice Golden mentioned anaerobic digestion, on which we are pursuing a number of works. In Ayrshire in September, we successfully connected our Girvan waste water treatment works to a local farm where the farmer has built and developed an anaerobic digester that uses farm waste and other products to produce electricity, which we use at the treatment works. That is reducing our need for fossil fuels and reducing waste on sites, and it is a perfect example of where we are working with the rural community.

Alexander Burnett: I think that the witnesses mentioned that there were six pollution incidents in the past year. Both higher and lower-category pollution events increased slightly between 2014-15 and 2015-2016. People who live and work downstream from some sewage works, including me, might contend that there are more incidents than are being reported. Why has there been a

slight increase? Why is there low public confidence in the assessment and reporting of incidents? How many pollution incidents went to the procurator fiscal and what fines—if any—were levied?

Peter Farrer: There was a slight increase in 2015-16 in total pollution events. Douglas Millican mentioned that our investment took a bit of time to kick off in the early part of last year. That could have had an impact on our ability to quickly deal with some issues.

We have had some reductions this year and we are on track for a 10 per cent reduction in the total. That has started to move at the pace that we would expect.

Let us look at that in the wider context. Over the five years since we started looking at the number of pollution incidents, the total number has reduced from 824 in 2010-11 to 257 in this period, which is a 70 per cent reduction. We have been focusing on that and significant benefits have come through.

We are continuing our focus on pollution events. We work closely with SEPA on their categorisation and I am fairly confident that we are now reporting all or the majority of pollution events. They are reported by us and SEPA picks them up when it goes round the catchment. In addition, members of the public report significant numbers. I am fairly confident that we are being notified of pollution events, and we have significant projects on the go to improve the situation even further.

I will talk about some of the improvements on which we are focusing. I ask members to bear it in mind that we are a heavy-asset-based industry. We have 1,800 waste water treatment works, each of which has the potential to discharge pollution to the environment, and we have 50,000km of sewers across Scotland, which have relief points and overflows that are designed into the system. The majority of our pollution incidents come from the networks themselves—only six of the 1,800 waste water treatment works are failing to meet the parameters that are set for them.

Some of the things that we are doing can improve the situation. We are looking at targeted proactive sewer maintenance, which involves clearing out sewers to ensure that they are at full capacity. If they are at full capacity, they can deal with the flows a lot better and stop discharges. If grit and debris are allowed to settle in sewers, they can impact on capacity and lead to discharges. We are increasing maintenance at pumping stations to take out more of the debris that goes into sewers, so that it is not deposited in the networks and does not cause discharges.

You will probably be aware of our customer behavioural campaigns that have been on

television. A main element of that is to inform our customers about not putting down toilets things that should not go down them because they cause significant numbers of blockages and, therefore, overflows and pollution events. Those things include wipes, fats, oils and greases. Our campaign is all about helping our customers to help us to have a more efficient operating system.

The final thing that we are looking at—we have run a pilot on it—is putting low-cost sensors on our sewer network to detect quickly flows and levels through our 24/7 control centre so that, when levels in sewers start to rise, we can go out to them and clear any blockage before it leads to an overflow or pollution that happens after the event. That is quite a big area for our focus going forward.

Alexander Burnett: Having had to watch videos of sewage pipes, I sympathise with your efforts to educate communities about what can go down the toilet.

You mentioned that you are self-reporting incidents. Does that contribute to public confidence? If you are regulating yourself, how thorough is that? Is there anything that you can do to improve the transparency of your self-reporting?

Douglas Millican: That raises two or three things. First, the number of pollution incidents is a combination of what we identify, what is reported by members of the public and what is reported through SEPA, so it is not just Scottish Water that reports incidents.

The biggest challenge is for us to understand what is happening, because the area of our network that is involved is where we have the least intelligence. We do not know today when sewer overflows are happening, especially in dry weather when they should not be. At the heart of understanding that is how we use smart technology to give us eyes and ears across overflows, so that we can see when there might be pollution and we can investigate that. It will take us well into the next regulatory period to secure the financing that we need to get that deployed, because it will be big. It will be the transformational step that we need to take to get intelligence so that we can deal with problems much more quickly than simply by responding to things that we find or that customers report.

Angus MacDonald: In recent years, the NFUS has highlighted numerous incidents of sewage sludge spilling on to farmland. It has also flagged up the fact that current law puts the onus on the farmer to prove that Scottish Water is liable for any damage that is caused by sewage spills rather than on Scottish Water to prove that it is not liable. As you might expect, the NFUS feels that that

should be changed in law as it is the wrong way around. I am interested to hear your views on that.

Douglas Millican: We have some sympathy for that. I was asked earlier whether I anticipate any need for legislative change, and this is the one area in which the law, which was written nearly 50 years ago, is out of step with current customer service expectations and practice. We need to look at that with the Scottish Government either to consider formalising a change in approach for the next period or to decide whether such a change should be accompanied by a change in legislation. It is on our radar.

Angus MacDonald: Thank you—it is good to have that on the record.

The Convener: I draw to a conclusion what has been a comprehensive first meeting between the committee and Scottish Water. I welcome the evidence that you have given. Mr Millican has undertaken to write to the committee on a number of matters and we would appreciate it if that could be done as quickly as is convenient.

I say to Johanna Dow that, as your discussions with the NFUS and Scottish Land & Estates continue, we would welcome an update on the specific points that have been raised today and the broader issues. If it is possible for you to write to the committee to advise us of how that has worked out, that would be good.

Thank you for your time today.

Subordinate Legislation

Air Quality Standards (Scotland) Amendment Regulations 2016 (SSI 2016/376)

11:59

The Convener: Under agenda item 3, the committee is asked to consider the regulations. The details of the negative instrument are to be found in the papers. Do members have any comments?

Mark Ruskell: I have a comment that is not so much about the statutory instrument as about the context in which it is being introduced. The Scottish Government was cited in the recent High Court judgment in *ClientEarth v the Secretary of State for the Environment, Food and Rural Affairs*. In broad terms, the ruling was that the UK as a whole state is failing to meet the current air quality standards and regulations. That has a number of implications, so it would be useful to get some clarity about the Scottish Government's response to that ruling and our compliance with existing air quality standards, which has implications for the adoption of more stringent standards.

David Stewart: Mark Ruskell makes a good point about the case that he mentioned. It would be useful to know whether the Government is to bring forward the policy of low emission zones, which have been implemented in parts of London, where the money is hypothecated to helping local authorities. There are plans for such zones, and the two issues are related. Low-emission zones might help with compliance with the court judgment.

The Convener: Those two points are valid but do not relate directly to the Scottish statutory instrument. With the proviso that we will write to ask the Scottish Government about those two perfectly reasonable points, does the committee agree that it does not wish to make any recommendations on the regulations?

Members *indicated agreement.*

The Convener: At its next meeting, on 13 December, the committee will hold its second session to take evidence from a variety of stakeholders and academics on deer management. As agreed earlier, we now move into private session.

12:01

Meeting continued in private until 13:09.

This is the final edition of the *Official Report* of this meeting. It is part of the Scottish Parliament *Official Report* archive and has been sent for legal deposit.

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