



**OFFICIAL REPORT**  
AITHISG OIFIGEIL

# Economy, Energy and Fair Work Committee

**Tuesday 17 March 2020**

**Session 5**



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Pàrlamaid na h-Alba

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**ECONOMY, ENERGY AND FAIR WORK COMMITTEE**  
**9<sup>th</sup> Meeting 2020, Session 5**

**CONVENER**

\*Michelle Ballantyne (South Scotland) (Con)

**DEPUTY CONVENER**

\*Willie Coffey (Kilmarnock and Irvine Valley) (SNP)

**COMMITTEE MEMBERS**

\*Jackie Baillie (Dumbarton) (Lab)  
Colin Beattie (Midlothian North and Musselburgh) (SNP)  
\*Alison Harris (Central Scotland) (Con)  
Dean Lockhart (Mid Scotland and Fife) (Con)  
\*Richard Lyle (Uddingston and Bellshill) (SNP)  
\*Gordon MacDonald (Edinburgh Pentlands) (SNP)  
\*Andy Wightman (Lothian) (Green)

\*attended

**THE FOLLOWING ALSO PARTICIPATED:**

Lesley Deans (Clackmannanshire Council)  
Maurice Golden (West Scotland) (Con) (Committee Substitute)  
John Mason (Glasgow Shettleston) (SNP) (Committee Substitute)

**CLERK TO THE COMMITTEE**

Alison Walker

**LOCATION**

The David Livingstone Room (CR6)



## Scottish Parliament

### Economy, Energy and Fair Work Committee

*Tuesday 17 March 2020*

*[The Convener opened the meeting at 09:45]*

#### Interests

**The Convener (Michelle Ballantyne):** Good morning everybody and welcome to the ninth meeting in 2020 of the Economy, Energy and Fair Work Committee.

I remind everyone to turn electronic devices to silent, so that there is no disturbance.

We have apologies from Dean Lockhart and Colin Beattie. I welcome Maurice Golden and John Mason in their place, and I invite Maurice Golden to declare any relevant interests.

**Maurice Golden (West Scotland) (Con):** I do not have any to declare.

### Decision on Taking Business in Private

09:45

**The Convener:** Do members agree to take items 4 and 5 in private?

**Members indicated agreement.**

## Energy Inquiry

09:45

**The Convener:** We continue with our energy inquiry. Today we will consider electric vehicles. I welcome Lesley Deans, who is principal transport planner at Clackmannanshire Council. I believe that this is the first time that you have given evidence to a committee. We are extremely grateful to you for making the journey this morning—you are our lone surviving witness today, so I hope that you enjoy today.

Before I invite members to ask questions, would you like to make an opening statement and tell us a little about your experience and where Clackmannanshire Council is at the moment?

**Lesley Deans (Clackmannanshire Council):** Thank you. I am a transportation planner at Clackmannanshire Council. A lot of my job is more to do with local transport planning, but my role has expanded to take on electric vehicle charging infrastructure development in the council.

We are a small mainland authority—one of the smallest, with a population of 50,000. We have about 16 charging points in place at the moment, with 11 in progress, making it 27; our provision is quite small compared with that of the much larger authorities, but we are quite a small area. I have been involved in developing the charging infrastructure over the past four or five years. It has been a steep learning curve—that is probably the best way of putting it.

**The Convener:** Did you encounter specific challenges to do with getting charging points installed?

**Lesley Deans:** It is a challenge. At the very beginning, the biggest issue was the unknown; it was relatively new to all of us. Local authorities were suddenly being handed a lot of money and told to put something in, and we did not know what we were looking for.

The situation is evolving. Transport Scotland is supporting local authorities where it can, and we are gradually getting to a stage at which we are much more comfortable with how we do things. However, there are still many challenges to overcome as we go through the process. We are coming up against more and more problems.

It is difficult. It is not just about installation; there are all the procurement issues to deal with, too. We have been quite fortunate with our planning processes; our local authority generally treats installation of charging infrastructure as permitted development. That is more difficult in some areas. In cities such as Edinburgh that have conservation areas, the question of where infrastructure goes is

more challenging. Other challenges are to do with the power network, connections and supplies. There are lots of different issues.

What else can I say? Even across the industry there is a lack of consistency. Car manufacturers do not produce cars that are all the same. There are different plug types. We might seek a specific solution from the supplier of a charge point, but they will say, "This will only fit this car or that car." It is about trying to strike a balance. We might not get the solution that we want.

When things start to take off and there is higher demand for electric vehicles, there will be an issue to do with where we physically fit charging points. You will have seen them; they are large pieces of infrastructure. If almost every parking space in Scotland has to be a charging spot, that will be a huge ask. Challenges and issues constantly come up.

**The Convener:** Thank you.

**Andy Wightman (Lothian) (Green):** Thank you for coming along today.

I will ask about how the process works. The Scottish Government has made funds available through Transport Scotland. How do you go about deciding how much infrastructure you will put in? To what extent is that your decision and to what extent are you getting guidance about how to do this strategically, along with the rest of Scotland?

**Lesley Deans:** Things have evolved from the point when we were initially given grant funding. An issue for us at the start was that we did not have the resources to make decisions. Transport Scotland originally came to us with the money, said that we needed to put in charging points and gave us an idea of where it wanted them. At that time, the numbers were small; for example, Transport Scotland wanted us to put in one rapid charger in Alloa. That was fine; it was just about finding the site. Sometimes, Transport Scotland tells us that we might need a charger in a particular place, but, as time has gone on, it has been left more to local authorities to decide where charging points should go. I cannot speak for all authorities in Scotland but, in Clackmannanshire, I decide where I think they should go. My priority is to make sure that every community in our local authority area has access to at least one charging point.

We are in the process of drafting a strategy to try and plan how we will develop our own network; we are also starting to look at the bigger picture of new developments coming in. What standards should we put in for private developers? Should they develop their own charging network? How will that integrate with the public network? That is an issue. The public network that the councils are putting in is all in the ChargePlace Scotland

network, but a private operator or developer might not use the same network, so we have the issue of a lack of continuity across the networks.

**Andy Wightman:** When you say that they will not use the same network, do you mean that they would not use the ChargePlace Scotland network?

**Lesley Deans:** Yes. I am still waiting on clarification from Transport Scotland. Because we are grant funded through Transport Scotland, we automatically get access to ChargePlace Scotland. Anybody—a business, for example—who gets funding for a public charging point through the Energy Saving Trust can also access the ChargePlace Scotland network. However, if we ask a developer, such as a large supermarket, to put in a charging point as part of its planning and, because it does not get funding, it self-funds that, we are not sure whether it can access the ChargePlace Scotland network. We are seeking clarification on that.

**Andy Wightman:** You talk about private developers. Domestic supplies would not be on the public network. In relation to the network, are you talking about institutional developers of offices and other businesses?

**Lesley Deans:** We have our own domestic chargers that are not part of ChargePlace Scotland. With regard to putting in the equivalent of a public network, a developer of a supermarket, for example, could put in the same unit that I would put in, but there is no guarantee that it would get on to or access ChargePlace Scotland's network. The developer could use a different network, which would give us an issue with there being lots of card types.

**Andy Wightman:** That is true—that is an issue. Could you repeat the number of charging points that you have and the number that you are going to install?

**Lesley Deans:** In Clackmannanshire, we have 16 charging points in operation and 11 in progress. We do not know what we will do in the coming year, because we do not know what our funding will be.

**Andy Wightman:** Are the 11 charging points in progress for this financial year?

**Lesley Deans:** Yes—some of them are. The work has been rolling on, but it should be done in 2019-20, so they should be finished shortly.

**Andy Wightman:** How do you decide where they go?

**Lesley Deans:** Our priority in Clackmannanshire is to make sure that every community has access to at least one charge point, but we have also taken suggestions from local communities on whether they feel that there

is a need for one. We know where there are residents who have issues accessing at-home charging because they do not have off-street parking, so we are trying to put charging points on streets in those areas. However, that brings its own challenges. We have also spoken to community councils, some of which have been proactive in coming to us to say that they would like a charge point. We are discussing with them where they think would be a good location in their community.

We have used a variety of methods to make those decisions but we are open to suggestions and to working with other council departments, because we have only so many sites and we are struggling to find suitable ones. I work in a roads department, so we have control over parking on our roads, but in order to find the best places, we are speaking to the housing and education departments, which have car parks in schools and on housing land, about using some of their sites.

**Andy Wightman:** Is the process of procuring a site down to negotiation between you and the landowner?

**Lesley Deans:** Most of the time the site is within the council's control. We tried to negotiate with the national health service about putting a charging point on its land, but that just went on and on, so we chose another site for the charging point in another quite large community that needed one.

It is not that we have given up on the NHS charging point; we have just had to put it on the back burner. There is an issue when you are dealing with more than one point.

**Andy Wightman:** Do you charge money for charging?

**Lesley Deans:** No.

**Andy Wightman:** Do you plan to?

**Lesley Deans:** We are considering it, but there is nothing in the pipeline at the moment.

**Andy Wightman:** So this is costing you money.

**Lesley Deans:** It is costing us quite a bit.

**Andy Wightman:** How much?

**Lesley Deans:** I do not have the figures on me; I would need to get them for you, but I can certainly provide them if required.

**Andy Wightman:** That would be useful.

I will come back in later, convener.

**Richard Lyle (Uddingston and Bellshill) (SNP):** Good morning, and thank you for coming. You have talked about shops in relation to installation. For the past number of years, my view has been that, as it is being built, every house

should have its own charging point. We put in satellite dishes, telephone lines and broadband. Do you agree that we should consider asking developers to put in charging points when they build houses?

**Lesley Deans:** That would be a sensible approach. It is much easier when it comes to houses with their own driveways, because developers do not need to do much more than make it possible for a socket to be put into the house wall.

It is much more difficult when it comes to flatted developments. We are thinking about how to approach that. We need to have that discussion with our planners, and that is a bit of a challenge because the roads department can only suggest things; we cannot make them happen. It would be useful to put that requirement into guidance somewhere to say how it should be managed.

When a developer passes on a flatted development, it becomes the residents' responsibility, and it is about who takes on the on-going maintenance for the charging point. Does the local authority adopt it? How do we pay for it? Do the residents have to take it on? How will they do that?

**Richard Lyle:** I came across a situation in which a resident in an upstairs flat wanted to get Government funding to put in a charging point. The housing association told them that that was not allowed because where they wanted to put it was not their designated parking area. They are now in a ridiculous situation: they need to put a lead down the stairs and right out on to the street, where people might be able to trip over it.

You are right in what you say about the situation, so what would you suggest? I mean no disrespect, because I know that you are doing your best in Clackmannanshire, which is the best wee council in Scotland. At the end of the day, however, you have 27 charging points and there are millions of cars out there, so one charging point in Alloa is not going to cut it. What do we do to encourage more installations, not just by councils, but by developers, shops and so on?

**Lesley Deans:** I think that it is almost going to have to become a planning requirement. Some councils have started to do that. I believe that South Lanarkshire Council has supplementary planning guidance that states what electric charging points it wants to put in.

In Clackmannanshire, we are speaking to our housing association, because we thought that that would be easy to target. It has been quite receptive to our installing infrastructure on its land. We might lease the land from the housing association: it would still own the land and we would lease the rights to put in the charging

points, which we would take ownership of and maintain. That would be a one-off: it is much easier to do that with a housing association—it is almost like a public partnership.

Dealing with private developers is much more difficult. I would like to see installation of charging points come in under planning legislation. We have parking and other standards that need to be adhered to, so I cannot see why the requirement for electric charging infrastructure cannot be included in that.

**Richard Lyle:** You said that every car manufacturer has a different type of plug. I find that amazing—it is crazy. Should there not be a standard plug that fits every car? I know that fuel can be put in on one side of a car or the other, but should we not have a standardised plug-in system for all electric vehicles, whether it is on the car's left or right side?

10:00

**Lesley Deans:** That would make things much easier. However, the issue that we had was that most charging points accept a type 2 plug. It is a bit like a mobile phone charger—you can have a USB or a micro USB. The end that goes into the charging point is generally standard, but the cables that go into the cars are different. People will see three different pumps when they go to rapid chargers at petrol filling stations because the connection is attached to the unit and it has to go into the car.

I found a difficulty when I wanted to put in on-street charging. I did not want people to use their own cables for vehicles, because they are up to 3m long. If a person plugged their own cable from their car into a unit, it would trail, and that would become a tripping hazard and an issue for people with visual and mobility impairments.

I like the idea of coiled cables, which I have seen in London. Such cables attach to the unit and stretch. If there was a standardised plug-in and every car accepted the same plug, there would be one coiled cable in the unit that fitted every car. However, as things stand, because different cars have different plugs, we need to attach three plugs to one unit, and that makes things difficult.

The approach that you suggest would certainly make things much easier for the local authority. I assume that, if there was just one plug, the charging manufacturers would not take different—

**Richard Lyle:** Should the Government make standardisation a rule? Should that be the law?

**Lesley Deans:** That would be good, but I am not sure how practical it would be, because we are talking about international manufacturers. The



same type of car that is sold in Scotland is sold in China and Australia.

**Richard Lyle:** I am sorry, but they would simply need to conform.

**Lesley Deans:** That is a great idea. We should definitely go for that. *[Laughter.]*

**Richard Lyle:** It is not for them to decide; it is for us to do so.

**Lesley Deans:** A standard plug would be helpful. There is no getting round that. However, I do not know how successful we would be on that.

**Richard Lyle:** Thank you very much for your expert advice.

**The Convener:** I declare an interest as an electric vehicle driver.

One issue is time. The number of charging points that will be needed relates to the time that it takes to charge a car. It can take an average charger around five to six hours to charge a car; with a rapid charger, you can be done and out in three quarters of an hour. What is your thinking on the types of chargers that you put in? Obviously, if they are rapid chargers, fewer of them will be needed.

**Lesley Deans:** It is very difficult to strike a balance on that. One of our biggest issues is when electric vehicle owners overstay their time. We have issues in our own council car park. Council pool vehicles are put on the rapid charger, but they can sit there for a couple of hours. Obviously, that upsets members of the public who cannot get in.

It is very difficult to get a mix, and because it is still fairly early days in the uptake of electric vehicles, it is difficult to know what balance there should be. However, we generally put rapid chargers in areas in which there is short-stay parking and a high turnover of spaces, and we put standard, slower chargers in residential areas so that people can plug into them overnight. However, you are right: a seven-hour charge is quite significant, given that the number of chargers is growing and there is more demand for them. If people arrive at work at 9 o'clock, will their employer let a whole load of them away at 11 o'clock to change their cars? Everybody would have to shuffle round. There are practicalities in respect of how that would work, and I am not sure how we will resolve that issue.

We try to consider the type of spaces that the chargers are going into and whether the parking is generally long stay, short stay or medium stay, and then we fit the chargers accordingly. Sometimes we mix them a bit so that there is a variety of options for people, depending on how long they are staying for.

As I have said, I am no expert. There is a steep learning curve for all of us, and I am not sure that we are getting it 100 per cent right, but we are doing our best.

**The Convener:** Combining that with human behaviour makes it more difficult, does it not?

**Lesley Deans:** That is definitely the most difficult thing.

**Gordon MacDonald (Edinburgh Pentlands) (SNP):** I have a couple of questions that will continue Andy Wightman's line of questioning.

What information do you get to help you to plan? You said that you want to get one charger per community and that you listen to various community groups to see where others should be placed. However, what information do you get about the number of electric vehicles in the Clackmannanshire area? The report by the House of Commons in January suggested that there were 200,000 electric vehicles in the United Kingdom. Based on population, Scotland would have about 17,000. Do you have any idea how many electric vehicles there are in your area?

**Lesley Deans:** I do not have access to that information. I have to go on the basis of people in the community contacting me. Not every electric vehicle owner will get in touch, but the ones who are interested will. That makes it easier to plan for those people, but by no means do I think that I am meeting the needs of all the electric vehicle owners. Of course, we also need to think about potential numbers of electric vehicle owners. If one of the barriers is that there is nowhere to charge electric vehicles, do people know that they can ask me, at the local authority, for advice and assistance? If that is an issue, we can consider what we can do to help, and point people in the right direction. I am not even sure that people in the area know where charging points are.

**Gordon MacDonald:** Do you not get information from the Driver and Vehicle Licensing Agency or whatever?

**Lesley Deans:** No. The information is quite difficult to find. We have a figure for how many electric vehicles are owned in Scotland, but it is difficult to break that down by local authority. Also, it might be that 3 per cent of the vehicles in the local authority area are electric, but we have to think about electric vehicles that come from other areas. We need to figure out how many electric vehicles are coming in, because demand might actually be higher than we think.

**Gordon MacDonald:** You highlighted the number of public charging points in your area. I know that you pick up the operating costs—that is, the electricity charge—but are the charging points fully funded by the grants that you get?

**Lesley Deans:** The charging points are 100 per cent grant funded through Transport Scotland. I believe that some of the funding for that comes from the United Kingdom Government's office for low emission vehicles. Some additional funding was released last year to cover some maintenance and warranty, because most local authorities were struggling with those issues. We had already covered our requirements in that regard, so we were not in that situation. However, as we put in more and more infrastructure, the costs will get much higher. We have only enough funding to cover our current infrastructure.

**Gordon MacDonald:** Roughly, what is the cost of one charging point?

**Lesley Deans:** There are 7kW standard chargers and 22kW rapid chargers. A 7kW standard charger costs about £9,000 for the unit. On top of that, there are the distribution network operator costs—the money that we pay to Scottish Power and so on—which can vary significantly. We have paid as little as £2,000 and as much as £13,000. When you get to the top end of that range, you ask yourself whether it is really worth putting in a new supply.

A 22kW rapid charger costs around £40,000 for the unit.

**Gordon MacDonald:** Again, there will be connection charges.

**Lesley Deans:** Yes. Connection charges are generally a wee bit more expensive for the rapid chargers.

The biggest issue with the DNO is the length of the connection. It is much easier to install a charger in a car park that is next to a main road than in one that is 100m away from the road, which involves putting in cables, which is where costs can suddenly spiral quite significantly.

**Gordon MacDonald:** Have you been given any indication of the lifespan of the chargers?

**Lesley Deans:** We are looking to move two chargers because the car park that they are in is not suitable. They are about nine years old; the manufacturer has told us that the units have a guaranteed lifespan of around 10 years. That said, by no means are those units breaking down all the time, so I think that they will continue to be used. They are standard chargers; I am not sure whether the rapid chargers have a similar lifespan.

**Gordon MacDonald:** Battery technology is moving on. When we were in Orkney, we were told that people there are getting roughly 120 miles out of a fully charged battery. I do not know what your experience is with the council's fleet. Yesterday, General Motors announced that, by 2023, it will have launched 20 new model types that will have a range of up to 400 miles. How do

you plan for where you are going to put battery charging points when the range of the batteries is changing?

**Lesley Deans:** That is obviously a difficult issue. You are right to say that battery technology has changed a lot. My first experience of electric vehicles in our council fleet was with "62" plate vehicles, which are now eight years old. We have found that the battery range for those vehicles is half of what it was; they started out being able to do about 80 miles, but it is now down to 40 miles. That is a significant issue.

We have some Nissan Leaf vehicles that are about four years old. Their range is said to be about 180 miles, but we think that it is probably a wee bit less than that. A couple of our members of staff have suggested ways to save charge, such as turning off the heater and turning off the wipers if it is not raining heavily. A member of staff was trapped in a traffic jam coming down from Glasgow and tried to eke every last mile out of the car. There are innovative ways of saving charge. He was very cold and a wee bit damp, but he got the car home.

The new Nissan Leaf has a range of about 200 miles, so change has happened quite quickly. Our first vehicle had a range of 80 miles; in just three or four years, the range increased to more than 120 miles and is now up to 200 miles. Tesla vehicles already have quite a significant range.

**The Convener:** Their range is 310 miles.

**Lesley Deans:** Yes. That is much better. Tesla is a different beast in car manufacturing, because it is talking about superchargers that will charge vehicles quickly. That might change the infrastructure that we need to provide. Tesla has its own charging points, and I believe that Stirling Council has specific Tesla chargers, which is fine if you have a Tesla.

We are always playing catch-up in relation to what the industry is doing. If people are driving 400 miles on a charge, there will be much more need for rapid charging, because they will be going further and will want a quick charge. I think that everybody wants to pull up then go, as per the petrol station experience.

There have been rumours in the industry about how the petrochemical industry will get involved. Will it turn petrol filling stations into big charging points? There has been talk of battery swaps in vehicles. However, the answer to the question is that we do not know.

**Gordon MacDonald:** You said that you received guidance from Transport Scotland about where to place chargers. How closely do you work with Transport Scotland? What guidance does it give you?

**Lesley Deans:** We work very closely with Transport Scotland, which has been very good in supporting all local authorities. Generally, it holds workshops once a year to give us updates on where it is and what funding is coming forward.

Transport Scotland also provides technical guidance. I am not an electrical engineer, so it gives information on what wattage, voltage and amperes should be used for the units. We take that guidance, pass it out when we prepare briefings for procurement exercises and say that the standards need to be met. That makes it much easier for me, because I know that I am meeting Transport Scotland's requirements. It has done a lot of the hard work for us.

Transport Scotland is fairly flexible and lets local authorities make planning decisions. That is good for us, because we know the local areas much better. However, Transport Scotland also has a strategic role, so it wants, for example, to ensure that there are X miles between rapid charging points and will say, "We're missing one here. There are chargers in your neighbouring authorities there and there, but we need one in the middle." Transport Scotland will ask for that to be done, but that happens more for the bigger strategic routes—the trunk road network. The A9 is a perfect example; Transport Scotland might say to a council that a charging point is needed in a certain town.

I hope that that helps.

**Gordon MacDonald:** Thank you very much. That was really helpful.

**John Mason (Glasgow Shettleston) (SNP):** I will build on what has been said already. Costs have been mentioned, and I think that Lesley Deans said that her council does not charge. The briefing that we have received shows that councils have completely different positions. Some councils—I think, for example, Moray Council—have always charged money. Dundee City Council charges non-residents, but charging of vehicles is free for residents. There is a mixture. It would be simpler if we had a national scheme and everything was the same, but would that be a good idea?

**Lesley Deans:** That is what most local authorities were looking for. Transport Scotland suggested that that might be the line that it would go down, but it decided not to. I am not sure of the exact reason, but I think that Transport Scotland felt that it might be better to give local authorities the decision-making power.

As a member of a local authority, I would prefer a standardised approach, because we would then not be competing with neighbouring authorities. Clackmannanshire is small, and we are close to

Stirling, Dunfermline, Falkirk and other towns, so if our charge was too high, demand would be put on those towns' units because people from our area would go to them to charge their cars. If our charging points were cheaper, we would have demand from people from those areas. That makes it difficult to see how a local approach can work.

10:15

We are in discussions with our neighbouring authorities about setting charges. If and when Clackmannanshire goes down that line, we will try to align our charges with theirs. That approach might lead, in a roundabout way, to charges becoming standardised.

**John Mason:** That will also make it easier for drivers to know what is happening.

I will go back to people overstaying their welcome at charging points. Your planning might not have got this far, but it has been suggested that an extra cost for people—a charge for overstaying—could be a way of managing demand. Have you considered that?

**Lesley Deans:** We are considering that. We do not have any parking charges in Clackmannanshire, and we do not have any decriminalised parking, so enforcement is obviously an issue for us. The council is looking at what charges will be put in place and how we will deal with electric charging points. Should we charge people to charge? Is it fair to charge people for parking when they might just want to charge and go? Those questions are still being considered and how best to do it is being decided. Perhaps charging would be a way to control overstaying.

With regard to guidance, either Transport Scotland or the Energy Saving Trust—I am not sure which—has given us a link that provides etiquette on how long electric vehicle drivers should stay at a charging point. We try to promote that where we can, but we are at the mercy of whether people actually read and follow it. We can certainly see whether we could introduce that.

**John Mason:** I will ask about broken infrastructure being fixed. I recently bought a petrol car—again—because, although I might have been able to get a map of the charging points, the last thing that I want to do is turn up at a charging point that is not working. Have you had a problem with that? It has been suggested that some points have not been repaired very quickly.

**Lesley Deans:** We had one rapid charger in the area; we now have three in operation and another is planned. Our first rapid charger repeatedly broke down, and we did not have a maintenance agreement with our manufacturer. It took a bit of

negotiation, but an agreement is in place now, and the charger is being fixed. However, we had to ask ChargePlace Scotland to take it off the map and put a sign on it saying that it was out of order. It got fixed and then tripped, and we did not have anything in place to deal with that.

All our other units are from another manufacturer, which is generally fairly good at reporting faults, but we have two units that have been out of service since January and are waiting on parts. That is an issue: faults are meant to be reported and dealt with within either 24 hours or 48 hours, according to a priority-based process, but that does not always work. It depends on the fault.

If a unit has lost communications, it is much easier to get it back up and running. We are quite a small authority, so when something goes wrong it is easy for us to go and switch the plug off and on again—power down, power up—and it is fine. That is much more difficult to do in large council areas. Highland Council has a massive area. People there cannot just drive out to every charging point and switch the plug off, because the distances are huge.

**John Mason:** Is your impression from colleagues in other councils that they are also having problems with maintenance?

**Lesley Deans:** Yes. Transport Scotland has put in place a system with ChargePlace Scotland through which it reports to the council and tells us when a unit is out, so we get a ticket sent through. That makes it a wee bit easier; councils cannot keep on top of their network by going out and checking everything every day. We rely on members of the public reporting faults to us. When we get those in the system, we keep an eye on repairs and chase them up. It is not always easy.

Sometimes units that are out of order are not reported: people moan that the unit is not working, but nobody tells us. It is difficult and faults need to be communicated.

**The Convener:** It might be worth noting that at a Tesla supercharger, you get five minutes from the end of the charge to remove your car. If you do not do so, a significant charge is added to your account. That certainly improves etiquette, shall we say.

**Lesley Deans:** That might be the way for us to do it.

**The Convener:** Jackie, has your question been asked and answered?

**Jackie Baillie (Dumbarton) (Lab):** Several of them have. Thank you, convener.

**Alison Harris (Central Scotland) (Con):** Several of mine have been answered, as well. I

will go back to an earlier point. You said that two chargers are awaiting parts. Is that two of the 16 that you have in place?

**Lesley Deans:** Yes. Each charger has two plugs; one plug is waiting on one part, and the other charger unit is completely down.

**Maurice Golden:** You have outlined lots of the capital costs of putting chargers in place, and I understand from your evidence that those costs have largely been met through funding. On revenue costs, will you give us an idea of the service and maintenance costs of charging points, and is funding coming into the council to cover them?

**Lesley Deans:** We were given—I think—£22,000 last year from Transport Scotland to get warranty and maintenance agreements in place for all the charging points that we already had in operation and that were out of warranty. I believe that that will cover them up to December 2023. We have spent about half that money and will probably not require the full amount.

The electricity charges come out of the council's funds. There are also standing charges on some of our rapid units—a fixed fee that we get on top, which makes them more expensive. That all comes out of the council's budgets—currently, it comes from our facilities budget. However, the costs are starting to ramp up as more and more people use charging points. That is why councils are starting to think about how to recoup the costs. Until last year all charging points that were funded through Transport Scotland had to be provided free of charge. That requirement was removed last year, which has been good for a lot of authorities. However, as has been said, Moray Council has always charged.

We always ask for four-year maintenance and warranty to be built in for our new units that are going in. However, they will all start to come out of their warranty at the same time and we will have twice as many charging points. As an authority, we will factor that into how much the tariff for using the units will be. We will need to factor in the costs of the electricity, the maintenance and warranty, and ultimately the replacement of units in the future. We will need to start getting that money into the bank, because some units will get to the stage at which they are too expensive to repair and it will be cheaper to replace them. There is a lot to think about in relation to how we structure the tariff.

**Maurice Golden:** On the key stakeholders that provide you with advice, you have mentioned Transport Scotland and the Energy Saving Trust. Are those the two main bodies that assist you in relation to, for example, procurement and location of charging points?

**Lesley Deans:** We do not have a huge amount of direct dealings with the Energy Saving Trust; it is more the case that we point private developers that are interested to it. However, we obviously work a lot with Transport Scotland.

We have also found that some of the charging point manufacturers—the companies that do the installation—have been incredibly good at helping us in relation to what we need, how we might save money and so on. For example, we were looking at putting in two 22kW chargers and a 7kW charger, but the manufacturer said that we might be better with three 7kW chargers because we would have the electricity charges and a great big unit, which would put our price up. They are good at giving that kind of advice.

**Maurice Golden:** Can you talk us through the grid connection process and how you have found it to be?

**Lesley Deans:** That has been a challenge, depending on the supplier. We have used two suppliers. One took the whole process from me and dealt with it all from start to finish. Our preferred supplier that we use for the majority of our installations will do all the liaison with the DNO—in our case, Scottish Power. However, payment has to come through the council. As such, we have to place the order with Scottish Power, which can sometimes make things a bit confusing, because the wrong people are contacted about technical stuff and do not know what Scottish Power is talking about. There is also a wee bit of duplication of work. However, in the main, the connection process has been okay.

The process is not perfectly straightforward. It would be much easier if suppliers took it on completely—although I would not then know whether I was getting value for money. Through our current way of doing it, I see the price for the power supply and can then decide whether a particular site should go ahead. If it costs £13,000 to put in a power supply, it might be better to look for another location at which the price would not be so bad. Once a plan is going ahead, the supplier deals with the electricity provider to get everything moving forward. It has not been perfect.

Recently, an issue in relation to charging points has been lack of resources in the council. We have had to ask for someone to do site supervision, because things have been installed in slightly wrong places.

We have had a lot of issues, as I mentioned already, to do with street furniture and blocking people with disabilities. That is a concern for me. We have had an electric charging pillar, where the power comes in, right next to a charging point, which has made the footway too narrow.

We have tried to be very careful in making sure that we are equalities compliant, but I am not convinced that that message has been shared widely in other authorities. The situation is definitely evolving and getting better, but it could be more streamlined.

**Maurice Golden:** Thank you.

**Willie Coffey (Kilmarnock and Irvine Valley) (SNP):** Thank you for coming to the committee.

What about the idea that we—your council included—should put in the same number of charging points as there are petrol filling station points? I presume that we are trying to make a transition towards that over the next 10 or 12 years. Are we doing enough, collectively? What do you see as the council's role in that and in affecting public opinion, to encourage people to make the transition to EVs? Sales of those are still pretty low relative to petrol and diesel vehicles. Do councils have a role in that? Do you expect the Government's promotional schemes to make the transition faster?

**Lesley Deans:** That is why, in the beginning, Transport Scotland wanted all charging points to be free, and local authorities went with that.

We have a dedicated web page for electric vehicles, and I believe that most Scottish local authorities have some sort of web link or information. We try to point people in the direction of bodies such as the Energy Saving Trust, which is good at providing advice to get private vehicle owners out of their petrol and diesel cars and into electric vehicles. However, there is no getting around the fact that people are still anxious about range, charging and cost. We hear about electric cars being twice the price of petrol or diesel cars. As a local authority, it is difficult for us to promote them. One would think that the car manufacturers would want to promote them. However, we all have a role to play, whether directly or indirectly.

**Willie Coffey:** At a previous committee meeting, we talked about what the garage forecourt might evolve into—you mentioned that earlier as well—and whether there is a role for the oil companies to play, too.

You have lots of little rural villages in Clackmannanshire, and in rural communities the garage forecourt is much more than just a place to get petrol or diesel; it is a shop, it has services and so on. Do you know of any discussion with the oil companies to see what their thinking is and whether—and how—they might develop their forecourts to continue to provide those services to rural communities while perhaps putting in electric charging points as well?

**Lesley Deans:** There have been discussions—at least rumours, snippets and articles—about

that, perhaps not specific to Scotland but relating to the UK as a whole. I am not sure. One petrol filling station in our area, on the road between Clackmannanshire and Stirling, suggested that it might like to put in a rapid charger, and it put in a planning application; however, I am not sure that it has actually done that.

At the moment, they will be asking where the money is in doing that. If I am offering it free of charge, they are not going to be too keen on putting in something that will lie idle and not make them any money—and, at the end of the day, that is what they are in business for.

Transport Scotland has mentioned that there may be potential at some point to transfer the ownership of publicly owned charging points into the private sector, but it has left that up to local authorities. The implication is that local authorities could consider passing their electric charging network to a private operator to make money out of it, but there has been nothing concrete on that proposal. It is the same with petrol stations—some areas will be more lucrative than others. A private business is ultimately in it to make money, so an area in which there are a lot of electric vehicles and a high turnover will be a much more attractive opportunity to a private business than a rural community where only one or two vehicles a week might be coming in at the moment. Obviously, as the situation develops—we are talking about quite a short timescale for everybody switching to electric—demand will suddenly surge.

In the future, petrol stations will naturally have to evolve in some way to meet the demands of electric vehicle drivers. We see that in motorway service areas, which are developing electric charging next to the petrol filling station.

10:30

**Willie Coffey:** I want to ask you about breakdowns. You mentioned that somebody you knew almost ran out of power. Inevitably, there will be breakdowns when people are driving along the motorway or whatever. Is there a service that can come along and give the car a quick boost to get it off the motorway? I do not know enough about the technology in that respect. Do electric vehicles need to sit there for three hours to get any kind of charge, or can they be kick-started for a brief period to get them off the motorway and to a charging point? How does that work?

**Lesley Deans:** I am not 100 per cent sure, but I understand that some of the breakdown services, such as the AA and the RAC, have mobile chargers that might be enough to get an EV to the next charging station. I have no idea how efficient that is, how much charge that provides or how long that takes. The advice that we are given

when we take a car out is, “Don’t run out. Make sure it’s charged and that there’s enough charge in it.”

Again, do not quote me on this, but I believe that you are not meant to tow electric vehicles and that they need to be put on the back of a truck or something.

It is not just about the person who puts in the electric infrastructure. We also have electric pool cars in our fleet, and the advice that I give all our drivers is not to run out of power—to make sure that the car is going to get back.

**Willie Coffey:** You can see the EV charging points on Google maps and so on. Are Clackmannanshire Council and other councils making sure that all their EV charging points are on the apps that we have on our mobile phones, so that, if you are driving along, you can find out where your nearest charging point is?

**Lesley Deans:** All our active charging points—the ones that are commissioned and up and running—are on the ChargePlace Scotland network, which we point everybody to. We have our own internal mapping, although it is not currently up and running. Previously, it had all our own charging points mapped. However, it is not live. The only live one that is useful to drivers is the ChargePlace Scotland one, because if any faults are reported in a unit, its site should immediately say either that the unit is out or that only half of it is working. The site also tells you whether there is a vehicle on charge, although it does not tell you whether someone is parked in the space and not plugged in, unfortunately. We always use ChargePlace Scotland.

**Andy Wightman:** I have a few follow-up questions. What kind of regulations are you considering introducing to ensure that people are not abusing charging places? I understand that they are for charging, not for parking. Do you have regulation-making powers?

**Lesley Deans:** Yes. We can put in a traffic regulation order. Our current town centres car parking TRO includes electric parking, but that does not include all the car parks that currently have electric charging; it only really includes the roads car parks. As this year’s installs get finalised, we will probably look to review that and include all the car parks that are not technically roads ones—for example, our housing and education ones.

I think that only four authorities in Scotland do not have decriminalised parking powers. We have no enforcement capability. We are in a unique situation in that, although we have the regulation in place to enforce parking restrictions, we do not have anybody to do that enforcement for us. That may change as we go forward and look at parking

charges. Other councils—for example, City of Edinburgh Council—have parking wardens and can enforce parking restrictions. I do not know whether their traffic regulation order covers that, but I imagine that most authorities will be putting that in.

**Andy Wightman:** Gordon MacDonald mentioned batteries, and they will change dramatically over the next decade or so. Nevertheless, are your efforts focused on providing residents with a place where they can charge once a week or whenever? The average car journey in Scotland is 10 or 12 miles a day, so there is no need to charge the battery every day. Obviously, if a person is travelling a distance, plenty of facilities are available en route.

**Lesley Deans:** It is a mixture of things. We are trying to make sure that every community has access to a charging point. Our focus is mostly on those who cannot put one in on their own property. Equally, we are trying to provide charging points at destinations. For example, we have charging points at our council office and we are putting charging points into schools. We have a new school development and we are trying to include charging points as part of that, so that visitors and staff can have access to them.

It is a slow process, but we are trying to get them where people need them to be when they arrive at their destination. If they were going to shop at a supermarket, for example, we would hope that they would have access to charging points there. Obviously, we cannot put them on private land, but we are encouraging large developers to consider putting in their own. Our charging point is right next to a large superstore and it is heavily used by its customers. As I said, they are not very happy if they cannot access it, so there is definitely demand for charging points at such places. The issue is getting a mixture of overnight charging points for residential areas and daytime charging points for workplaces and day-to-day leisure activities.

**Andy Wightman:** The committee met about 20 or 30 electric vehicle users in Stirling; we also talked to people in Orkney. A persistent complaint was about the back office operation and the difficulties of communicating with Charge Your Car, which operates the ChargePlace Scotland network. I understand that that is now owned by BP Chargemaster. What is your experience of that? Perhaps you do not have any experience of it, because that is to do with the driver side of things. However, there is a liability issue. You are being given funding to put in charging points, you are putting them in and you own them, but you have no control over who then operates them. Is that an issue?

**Lesley Deans:** It can be. Certainly in the beginning, ChargePlace Scotland's communications were very poor. They are slowly improving, but they are still not great. If a fault is reported to us, we get a generic email saying, "Charging point X is out of action." However, we do not get a follow-up message telling us that the charging point is back in operation or that there will be a wait for parts. I therefore have to check the charging point's status and whether the fault has been reported. Given that I am already doing another day job, sometimes the ball is dropped on other things. Then members of the public complain that the charging point has not been working for a month. I am left wondering why that is the case, and I end up chasing ChargePlace Scotland, but we are not necessarily getting that—

**Andy Wightman:** But you do not have a direct relationship with ChargePlace Scotland, legally.

**Lesley Deans:** No. Transport Scotland puts out the contract for that service and we get—

**Andy Wightman:** So we have a Government agency providing funding for and contracting out the operation of a network, but that network is in fragmented ownership and involves 32 local authorities. It does not seem to me that, in the long term, with the demands on the network set to increase, that is a particularly good business model.

**Lesley Deans:** It is a difficult one.

**Andy Wightman:** That will particularly be the case when you start charging fees. I am looking at the business case for Edinburgh. It is way behind the curve, but I think that it is slowly catching up. It is clear that it will charge from day 1. I live in Edinburgh. If I paid City of Edinburgh Council for the electricity, I would have a contractual relationship with it. I do not think that, in the medium term, the council would be happy that it had no control over the operation of the network. I would be paying the council for a service that it had no control over. I know of no other business model that works in that way.

**Lesley Deans:** Transport Scotland controls the contract. If we have any issues—and we have had issues—we escalate them through Transport Scotland, to get a resolution.

I think that Transport Scotland now has meetings with ChargePlace Scotland or BP Chargemaster about the contract and the issues that local authorities are raising about those exact things, including the reporting of faults and making sure that they get fixed.

The situation is definitely better than it was, but it is not perfect. As I have said, when charging points are faulty, we are not told what is happening—whether they are still faulty or where

we are in the process. I do not have the power to demand that the operator sort that out. Transport Scotland needs to do that, but we have a good relationship with it so that is one avenue.

**The Convener:** As members have no further questions, I thank you for coming, Ms Deans. It was very good of you to turn up. It has been a useful session, and I hope that everyone has taken a lot from it. Is there anything that you would like to add before you leave?

**Lesley Deans:** The only other thing that I had thought about that needs to be considered is the issue of equalities—I have briefly touched on that. There are physical restrictions on people with disabilities accessing charging points. We have tried to put in place what we think is Disability Discrimination Act 1995—DDA—compliant charging infrastructure, but I am not convinced that we are ticking all the boxes. I do not think that what we have put in place is perfect, although our chargers are not too bad.

It goes back to the point about guidance and standards. We have talked about parking standards for new developments, but, equally, we need to think about how we provide for people with disabilities. We have a huge population of people who hold a blue badge, and, in 10 or 12 years' time, they will also need access to the chargers. We need to make sure that they are not forgotten about. Having spoken to other authorities, I know that some have not even considered that. It might be something that the committee wants to consider.

**The Convener:** I presume that, at the moment, those people are driving cars with combustion engines and have to get petrol and diesel in the same way. There must be a comparator there, because it involves the same basic movement of taking a pump and connecting it to your car. Perhaps it would be good to look at what is being done to ensure that there is access to petrol and diesel supplies and how that works.

**Lesley Deans:** At a petrol filling station, a person can sound their horn and someone from the petrol station can come out and refill their car. They cannot do that at a charger at the side of the road.

**The Convener:** That is interesting. A lot of the petrol stations that I visit have only one person on duty. I have never seen that happen—I do not know whether anyone else has—but it is something that we should consider.

**Lesley Deans:** It is something else that needs to be considered. That is the only thing that I would add.

**The Convener:** In that case, thank you ever so much. I wish you a safe journey back to Clackmannanshire. Perhaps the next time I drive through, I will have to test out your charging points.

10:43

*Meeting continued in private until 11:28.*



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