Nilam
Hello and welcome to the third episode of Net Zero Talks Podcast Series brought to you by Innovate UK KTN. I'm Nilam Banks Knowledge Transfer Manager for Place and the lead for the Net Zero Places Innovation Network, which is a two year flagship programme dedicated to supporting local and regional authorities and agencies to connect, collaborate, inform, share experiences, lessons learned, in order to adopt innovation and level of across the UK. Before I introduce our guests, let me tell you a little bit more about this podcast series and the Innovation Network. The Net Series Talks Podcast Series has been created to hear from the experts and other local authorities on the challenges to reaching net zero. So basically, we work with authorities to help identify the challenges to meet net zero, promote these challenges to engage innovators across sectors and collaborate with public buying organisations to make sure solutions are procurement ready. Our goal is to provide practical insights into different topics on how to achieve net zero in places. Before we dive into today's topic, if you haven't already, please go to Innovate UK KTN website through the link in the description and sign up to receive newsletters, and updates on all of our activities. You'll also find out about future episodes of this podcast there too. In this episode, our guests will be talking about the UK EV Infrastructure Strategy. So let me introduce you to Simon Buckley, the Knowledge Transfer Manager for Zero Emission Mobility at Innovate UK KTN and Peter Brown Senior Policy Advisor for the Office of Zero Emissions Vehicles, also known as OZEV. So it's over to you, Simon.

Simon
Thank you very much Nilam. So maybe before we start, Peter, do you want to say a few words about yourself?

Peter
Hello, my name is Peter Brown. I am a Senior Policy Advisor at the Office for Zero Emission Vehicles. I have a history of working on various different bits of policy, whether that be in sort of the education sector, sort of regeneration, particularly around sort of levelling up. Also more recently in EV Infrastructure where I've been working in office for Zero Emission Vehicles for coming up to two years now.

Simon
Yeah, thanks very much. I look after Zero Emission Mobility, so that's everything from scooters all the way up to aircraft, so a wide range of applications. What we wanted to talk to you today about, is about your EV work and the EV Infrastructure Strategy, how it might affect local authorities. So if you can just first give us a quick summary in a few minutes, no easy task there I know, about what the EV Infrastructure Strategy is? What does it aim to achieve?

Peter
Yeah, absolutely. So the EV Infrastructure Strategy, is essentially a landmark, central
government document, that sets out our plans to accelerate the rollout of EV Infrastructure to
make sure that it's of a sort of world class charging standard, to ensure that we've got sort of
a public network, that very much lives up to that name. Essentially, we've done that by sort
of communicating through the infrastructure strategy, and sort of government's vision for EV
charging infrastructure for the years leading up to 2030 and beyond, as hopefully some of
your listeners will be aware earlier on, during this sort of government, we had sort of the
2013 phase out date that was set out of all internal or the sale of new internal combustion
engine vehicles. Essentially, although sort of the vehicle, sort of side of that was pretty clear
cut, there were rightly so some questions around how the infrastructure would be there and
placed to best support that transition. So essentially, we've sort of communicated
government's vision through seven clear principles that range from everyone being able to
find and access reliable infrastructure, both now and in the future, no matter where they live,
to making sure that people can access different types of infrastructure as well. So whether
that's they've got sort of access to off street charging, but also crucially, making sure that
there is sort of on street provision as well, for both private drivers, but also drivers who may
be looking at it from sort of a commercial point of view. So they need to do that too, through
either fleets or their business. Also, crucially, as we sort of work our way to sort of wider net
zero goals, making sure that that electric vehicle infrastructure is integrated into sort of a
wider Smart Energy System. In the strategy as well, we set out that EVs, the story of EVs
has come a long way and they've been sort of big improvements in the market, although
there is still some way to go. We've set out sort of the remaining barriers that we probably
see as being sort of key, before we transition to sort of wide mass market EV uptake, and
particularly thinking about sort of the barriers that are particularly prohibitive to ensuring a
comprehensive public charging network. Crucially, we set out how we aim to address those.
Another thing that the strategy does, as well, is clearly communicating sort of rules and
responsibilities for all different actors across the electric vehicle, sort of field. So whether
that's those working on the energy network distribution, network operators, and that energy
side, whether that's those working, sort of in the transport sectors, thinking about charge
point operators, or manufacturers or installers, but also crucially, ourselves in central
government, and also the whole range of local authorities up and down the country, who are
really at the sharp end of delivering a lot of this infrastructure. So that, I think, has been one
of the key barriers in the past, especially when we were doing sort of our engagement of
leading up to sort of the publication of the strategy. We heard repeatedly, that there was
unknowns around where people thought their wills ended, whether that was sort of on the
energy side, or on the transport side, there was often a bit of miscommunication, we really
wanted to sort of clear that up. I think what strengthens our case even further, is we've gone
beyond that and we've set out sort of an action plan with sort of clear commitments what we
will do in central government, but also crucially, what we expect other stakeholders. So that
really sort of shows up both the roles and responsibilities question, but also what we expect
from industry as a whole. So essentially, that's the EV Infrastructure Strategy, in a nutshell,
hopefully providing a lot of colour to sort of previous plans or governmental plans on electric
vehicles.

Simon
Thank you very much. So it's very simple, only takes a few minutes to explain and that's it.
You mentioned barriers there. So, and we'll come onto local authorities stuff in a minute but
what was some of the top barriers you see, for EV charging infrastructure?
Peter
I think some of the top areas that we see are particularly around sort of commerciality and is sort of a key one and making sure that sort of business case works. So that private sector can come in and invest and also have sort of that commitment that they will be a way that they can sort of get their returns back, and rightly so. Also, I think a key barrier is making sure that quick connection upgrades are sort of carried out in a in a systematic way, in a way that is able to be sort of clear and consistent and is programmed in a way ahead of time, so that there isn't an sort of a need to constantly go back and upgrade particular areas of the network that have already been sort of recently reinforced, making sure that that is done in the most effective way possible. Specifically thinking about how that impacts other businesses in the local area, and other sort of ever changing demands on sort of our energy system. So I think they're two of the big factors and I think the commerciality factor definitely plays into sort of the wider agenda of this government, in terms of thinking about levelling up, ultimately, we want to make sure that no matter where people live in the country, that you can transition to an electric vehicle and have faith and not have to worry about either charging that vehicle or worrying where they can actually do so. Essentially, it should be relatively a straightforward process. Obviously, different parts of the country have different demographics and there may be sort of different housing stock that impacts the type of infrastructure that those areas might need, but essentially, one sort of local authorities and other sort of local players can sort of bottom that out. It should be sort of a relatively straightforward transition. I think what is crucial, is we want to make sure that that transition is equitable across the board, and that there aren't sort of some areas that are unable to transition because of location or because of a lack of a strategic strategic plan.

Simon
Coming to that on off street charging in a little bit because there's a few questions around that that would be useful to explore. But more generally, if I'm a local authority, how can this help me plan my future strategy? Is there a cheat sheet or something? Or quick summary they could digest? How best to go about that?

Peter
Well, I think the government's electric vehicle infrastructure strategy, essentially, sort of sets out that in order to transition to an EV sort of charging network that we all want to see, really requires a shift in sort of how government at all levels, sort of plans, delivers and works with both the private sector wider industry, research and development and also civil society to deliver that that level of infrastructure and essentially, the strategy is quite sort of a high level sort of strategic view on a lot of that, especially thinking about how we go about rolling out that infrastructure. But I think what's what is particularly of note for local authorities and potentially local authority officers, is the range of commitments that we've got in that strategy. So that's thinking about how we've set out and tasked and sub-national transport bodies to produce sort of regional EV charging strategies, we heard a lot in terms of our barrier scoping in our early engagement, about how local authorities weren't sure what their role was and even if they were sure, and wanted to be proactive about that, they didn't necessarily have that extra support or expertise, or modelling experience that they needed to really steal a margin and roll out their infrastructure in their areas. We strongly feel that sort of sub-national transport bodies are really well placed to do that. We've also got other aspects and resources and commitments that we've sort of set out. We've published a Local
Government Knowledge Hub, alongside the strategy, which is basically a resource rich bank of information that local authority officers can rely upon and use everything from sort of planning EV infrastructure in the first place to actually rolling it out and helps you through pretty much every step of that process. We've got further guidance coming out to the Institute of engineering technology that will do that and more. We've also got other commitments that we hope will make local authorities lives a little bit easier, particularly thinking about sort of trying to put regulation orders, making them more straightforward. We're also opening up data as part of our wider sort of consumer experience regulations and we feel that that will make it easier for local authorities to understand the specific needs of fleets, for example, in their areas and then obviously, alongside sort of the strategy, there was a range of announcements on funding as well. So I think a quick cheat sheet is probably not what the strategy aims necessarily to do. But hopefully, that wide range of sort of commitment and action plan is really key for local authorities to see sort of what direction we're going and sort of what's coming down the line, as well as a whole host of resources to accompany that.

Simon
Yeah, thank you. So if I, just starting off on my EV journey, as a an officer in a local authority, where do you think out of all those options would be the best place for me to start?

Peter
I think the best place for you to start in that regard, is probably through the Energy Savings Trust. So we have prior been sort of funding them to deliver their local government support programme, and in the strategy commit to continuing to do that. This programme, essentially helps local authority officers through every stage of the process. So whether that's particularly thinking about what infrastructure is needed in their areas, to understanding sort of what are the demands on sort of consumers, how to work with traffic regulation orders, and they essentially have forums from across the country and the walk local authority officers do this. So they've seen all the barriers before and often have been able to sort of point and produce case studies that show how best to negotiate these. We've received sort of really, really strong reviews and feedback that support Energy Savings Trust and all the work that they do in that programme. So I would strongly recommend sort of any local authority offices on the call to get in touch with them. They've also got a whole range of and different resources online as well that you can access without even signing up to any of the forums. I think on top of that, as well, The Local Government and Knowledge Hub that we produced alongside of the strategy is super important as well, and again, a real literal resource. And if any officers are particularly interested in sort of the consumer behaviour aspect, we did produce quite a lot of research alongside Britain Thinks who have produced a really strong set of results, particularly looking into sort of the consumer behaviour of EV driving and how that is likely to change in the future. So definitely important to think about when you are planning EV infrastructure in your areas.

Simon
Yeah, thank you very much. Yeah, EST are a great organisation who we work closely with as well, so yeah, I'd recommend that. Off street charging and on street charging, you mentioned it'd be equitable. How would that happen? Because obviously, if you are charging from your own electricity supply, versus if you've got a public charge point, it's going to be
cheaper if you're using your own private supply, I'm going to assume. So are people with terraced houses naturally disadvantaged in that respect? And how could that be balanced?

Peter
So yes, Simon, you're absolutely right. So if you are charging off street, you will in the vast majority of cases using your own electricity supply and in that regard, you'll be able to take advantage of a lot of the sort of new or not new anymore, but flexible tariffs that a lot of the energy companies are offering these days, which allow you to charge it overnight, and there's less demand on the grid, you then have access to a lot cheaper rates, which obviously is beneficial for everyone. Honestly, charging traditionally isn't able necessarily to do that, but there are new innovative sort of solutions coming along all of the time, we've recently been working on a pilot a in Oxford, that we've been looking at as sort of having gullies, so essentially, they channel the EV cables underneath sort of the pedestrian, carriage rail highway and that way, they can sort of link up to even terraced houses, sort of individual electricity supplies, so they can still take advantage of those favourable tariffs that I mentioned earlier. So it's the people with on street sort of housing traditionally are a disadvantage, essentially working to try and make that as minimal of a disadvantage as possible. Ultimately, terraced housing sort of differs from sort of across the country, in large sort of urban centres, parking can be quite competitive. In those areas, early research seems to suggest that as sort of consumers would prefer to charge up sort of a local rapid hope that in sort of a five minute walk away, and we can definitely see sort of the business case for that, both from sort of an economic point of view, but also from sort of a charging behaviour point of view. In areas where parking and terraced housing is less dense, so in sort of semi urban or semi rural locations, it might be a lot easier to sort of have your car parked outside of your house, and therefore different solutions, such as the gullies and other new technologies that are coming along, may well be preferential both for the local authority to deliver, but also for the end user. So essentially, I think what we need to sort of do and I think the strategy does a good job of setting this out, is making sure that local leaders are empowered to make these decisions, it's not for central government to sort of interfere and meddle in a lot of sort of local decision making. So I think, very much that local authorities should be taking the lead and feel empowered to make these decisions, because ultimately, they know their area's best, they know people living in those areas and sort of what they want, and then you have direct sort of access to them through various different forms of engagement. Ultimately, I think that has other benefits as well, of making sure that people feel like they are in power of sort of decisions that have been or that at least they're taking part in decisions that are being made in their areas, and obviously that has extra benefits as well, and travelled been a sort of a key part of that. So essentially, there is a slight disadvantage there, but it's one that we're sort of working hard to try and unpick at at every level.

Simon
Thank you very much. So I think time probably for one more question and you kind of touched upon it. In terms of funding available, can you tell us a little bit more about the levy fund because I believe some of that is trying to [PLEASE CHECK] a few more of these technologies you were discussing, and kind of prove out that the case for those technology. So can you tell us a bit more about that?

Peter
Yeah, of course. So through the EV and Infrastructure Strategy, we announced sort of a range of different funding available to local authorities to help them rule out this infrastructure, and to ensure that the transition to electric vehicles takes place in every part of the country. So we've got 500 million pounds to support local charge point provision and as part of this, the Local Evie Infrastructure Fund will provide approximately 400 million pounds of capital, and 50 million pounds of resource funding to support local authorities to work with industry and transform the availability of charge points for drivers in their areas, particularly with off street parking. Part of that fund, the way that it's structured and sort of set up is there is a 10 million pound pilot that got launched earlier on this year that closes in June and that essentially is a springboard and an opportunity for the fund to understand the market and what's sort of at play and learn any lessons before the full development of the fund is out, later on. So we see that as being sort of quite pivotal, to understanding sort of some of the latest innovations, some of the latest technology, but also business models as well, that will enable sort of both local authorities but also the private sector to scale up and roll out and EV infrastructure across the country. The strategy was quite clear that we need to see a massive uptake of provision of EV charge points across the country. Currently, we have just over 30,000, the strategy said we'd need at least a tenfold increase, to 300,000, we also actually had a range in there up to up to 700,000 as well in some scenarios. So essentially 300,000 scenario focuses a lot more on rapid EV charging hubs, where less charges are needed. Whereas the 700,000 range towards that top models, more on street, slower charging, that will be traditionally done sort of overnight. So essentially, we see, as I mentioned earlier, the Local EV Infrastructure Fund being really pivotal to us understanding the market and sort of which way it's going to go next in terms of rolling out and providing that public network for mass market transition to electric vehicles.

Simon
Thank you very much. And there's links in the descriptions here for anyone who wants to get any of the information around that fund. So thank you very much for your time, Peter, it has been pleasure. I'm just going to hand back over to Nilam.

Nilam
Thank you, Simon and Peter for joining us today. That was a great discussion. As Simon mentioned, all the links will be in the description. Also don't forget to sign up to receive the newsletter and updates of all of our latest activities, which will include activities around decarbonisation of transport. In our next episode, we will discuss how can collaboration with academia support decision makers on climate adaptation. So I hope you come and join us for that one. But thank you all again for listening. I hope you enjoy this series and this episode specifically, and that you'll come back for more, until next time.

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