How can cross-industry collaboration accelerate emobility? | COP26

Video Transcript

[Music]

Let's go, you lead the way
Where are we headed
towards a net zero future of course
Cleaner water, more electricity, a sustainable society
That's the destination we've set ourselves this we know
Yes, we know exactly where we're going but we need to get there quicker so
Let's build on the progress we've already made by working and walking together
With the right partners, tools, and ideas we'll become an unstoppable force this we know
Right now, there are businesses who are putting technology and sustainability at the heart of everything they do
Brave leaders turning maybes into realities and building something better for everyone
Now is the time to look to the future and reinvent ourselves today empowering others to do the same tomorrow
Yes, we know what the future holds and we know how to get there so let's take charge of the journey today
Hello and welcome to Glasgow and welcome to the art of convergence in emobility
Uh, my name is Andrew Smart I'm a senior managing director at Accenture

And I'm i was about to say a select but I think actually a self-selected industry executive who with a number of my colleagues a while back stacked hands with a view to bringing our industry capabilities together with a view to helping with the energy transition so it's uh no coincidence uh that today you know we're going to spend the next hour thinking about how convergence you know can really lend itself to maximizing the benefits uh of the huge potential and the very exciting potential that emobility has to offer and very specifically to think about right at that point of convergence between supply and demand to create a charging manifesto that we'll look at through the lens of the customer through the infrastructure roll out through the attraction of investment and also for the balancing of the end to end system so I'm delighted to have with me today an amazing panel it's been actually very humbling to to not only realize you know quite who it is who's leading the innovation across
the sector today but also
the amazing longevity and expertise that
is at the helm of our industry and so uh
i as as has become the way we have a
hybrid panel uh so on online here uh
today with us we have ariane vanek uh
the ceo of uh
energy e-mobility
we also have reggie corteau
the ceo of free to move
and here in glasgow we have uh fiona
howarth the ceo of octopus
electric vehicles roy williamson a
senior advisor to the industry and our
very own uh sander tueslick who leads
connected energy for accenture
so as is the way with these things i
think it's you know it's crucially
important when we think about you know
these different dimensions that we
always come back to the to the primary
topic which is
the customer and the customer experience
so sandra maybe you could help us by by
kicking off with you know maybe the best
and the worst uh that's out there and
and maybe what our aspiration should
ultimately be for the charging
experience
thank you billy and it's a real honor to
be here with those industry experts in
this panel and what a great question to
start with the customer right so let me
start with the good have you ever driven
an electric vehicle indeed i mean it's
an amazing experience right and so this
is what every ev driver will tell you
right and also it's so quiet so there is
this noise cancellation another
major benefit of switching to electric
mobility is the convenience of being
able to charge when you're parked right
and especially for those infrequent
short distance travel like work home
commute i simply need to charge when i'm
parked either at home or at work or
while doing shopping at my local
supermarket so that burden of actually
having to go to a fuel station to refuel
my car
is completely gone
and of course you're at cop right so i
mean electrifying cars and vans and
buses is obviously good for the planet i
mean just in europe
more than 20 percent of co2 emissions
are coming from road transportation and
this is also why
european union has set
aims to have at least
30 million
zero emission vehicles on the road by
2030 combined with 3.5 million of public
charging infrastructure installed
and we see the similar level of ambition
also in the united states with the biden
administration
so
but just to put things into perspective
right today in europe we only have 3.1
million electric vehicles on the road
and less than 300 000 public charging
stations installed
so this is a 10-fold increase both the
number of electric vehicles on the road
as well as the charging infrastructure
to be installed
in just
eight years to deliver on these
ambitious targets so this is really
what's at stake when it comes to you
know getting to net zero with e-mobility
but it's not because the government says
it's good for the planet and says these
ambitious targets that people will adopt
electric vehicles at scale
because today it's just asking them too
much effort the adoption barriers are
too high
especially when it comes to
public charging experience because today
the reality is that the public charging
experience is not reliable is fragmented
and it's complex
and yeah it's just asking too much
sacrifice for me as an ev driver
so
if you want to mainstream evs quickly
we need to really solve for these uh
adoption barriers i mean today one out
of six charging sessions goes wrong
problem that virtually never happens at
the fuel station
another burden that ev drivers
experience today is this fragmentation
of experience right so it's very
difficult to ease to find and pay for a
charging session and you know and people
need to go through dozens of apps just to be able to start a session and finally also there is just simply not enough charging points that need to fan we need more charging points to be installed where we most need it for instance in germany today there are around currently 17 electric vehicles per charging point whereas 10 is considered an optimum and as a consequence you need to be lucky enough to find an available charging stations in city centers and even along the motorways so the acceptance of electric mobility really largely depends on this charging experience if we are really to kind of mainstream that uh and reach the targets that the government has said before but because if difficult charging experience will really undermine people trust and put people off electric mobility and this is why also this cross industry collaboration is so important because no single company even industry or country has the scale and the ability to do this on their own ultimately what we want to achieve is that we have a charging experience that is convenient simple and reliable so that in two years from now two years from now i should be able to go from amsterdam in the netherlands to bordeaux in france in the same amount of time as i would do with an icu vehicle because this is what's needed to mainstream uh char i mean electric mobility with this charging experience fantastic well i think you've set out the challenge uh very nicely there sander which is you know the essence of cops so that's good we get we like a challenge so fiona i know you've been you've been passionate about this sector for many years but you're pushing the boundaries now so you know i know that also that its convenience i think was the touchstone of what you described to me in terms of what you've been focused on for octopus how does that respond to some of sander's challenges yeah absolutely so i mean for those of you that aren't familiar with octopus ev we try and make it as well we do make it as easy as possible to switch to evs as we can so from choosing your car so you've got independent impartial experts can help you select from 35 electric cars now different bottles that's pretty exciting in itself uh through to getting a charge point at home maybe an ev tariff where you can charge up in the middle of the night for a fraction of the cost probably about 10 of what you might pay for the petrol diesel equivalent and actually we do have a charging card which integrates across about 10 different networks now in the uk and it gives you access to 100 000 charge points across europe where you can tap and go and it all goes on a single bill and so part of the challenges that we're seeing for example with public charging is uh you might have a number of different cards you might have a number of different apps maybe you have to top them up you don't really know what you spent you know i forgot my card i forgot my electric juice network card and i did a road trip up to cop and i was i was living this life without the card and i was like oh no and i still don't know really what i spent where in terms of topping up my ev to get here so it is a bit complicated but the change the pace of change is so fast now so i think the number of locations in which you can publicly charge your car is about double the number of petrol stations now in the uk which is pretty exciting and that's before you take into account that you can charge at home and charge at work which many of us can and then in addition to that it's that's kind of doubled in the last two years so
that pace of change is hugely very fast and the other thing is that there's lots of different business models emerging so it might be that classic when you're driving your petrol diesel car and you kind of imagine this world of evs it's very natural for you to imagine that you're going to go and fill up your battery somewhere but to your point the reality is you can charge your car where it's stationary it's like it's a total mind shift it's like where's the dwell time i hate the word dwell time i need to find a new word but where's the dwell time for you and your car and like is that a home is it at work is the gym so one of the places i charged up on the way out was an insta vault at a valentine's gym and actually i wish i bought my stuff to go and use the gym i was like if i if i lived near here i'd be here every weekend it was gorgeous like you just go and like you know top up your car if you didn't have a have a driveway i literally i i might even go there anyway just to have a break but there's lots of different places in which you're going to stop and relax and and actually then there's another business model that's emerging as well where the airbnb of uh charge points where you can actually borrow your neighbor's driveway your neighbor's charge point to fill up your car and actually that neighbor might be renting that driveway out that charge point to different people and then they start to make money off the back of like using their asset their charge point and their their driveway to help other people charge up their cars so actually maybe you won't be filling up at the banner times if you're kind of passing through york maybe you'll be plugging in at your friend's house that you're staying at you'll be charging up or maybe you'll be plugging up another you know local resident when you get to your your hotel later that evening if the hotel doesn't actually already have a charge point which many do so is this just this proliferation of charge points in lots of different places and the difference with kind of petrol or diesel where you know you can't actually access that in lots of places electricity you can it's a completely different world i mean it's beautiful the way you you know you depict you know that range of innovation that's still really just burgeoning yeah and you know it may be a great opportunity bridging for you to comment i think you know you've obviously brought partners together industries together in many ways to break open some innovation maybe you know your your reaction to fiona's comments there yeah so hi everybody i'm very glad to be i have to change on the on-the-go for the customer when the guys remember to send i want to go from paris to amsterdam huh i've heard you uh so we need to change this pattern we will not do it alone it's a question of ecosystem partnership if we talk about the charging station and we need to have this one card one app being able to recharge with all the different cpu so being uh proposing a solution a seamless solution to the customer we also need to provide some kind of packages to the customer in order to use green energy when he because it's also a question of mindset when we drive an ev car it's also because we are part of the world we want to change the world and we need to be able with partners to provide with green energy our customers and you know this is really a question of if we want to deploy if you want to have a fast charge strong fast charge network
we also need to do it not only with energy provider but also with partner being able to settle in some place people investors who have the money and so on so if we want to provide the best customer experience tomorrow in order to change this evie world we have to partner fantastic and and i do think you know it's very interesting the theme between the customer experience and the linkage to the infrastructure requirement you know clearly you know a a significant amount of work you know still to be done and many parties you know needing to be involved regime so you know roy maybe you know from your vantage point you're working with many players you know who are you know looking to find their way in you know what are your reflections on the rollout it's very interesting hearing the different perspectives so i've led bp's entry into this space over the last couple of years and then more recently now advised across the value chain really from battery companies through to charging operators and private equity investment in this space and i guess a couple of thoughts one is you we're trying to get a fair system and an efficient system really and the fair system has to be policy driven so the government does have a role here and cop is is a great forum for various different governments coming together to get aligned on what is what's the right level of regulation in this in this space and that can be very basic stuff like plugs and access it can also be education and communication because i think you've just heard that you know people's percep people's perspective of the electric vehicle experience is often very different from the reality so one of the things we need to do is educ ate people around how easy it relative it is relative to to their existing experience but also i think government has a role to incentivize innovation in this space and keep the the ball rolling and octopus energy are a classic example of how you know people are really pushing the pushing the boundaries of of what's possible in this space but i also think the uh it's important that the government doesn't get in the way of intervening where they shouldn't be intervening and certainly the operators in the marketplace are looking for a competitive market there's a recognition that to get the fairness you need you need to consider this a public good therefore you need to be able to help subsidize those areas where the market is not working and often that's rural areas sometimes that's areas where there just is not an economic case for a charge point so finding the right model for that um getting us a hybrid solution between letting the market operate and also providing the the black spots in the market if you like with solutions i think is part of the way that we can collaborate for success in this space yeah i mean i think you know that balance between you know if you like the the premium and the access for all you know in order that we get a broad-based roll out i think uh you know supremely important point uh and you spoke there about the role of of government and i guess government operates at many in many stratas roy and i know uh ariane when when we spoke you know uh you focus and drive for innovation i know you know you hit some very you've hit some very practical barriers in terms of alignment of of the parties maybe you could speak about how you see that and how you see that we could make progress on that basis yes thank you william one regards from from germany um the regulatory framework if you want to scale quickly is is of course very important and and what we see
the industry can do a lot of itself roy
already spoke about plugs and
communication protocols and all those
things i think the industry is perfectly
capable of
standardizing themselves and making sure we get
international roaming in place etc um
what the governments can do to stimulate
better is align what their goals are we see for instance in germany if you want
to put a simple box like this on your wall and you want to charge it with more than 11 kilowatt per hours you need an approval from the local grid operator that doesn't always work
if in germany you want to as a charge point operator you want to put charging poles in the ground you need the permits from the city you need the approval of the grid operator again that takes an awful lot of time and the central government says
we need to roll out infrastructure quickly the local government says well we need to think about whether we give you a permit yes or no and i know that a lot of investors in big cities in in germany have already pulled back because it takes too much time
and so here there is still a lot of alignment work to do i think uh within countries itself and and and thinking about the role of the government that they want to play and making that alignment across the local and central government
yeah fantastic i mean i do see you know the complexities start to emerge when you you know we start to realize you know how many uh parties are you know genuinely involved you know in this rollout component and fiona i think when we spoke you you also highlighted therefore you know the potential benefits of of more data transparency so that we could see more of what was coming maybe predict more what was needed and when
in order that this rollout is you know is efficient yeah i'd probably claim this is my point actually this came out of a conversation with one of our other panelists but in terms of like you know when when um
when people are thinking about in investing in charge points and where they're going to put them actually the business case is based often around utilization right we don't have some kind of uh revenue guarantee at this point in time so there you need confidence that cars are coming so we actually looked at these business cases a few years ago
and this was well before 2030 targets
well before their mandates were on the table and it's like are the cars coming like a rapid charger had on average one charge a day
that's like 10 pounds or something if that depending on how much they're charging i mean it's not a lot of money and if you're putting in place a 50 grand rapid charger probably a lot more now because they're much much higher rated so you know 350 kilowatt charging well over 100 grand to put that in place
10 pounds a day is not going to get you very far so what you want to know is like where are the cars coming how fast are they coming are there going to be a hundred thousand of them this year are going to be 2 million and where are they going to be sold right and so actually if they're being made in europe they come into the uk they're going to different countries and of course tesla ruled out their charging network they were in such a special position because they were selling the cars as well so they could see where the cars were going to be sold and they they knew where the charging had to be whereas actually the charging companies at the minute don't know that but the car manufacturers need the charge point companies the child porn companies need to know that from the car manufacturers perhaps we could collaborate we could make that work indeed and i and i do think it's interesting to compare and contrast your first mover like tesla that has so much you know if you like had to to solve for itself if you like and therefore it
extended its business model in order to do that and now we're thinking how does the ecosystem achieve those same goals yeah and then they've got a lot of advantages in their time in their dashboard as well essentially their screen if you haven't seen it they don't have a dashboard they have a ipad essentially where and it can you say i want to go london to glasgow and it will tell you where to stop and how long it will start and half an hour before you get there pre-condition the battery and all that kind of stuff so it's really very clever and us being able to bring some of that tech more into the other manufacturers is good but of course the good news is that they are they will be opening up that public charging network as well so that will become available to non-test drivers so that's open access i think crucially important i think we need to you know create that you know that accessibility you know across the network and maybe regime you know from a from a free to move standpoint you maybe have again you know more components or access to more components within your ecosystem how do you see you know some of those challenges that fiona just talked about being sold through the collaboration and the partnerships you've developed yeah the uh andrew the question of the data is is not an issue as soon as we treat the customer and we say experience we we probably need the the data from the customer in order to put the fast charge at the right place now uh but we also know where we need the fast charger we need it on the highway on the undergo uh we need it on the parking places when you go for the shopping and so on and so forth so so the question of the sharing data is not an issue uh of course it's super clear now we need you know as we said at the beginning we need to do it uh we need to deploy we need to accelerate because everything will accelerate uh so i agree on the fact that we it's not an issue to share it's more a question of investment acceleration bringing the right experience the transparency on the pricing and so on and being able at the end of the day to find the right balance between the stakeholders because we need it but of course sharing data is is key uh deploying is even more key absolutely so if maybe then you know if data is is one element or the of the lifeblood if you like of this uh you know fast and an efficient rollout uh clearly investment is going to be a an equally crucial component and you've lived in or you're in the middle of a transition between different funding models if i could if i could call it that uh maybe your reflections on how we you know from most uh two vantage points how we attract you know more investment into into the sector and in order that we affect the the acceleration that bridges spoke of well the there question is how are the the value chain partners going to develop where is the capital going to come from we used to be part of a of an energy company energy companies are players in this game the oil companies are are coming and the the owner already said see the cpos and the car companies need each other car companies have funded cpos as well so there is a large uh group of parties that is bringing capital to make investments and the question is who are in there for the long run and and that's uh that's not an easy game for some of them and what what we see now is for us as a simple technology company now we deliver the software and the hardware and we see our group of customers changing at the moment and i think it's a very interesting game in europe at the moment who is going to have the longest breath and
develop the strongest network
it's amazing what tesla did with their rollout
now
companies like ionity fastnet they're growing very fast they have the capital behind it to do it and
it's going to be a very interesting development
who's going to develop the highest speed and for us as we used to be a company an energy company has different shareholders
and can they invest as much as as is needed by other companies that have external capital and are fully focused on infrastructure
maybe fiona has an opinion
yeah i mean it's fascinating as things open up the number of balance sheets that are now coming into play and obviously uh you know tesla's alone you know it's an intriguing one roy as you're talking to you know potential investors or even existing investors
what's their mindset towards
i think we've reached a really interesting point in this market when it's evolved from being a kind of wild west venture capital high risk high technology risk high utilization risk um punt sort of market from the early days with some great startups many of whom have now been bought up by people like bp and shell by the way and some of the energy companies and it's evolving to become really because of the scale of the investment we're now talking about needing billions of dollars of investment not tens of millions or even millions in the early days it's not hundreds of millions anymore it's billions of dollars and in order to get that sort of finance yeah it's not going to come in my view from the corporates it's going to come from private equity it's going to come from the big funds maybe even the pension funds need to start backing this sort of activity and for them to back it the technology risk has to disappear because they're not interested in anything that involves any technology risk and that's pretty much happened um they need to to have some sort of secure demand profile to fiona's point earlier you know if you don't know that these charge points are going to be utilized any more than five percent of their life then frankly there isn't an investment case so getting to the point where we can find model business models that work and that needn't necessarily have to rely just on charging so we talked about revenue stacking we talked about energy management and the work that some of the other panelists are doing in providing energy management solutions to support a business case for putting down a child and by energy management i mean providing vehicle to grid um energy provides storing solutions to help the grid management process so i think there are a bunch of different ways that one can get to the answer but if we are going to get the billions of dollars we need invested in this space we're going to have to have this market grow up in in many senses and not become the wild west and become a much more predictable rateable uh environment for the big investors to come in i mean it's uh it's intriguing when you you know we've already talked through you know many components of you know we we focused hard in on charging and we've already you know shown the you know the the degree of integration and collaboration and connectivity that's required and you think of that then you know within the wider power system and how you know that operates maybe sander it would be useful to comment on you know what is the potential there for you know in terms of system optimization you know how do we keep that balanced and make sure that you know again that it that you know that it works you know on behalf of the customer but also on behalf of the
system
um yes indeed so i mean the characteristics of the electricity system that you need to keep it in balance at all times so the electricity supply and demand need to be managed and kept in balance and so traditionally uh this is what we call kind of the flexibility so the ability to regulate the supply and demand so that the system is in balance and actually traditionally these flexibility needs were quite predictable and limited but with the increasing share of renewables that are coming into the electricity supply it's becoming more unpredictable actually because obviously the sun doesn't always shine when we want it and the wind doesn't always blow and this is creating new flexibility needs for the energy system on the other hand on the demand side the demand patterns are changing i mean we have electrification of transport and heating but also some consumers are starting to produce their own energy and so this is making the demand patterns more volatile and unpredictable and so if you combine those shifts you know in the way we produce and consume electricity um then there's a new flex farm we did a study actually of six european markets where we that shows that actually the flexibility needs for the energy system will increase by 30 to 45 percent by 2030 because of these shifts and this corresponds to let's say up to 90 gigawatts of flexible new additional flexible capacity that needs to be put into the system in order to manage those situations where you have abundance of renewable energy but not enough energy supply or where you have actually demand peaks but not enough that needs to be fulfilled and so here comes the beauty of electric mobility and electric vehicles because they are batteries on wheels and so there is this huge potential that they can actually um offer to the energy system because they will naturally add additional flexible capacity right and in a way that they can you know we can manage the batteries that take the speed or the or the time of charging through smart charging which is actually already commercially viable or as roy said as roy said the emerging vehicle-to-grid technologies which would allow the actual vehicles to put energy back to the grid when it's needed but actually here is the trick this will only work if the ev drivers opt in at scale right so i mean otherwise imagine if we would have all these 30 million zero emission vehicles i talked about before providing flexibility to the system when needed and imagine if you can actually tell to those ev drivers up you can drive for free as long as we can use your batteries while you're plugged in when parked but all of this will only work if ev drivers opt in at scale so the question is how do we show them the value that they can bring to the energy system so they are going to be plugged in at all time i don't know fiona did you have any experience with that working with your customers funny our standard uh so we have yeah um at octopus as well as supplying energy to like three billion homes in the uk we have the tech platform that supports that so it's a billing our crm platform which enables time of use pricing and i came across outside response in 2010 and the idea of vehicles grid so i heard about this tech platform i was like oh yeah this is like a playground for me so we uh we've launched uh an ev tariff where you can charge up in the middle of the night for like four hours at a third of the cost compared to your daytime uh usage and as we've had loads of people opt into that and that is typically a
kind of entry-level ev tariff i would say and then we have this next level tariff which is the agile tariff which follows the wholesale market price so actually uh it changes every day and it's half hourly slots throughout the day you get the pricing about four o'clock the day before and it's typically relatively cheap overnight there's a peak around about breakfast it's cheap again and then between four and seven it's really high because that's our peak consumption in the uk and then it's cheap again now it obviously varies depending on when the wind is blowing when the sun's shining and all that kind of stuff and it will increasingly become so and uh we've got we made the pricing apis available and we've had uh smart charging companies integrate with those apis and actually other companies and battery tech and heat pumps and they optimize for it so my ev for example is optimized every day on this tariff and so it it just says i just say i want 80 by 7 am and it just fills me up when it's cheapest and in fact it sometimes goes negative right so sometimes we're paying wind turbines subsidies not to generate because we need to balance the grid right no don't do that don't pay these wind turbines to turn off pay our ev drivers to charge up so last year during a bank holiday weekend we uh we it went negative the pricing went negative and one guy actually charged up enough to go like london to newcastle and back and he got paid five pounds of pleasure so it's like here's your free fuel and here's your donut and coffee to go with you in fact it was during lockdown though so i understand that he actually seeing that for everybody i don't know to be fair though it also works the other way around at the minute right so obviously the pricing has been hugely high recently at points as we know and so that tariff has also had peaks so it's got the ups and the downs and um some people say switch back to octopus go during this period where it's that kind of more predictable one what's what i find interesting is because we speak to a lot of people thinking about making that switch to evs we the octopus go which is the kind of set 5p per kilo hour for the four hours that's very predictable so therefore you can say okay if i drive uh you know four four miles per kilo hour you can start to work out it's between one and two people per mile right and so this is really exciting and people start to like work out these numbers and they can start to see how much they're saving versus their petrol diesel versus the agile one is less predictable so it's it's not as tangible in that way so i quite i quite like the go for the kind of mass market in a minute but the other thing is we've we've gone a step further and we also do vehicle to grid so we've got 135 drivers now with nissan leafs and uh market leading vehicle-to-grid charges so bi-directional charges at their homes and so we've done a very very simple proposition in the first place where they lease the car the charger and everything and if they plug in i think that's 12 times a month overnight we give them back 30 pounds on their lease very simple you make your asset available so that we can use it to help balance the grid we'll get you charged by the time you want and we'll just we'll give you a credit essentially on your your lease to say thank you for letting us do that but they don't take any of the risk around the battery or anything like that that's all with us because it's a lease and you make it more affordable for them right so yeah it's much more affordable for them and actually we find they love it because there's so many more people engaged in you know the the net zero challenge ahead of us there's a real community in this this group of people that feel like they're helping us forge the path and for me it's less around the consumer challenge now there's actually some regulatory pieces where
um that pricing that we’re talking about that’s blurred at the minute because actually we’ve got other things on top of that which are smeared across the time of use charging so there’s network operating costs and so dna costs are smeared across every hour of the day and then also essentially the tax from some of the net zero subsidies that we’re contributing to so things like um this the contract for difference um electricity market reform type uh mechanisms that then essentially get charged back to us through our energy bills that’s also just smeared across every time of day so the actual differences between the cost throughout the day isn’t as reflective as it should be so we need to kind of start to think about this we can quickly see you know as we come back to the customer yeah you know i don’t think you just you know as soon as you’re into contracts for differences i think your average customer probably yeah we need to description right for them yeah make it super easy yeah so and i think you know philly you spoke about you know the you know the you know the early adopters who love all the data and love to calculate you know you know some of those uh time of use uh value propositions that you described but then you’re you’re now moving to that more ubiquitous simpler model that brings others in is that is that how you see it well i i feel like there’s there’s different levels because what we’ve found is that people the kind of uh people like to get the simple option and then they learn about some of the other stuff and they kind of upgrade themselves so it’s a bit like when you yeah there’s a pathway that’s the same as tech right when you first got your mobile phone actually it wasn’t nearly as sophisticated as it is now but then you kind of upgrade yourself i remember the first guy that told me i should get internet on my phone and i was like really i mean i don’t know why do i need that but like oh clearly you can’t can’t do without it now so it’s a kind of pathway i see that and and i i can definitely you know those uh customer business models you know really interesting to see how they’re evolving uh maybe at times that we forget you know the b2b side of this and brigitte it would be great to get your thoughts i know that you know again that you know within your construct you see opportunities for the fleet if i can call it that and maybe uh would be good to get your view how that same early adopter into mass adoption switch would happen there as well yeah on our side we consider that b2b will be the first main move in fact because you are able for a fleet to really help your customer to reduce its cost it’s really exciting to see that with our cars we will be able to i would say help the question of the energy today because the main question as asana said at the beginning of the energy is the question of the storage if tomorrow we are able to storage the energy will be able to reduce the cost and to put the right need at the right time so when you take it from a fleet manager point of view from a corporate company or company when they have 100 cars 500 cars 500 db cars when you understand that they can be part of what we need in terms of environment changing this world but also be able to reduce its cost because when you talk to a fleet manager i will not say the only thing that matters but the main thing that matters is to be able to reduce its cost so you put the fleet while the feed heat is not used you are able to put it as a storage and to give the energy to the energy provider and when the i would say the fleet manager need the car he programs the car he said at
this moment of this day at this hour i will need it it will be needed to be fully charged and i can manage my feet on the right way and at the same time being able to reduce my goals so what we are doing today is to start we already started on our side in our plant in italy and we will also starting with b2b customers because we will learn i will not say that this is uh we have found everything in terms of business model but we want to start because we consider with the b2b is the probably i will not say simplest but i can put it into brackets simplest way to learn to see how our customer needs how they are able is it uh for instance plus all kinds of customers or some typical kind of customers uh during the night uh and so on so we really need to learn and to start from now because it will be key in 2025 when the number of eevee cars in the i would say on the the energy grid will be so high that we will have an issue if you don't do it so i would say the positive side is that wow cars now start to become a real advantage on this on this part but not only all the fast charge storage will be able to put i would say battery as storage uh enabling the management of the uh energy grader yeah and and brigitte i was fascinated to hear even you know how you were using your inventory if i could call it that you know your your your fleet uh to all also as as virtual storage could you comment on that also yes of course we already do it we start that with uh italy with 500 fiat 500e so i will say uh the the car is produced the car is stopped in a parking place where you have all this system the v2g system uh so if there is no customer in front of that the car can stay one week two days depending three weeks two weeks and during this period it's a kind of storage and as soon as they we say we have a customer the fleet manager this new fleet manager i would say program the fact that this car will need to have this level of charging uh for this date at this hour because it will go to a customer so this is really interesting to do it one of the things we have to manage is the fact that uh during the during the summer we do not produce 102 weeks for it depending on on the year or on the plant so we need to manage this because as soon as we have this contract with the energy provider he cannot we say support the fact that we don't have uh those car produced during the the summer so those concrete kind of things we have to manage them but we are doing the we are doing the job today yes it's fascinating you know almost unbeknownst you you know how you become a power you know a power player you know you become a you know a critical component of the of the end-to-end system and you know different risk profiles and different commercial possibilities as well and maybe aryan you know just in closing you know out on that vehicle to grid conversation obviously at the heart of that is is the customer's concern about the the life of the battery the performance of the battery and you know how do you ensure that you you know you're a good you know the the your uh whoever you're partnering with as a customer is looking after your battery in your best interest your thoughts in terms of how technology can enable that well a lot is already possible and i think that the example that brigitte is
giving is a good one and we see the same
with the large uh
fleet operators for the last mile
delivery for the fedex the amazons and
the deutsche posts of this world are
developing now this technology as well
and and they're creating on-site
charging uh with
own production of pv with batteries
creating a total solution that manages
that
exactly what what brigitte despite
and uh what is also the key of their
business case is basically the the
electrical vents that are coming out at
the moment have a far longer lifetime
than than
the ice vents that they use at the
moment and that is a very big part of
their business case is this longer
lifetime and less maintenance cost that
the electrical vans have in combination
in comparison to the ice fans and i
think this is a factor therefore the the
lifetime of the battery uh
is probably the most important part of
the car to manage because the rest of
the car can can take much longer than an
ice car so it's uh it's really
interesting to make sure
that this lifetime is maximum because
the difference between two years with
the car or five years with the car is
huge for for a fedex or on amazon and
they they are exactly as we said totally
focused on getting the total cost of
ownership down
i mean it's been fantastic to hear if
you if you
if we pray see our discussion here
you know the the possibilities that
we've just opened up in in so many
ways you know many of the
if you like the holy grails i think you
know for for the industry in terms of
you know providing that customer
experience and the value proposition
that draws you know customers and
consumers into the industry you know a
technology that actually has a positive
business case and a positive
environmental case
you know associated with it and an
investment case that's going to draw
finance you know towards us and the
possibility to have
uh the market open up in a way that does
balance access and fairness you know in
equal measure and i guess you know
finally and crucially you know the
possibility to help balance the system
to actually therefore enable us to bring
more renewables in more storage in and
create a much you know more
carbon efficient end-to-end system
the energy markets have been doing this
for years um on you know when the
end of the game or half time in the game
is everybody goes and puts that kettle
on yeah that sort of predictability so
why can't they just join up with the 500
you know fiat 500 ease
and all the other data that they can get
access to to provide a holistic
system-wide balanced solution it's got
it can't be that far away i think so
yeah the balancing mechanism makes that
all work
our vehicle to grid cars in the uk will
be the first evs yeah to participate so
it's happening
it's all happening which which is which
is hugely heartening because i think
fiona as we were about to walk on stage
i think you said actually we've got
we're we're in hundreds of work days not
thousands of work days yeah to make this scale
you know possible and you know
we're probably talking about the sector
that's most ready for prime time yeah so
if anyone's going to do it it better be us
it's happening i think we've laid out
the challenge beautifully i can't thank
all of my panelists enough for their
contributions i think our manifesto for
charging you know is well shaped you
know in that regard and and i think you
know the the friendly faces here in
glasgow in the audience for being with
us here today and i hope those of you
online have enjoyed the discussion also
i i do think it's a you know we look
we're looking for pathways for success
and i think we've we've painted a you
know a beautiful yellow brick road here
today so thank you all for joining enjoy
the rest of cop and uh
and you know keep keep driving
[Applause]
[Music] you