# a

### 20 APRIL 2021

#### **OPENING DAY - 20 APRIL**

09:00 – 09:25

**KEYNOTE** 

09:40 - 10:25

#### PANEL: THE ROAD TO 2030 - DEPLOYING £1.3 BILLION TO SUPPORT EVS



With £1.3 billion announced by the government to accelerate the rollout of charge points for in homes, workplaces, streets and on motorways across England we look at the challenges for EV infrastructure leading up to the 2030 phase out date of ICE vehicles

- Discussing potential ways to distribute £1.5 billion funding, and how businesses and local authorities can make the case to receive support.
- With tighter budgets post COVID-19, are the commitments enough? And how will the rollout of charge points be affected?
- Analysing whether there will there be a need for the phase out date, or whether price parity might push out ICE vehicles before 2030?
- · Achieving a nationwide charging strategy to avoid monopolies of price and protect consumers

Joseph Cosier, Policy Manager, Energy UK

Andy Eastlake, MD, Low Carbon Vehicle Partnership

10:40 - 11:25

# PANEL: WHO NEEDS WHAT, WHERE? SMART CITY PLANNING TO ADDRESS CHARGER SPEED AND LOCATION DEMANDS



As the Energy Whitepaper outlines the intention to bring forward regulations in 2021 to mandate that private EV charge points must be smart, we look at how data can help build a smart charging network that can identify charging needs based on location and speed demands.

- Assessing the latest modelling techniques and frameworks, and how public sector can start to build their
  own to obtain the grid capacity information, land information, demand for existing chargers, EV ownership,
  and electrical supply.
- Analysing data on which chargers are accessed most frequently, which payment methods are used, and charging time to maintain, update and expand a charging network
- Building a smart grid to support charge points as the information from these points will inform planning and operation of electricity systems, and how this can help customers save money.
- The applications of Al open data in understanding the behaviour of drivers better to inform the building and maintenance of charging networks

Thalia Skoufal, Transport Practice Manager, Energy Catapult

Chris Barlow, Innovation Director, SmartDCC

Rachel Lewis, Project Manager, Transport for Wales

11:25 – 12:05

#### **SPEED NETWORKING**



Make the connections to accelerate your EV aspirations, with 40 minutes dedicated to building your network. Join our virtual speed networking and let us take care of introducing you to new contacts with our dedicated networking software:

Speed Networking will place you in a room with 3 random contacts. Designed to replicate some of the spontaneity of making contacts during the coffee breaks at live events, the system even provides prompts to help facilitate conversation if required.

### 20 APRIL 2021



# GREEN VEHICLES BEYOND THE TAILPIPE: REDUCING COSTS AND EMISSIONS WITH SECOND LIFE BATTERIES



As the uptake of EVs grow, the number of used EV batteries that people don't know what to do with will increase. With the potential for cost savings, as well as reduced lithium and cobalt usage, we will look at how second life applications can create a circular economy for EVs.

- Overcoming the challenges of taking batteries with different chemistries, different model types, and different states of health, and then trying to collect them into one battery storage unit.
- Making the economic case for recycling batteries and how it can help the bottom line for those purchasing or maintaining EV fleets or Energy Storage
- How will the car OEMS approach the problem of making batteries recyclable, and will legislation force them to make batteries easier to reuse?
- Understanding the logistics of procuring the used batteries, and how the supply chain will grow as more
  used batteries come online in future.

12.45 - 13.30

#### PANEL: "ACCELERATING THE MODAL SHIFT TO PUBLIC AND ACTIVE TRANSPORT"



As the first point on the Transport plan in the Energy Whitepaper, the urgency in initiating a sea change in the way people travel and their reliance in cars in particular is clear. Here we will assess how local authorities and private businesses can support that change.

- Questioning the ownership of cars can everyone afford to own one or two cars and if not, what model is best place to replace these journeys?
- How will the COVID-19 pandemic change the in personal car uptake and how can usage be discouraged?
- · What can charging data tell us about redesigning a city for use after cars?
- Can car sharing, micro-mobility and MAAS options fully replace enough car journeys to achieve decarbonisation targets?

13:45 – 14:30

# PANEL: LOOKING AT THE LATEST TECHNOLOGIES AND SOLUTIONS TO SUPPLY ON-STREET CHARGING

As local authorities take on more responsibility for ensuring EV drivers have adequate charging infrastructure to support their vehicles the challenge remains that around a third of households have no access to off street charging. In this session leading councils and infrastructure providers will look at the latest technologies and innovative solutions to address challenges of cost, accessibility, and installation.

Alastair Mumford, SWEP Programme Manager, Devon Council

Paul Gambrell, Team Leader – EV Integration , Oxfordshire County Council

Jeremy Yapp, Head of Flexible Energy Systems, BEAMA

14:30 – 15:10

#### SPEED NETWORKING



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### 20 APRIL 2021



#### 15.10 - 15.55

#### PANEL: DELIVERING AN OPTIMAL CHARGING EXPERIENCE FOR CONSUMERS



So far, the EV revolution has relied on 'early -adopters' willing to accept less than perfect charging experiences as EV owners. Here we will examine how the level of service needs to improve as the market grows and EVs become mainstream to ensure that public charging anxiety doesn't put off buyers.

- Analysing what consumers want from the charging experience and understanding how chargers are being used
- The importance of developing comfortable charging locations, considering weather protection and innovative locations such as underground charging possible due to no emissions
- · Developing national and international standards especially in terms of interoperability and security.
- As government legislation looks to make contactless payments mandatory, how can chargers be retrofitted to roll this out as easily as possible?
- Building customer focused networks: putting chargers in areas such as rural towns where there is less commercial benefit but expands the network and uptake of EVs

Hannah Budnitz, Research Associate in Urban Mobility, Oxford University

#### 16:10 - 17:00

#### PANEL: HOW SETTING UP CLEAN AIR ZONES HAVE ACCELERATED DECARBONISATION



Cities across the country including London, Nottingham, Leeds and Oxford have established clean air zones to discourage car use. In this session we will hear from leading cities on how they have established clean air zones, their plans for future expansion of the zones, and how they have impacted their decarbonisation targets.

- · Implications of implementing clean air zones
- Building a network or charging infrastructure in and around the zone

Jason Torrance, Clear Air Cities Director, UK100 Cities



### 21 APRIL 2021

#### INTEGRATING EVS WITH THE ENERGY NETWORK - 21 APRIL

09:00 – 09:25

#### PANEL: INTEGRATING EV CHARGING WITH BATTERY STORAGE TO REDUCE GRID DEMANDS



Battery storage is an increasingly popular option to pair alongside chargers to reduce grid demands and save money by avoiding charging a peak time, and even to increase the sustainability profile of a charger by using renewable energy sources. However, the rapid growth of storage and the myriad of options can be a cause of inertia as buyers are wary of purchasing something that is out of date. In this session we will outline all the options and the long-term implications of deploying battery storage alongside your charge points.

- How to make the most of integrating storage and charging on site and optimising those assets for increased longevity and performance.
- Looking at the long-term development of storage technology and latest innovations to make the best choice when procuring storage
- Examining the reasons to select alternative battery technologies and chemistries and how they affect performance and price, and why lithium ion is problematic environmentally

lan Featherstone, Account Manager, Supply Chain, Energy Saving Trust

09:40 - 10:30

#### PANEL: SHOULD EVS PARTICIPATE IN THE CAPACITY MARKET?



With BEIS' recent AR4 open call to stakeholders asking whether EVs should be able to participate in the capacity market to reduce the strain we have seen recently; we will discuss how EVs can contribute and whether capacity is growing fast enough to meet the growing demand of the EV market.

- How time of use charging can offer a simple solution to offer balance when there is too much or too little power, and whether EVs should, and whether they are able to take up this role
- · How will Ofgem's announced changes to network generator pricing affect tariffs?
- With the role out of renewable energy, will we have to change the way we charge EVs to ensure that the grid is not over strained? Will this mean we always need a smart charging system?
- · What are the energy suppliers planning to do to address future constraints on the grid?

Aimee Manester, Strategic Co-Ordinator, Ofgem

Jamie Charles, Head of I&C Development, ESP Utilities Group

10:45 – 11:10

#### CASE STUDY: HOW COMMUNITY ENERGY PROJECTS CAN REDUCE GRID DEMANDS



Community energy puts people at the hear of the energy system, provides a sense of ownership in the energy transition, and accelerates the transition to a zero-carbon energy system. At a time when there are concerns over the grid's ability to cope with increased numbers of EVs on the road this case study will look at how infrastructure providers and councils can engage with community energy projects, and even support clean transport in communities in rural or geographically isolated areas.

11.25 – 12.15

#### PANEL: HOW MICROGRIDS CAN OFFER AN ALTERNATIVE TO REDUCE DEMAND ON THE GRID



The practice of building microgrids to serve local energy loads with local and renewable energy sources is a growing concept and one that could be crucial in providing the flexibility and efficiency needed to support increased power demands as EV uptake increases. In this panel we will introduce the concept of microgrids as well as how to model, plan and install them to support EVs.

- How microgrids can add resilience to community charging infrastructure, protecting against power surges as well as Suring up the existing grid
- Understanding Local Authorities role in deploying microgrids with an unclear role in the energy transition, is it right for councils to take a leading role, or just encourage commercial projects?
- Examining the potential for microgrids to save money with low energy costs and even to generate revenue by selling energy back to the grid

12:15 – 13:00

#### **ROUNDTABLE**



Your turn to get involved and share your insight! These roundtable sessions are designed to allow delegates to network and interact whilst continuing discussing the topics from earlier in the day.





#### 22 APRIL 2021



#### **ELECTRIFYING PUBLIC & PRIVATE FLEETS - 22 APRIL**

09:00 - 09:25

**KEYNOTE** 

Justin Laney, General Manager – Fleet, Waitrose

09:40 – 10:30

#### PANEL: ADDRESSING LAST MILE CHALLENGES TO DECARBONISE HOW WE GET OUR GOODS



As part of the government's energy whitepaper, decarbonising the supply chain for everyday goods and logistics was a key priority. In this session leading logistics companies and fleet operators will come together to talk about the solutions to decarbonise one of the key contributors to carbon emissions.

- · Transform 'last-mile' deliveries developing an integrated, clean, and sustainable delivery system
- Understanding what the 2030 phaseout date of ICE vehicles means for fleets
- Navigating the roadblocks that prevent fleet operators from electrifying their vehicles and the long-term implications
- Address challenges of getting the network connections you need, and how batteries and solar panels can help address power demands
- Optimise logistics efficiency and explore innovative digitally enabled solutions, data sharing and collaborative platforms
- Are there any alternative financing arrangements that might come from the transition to EV that help to
  accelerate the rollout of their fleet electrification, or increase purchasing power

David Gibbin, Energy Flexibility Manager, Severn Trent

Chris Jackson, Head of Fleet Partnerships, Centrica

Graham Thomas, Energy Flexibility Manager, Ocado Group

Steve McNamara, General Secretary, London Taxi Drivers Association

10:45 – 11:35

#### PANEL: HOW WILL OEMS MEET THE VEHICLE SUPPLY DEMANDS OF THE ELECTRIC REVOLUTION?



An overview of OEM's role in the electrification of fleets, with representatives from the large car manufacturers this will be a chance to hear their views on how they see fleets being transformed in the run up to 2030.

- Addressing availability of vehicles; what new models are planned for the next year and how are OEMs planning to meet increased demand?
- Discussion on hybrids what is their value in the light of the 2030 deadline?
- To what extent are OEM plans constricted by utilities and the lack of grid capacity; will this result in consumers dissatisfaction and going back to ICE vehicles?
- Discussing the responsibility of OEMs to make batteries easier to convert to storage and recycle to create a circular economy
- Understanding European standards post Brexit for technologies such as V2G. With no European standard yet, how relevant are other standards such as CHAdeMO, will it be replaced by CCS, and what role will OEMs play?

Peter McDonald, Fleet Director, Nissan GB

Tomoko Bletch, Secretary General, CHAdeMO

Richard Hankinson, Automotive Director, Unipart

Alexis Percival, Environmental and Sustainability Manager, Yorkshire Ambulance Service





### 22 APRIL 2021



#### **CASE STUDY: ELECTRIFYING BUS DEPOTS**



Bus electrification is a significant step in decarbonising Britain. However, with huge power and logistical demands, the depots to support these buses can be complex and challenging to install. In this session we will hear a case study of how a local authority planned and executed their public transport electrification strategy.

- Managing power and charging on the grid; addressing the huge drain on resources and looking at solutions outside of cites where grids tend to be less constrained
- How to replace those larger vehicles including buses now that that government has committed to 2030, and understanding if there is a cut-off point where you rely on battery before you switch to fuel cell?
- Is there space for private investors to get involved and own the assets, whilst assisting Local Authorities to electrify?
- Identifying transport models to determine where will be the hotspots for usage on the network

Shamala Evans, Project Manager, Coventry Council

12.15 \_ 12.00

#### ROUNDTABLE



Your turn to get involved and share your insight! These roundtable sessions are designed to allow delegates to network and interact whilst continuing discussing the topics from earlier in the day.





### 27 APRIL 2021

#### **BUILDING PRIVATE CHARGING NETWORKS - 27 APRIL**

#### 09.00 - 09.50

#### PANEL: MAKING THE CASE FOR PRIVATE BUSINESSES TO INSTALL CHARGE POINTS



As the uptake of EVs increases then demand by consumers for places to charge will also increase and organisations and landowners will have the charge to install their own points to attract customers and even generate revenue. However, will uptake by businesses slow thus far we examine the benefits for businesses of developing their own charging network.

- Helping small and mid-sized operators to understand what they want from a charge point; what is the attraction for customers, and are they relevant?
- How to find eligible land to install upon and ascertain whether a business owns the land or leases, and how
  to work with the landowner for leased sites.
- Assessing the impact of COVID-19 on businesses including retailers, airports, and hospitality and how this
  has delayed the installation of infrastructure
- Assessing financing and grants; how to take advantage of the workplace charging grant and understanding why it isn't taken up more

#### 10:05 – 10:30

# CASE STUDY – HOW PRIVATE BUSINESSES HAVE GENERATED REVENUE AND CREATED A NEW CUSTOMER INTERFACE WITH CHARGE POINTS



In this session we will look at how a private business financed, procured, installed and maintained its charging network to draw in new customers and the business model they used to generate new revenues. In addition, we will look at the data used to understand the usage and dwell times of customers that helped to make procurement decisions for the charge points.

#### 10:45 – 11:35

#### PANEL: DEPLOYING PRIVATE NETWORKS TO HELP REACH CRITICAL MASS



Despite Local Authorities' attempts to provide charging for residents, mass adoption of EVs is likely to need the support of private charging infrastructure supplied by businesses to meet demand and hit 'critical mass'. In this session we will look at how private businesses can play a key role in supporting EV charging.

- · How to build private businesses' confidence in procuring and installing private charging networks
- Looking at the limitations of public charging infrastructure and the usage data to support private charge points
- · Looking at low tech solutions to get businesses started with off the shelf charging solutions
- Discussing the lack of government support for destination and private charge points opposed to workplace and home but not for your customers, and alternative ways businesses can finance charge points

Martin Spencer, Technical Manager, Caravan & Motorhome Club

Nigel Morris, EV & V2X Integration Manager, Active Building Centre

#### 11:40 – 12:25

#### ROUNDTABLE



Your turn to get involved and share your insight! These roundtable sessions are designed to allow delegates to network and interact whilst continuing discussing the topics from earlier in the day.

### 29 APRIL 2021

#### FINANCE DAY - 29 APRIL

09:00 – 09:25

#### **DEPLOYING £582 MILLION IN GRANTS FOR EVS**

With £582 million in grants promised in the energy whitepaper for those buying zero or ultra-low emission vehicles to make them cheaper to buy and incentivise more people to make the transition, we examine how this money can be deployed to maximum effect.

09:40 - 10:30

#### PANEL: WHEN WILL CHARGE POINTS BE CONSIDERED BANKABLE?



As investment in charge points grows, a crucial question for both investors and those purchasing infrastructure is when they become bankable assets, allowing businesses to obtain finance from banks. In this session we will look at the obstacles to charge points becoming bankable, as well as how charge points becoming bankable could accelerate rollout.

10:45 – 11:35

#### PANEL: UNDERSTANDING INVESTORS' CHANGING RISK PROFILE TOWARDS CHARGE POINTS



As the risk profile for EVs and charge points is very different to wind or solar, due to a lack of volume certainty in EV uptake, they must be handled differently to avoid the risk of a stranded asset. In this session we will look at how investors profile risk related to charge points and how that volume risk can be mitigated.

Antonio Curia, Executive Director, Wimmer Financial

Stephane Tetot, Director, Blackrock

**Axel Jaegel,** Commercial Specialist, Project & Structured Finance Group, **Infrastructure & Projects Authority Lukasz Cianciara,** MD, **Brean Capital** 

11:50 – 12: 15

# ANATOMY OF A DEAL: IDENTIFYING DIFFERENT BUSINESS MODELS TO GENERATE REVENUE FROM PRIVATE CHARGE POINTS

A key driver for public and private businesses in installing charge points is revenue generation, however with so many different models it can be hard to identify the best for your business. In this session we will examine some of the key advantages of different business models and deep dive into an investment and revenue share model.

12:15 – 13:00

#### **ROUNDTABLE**



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