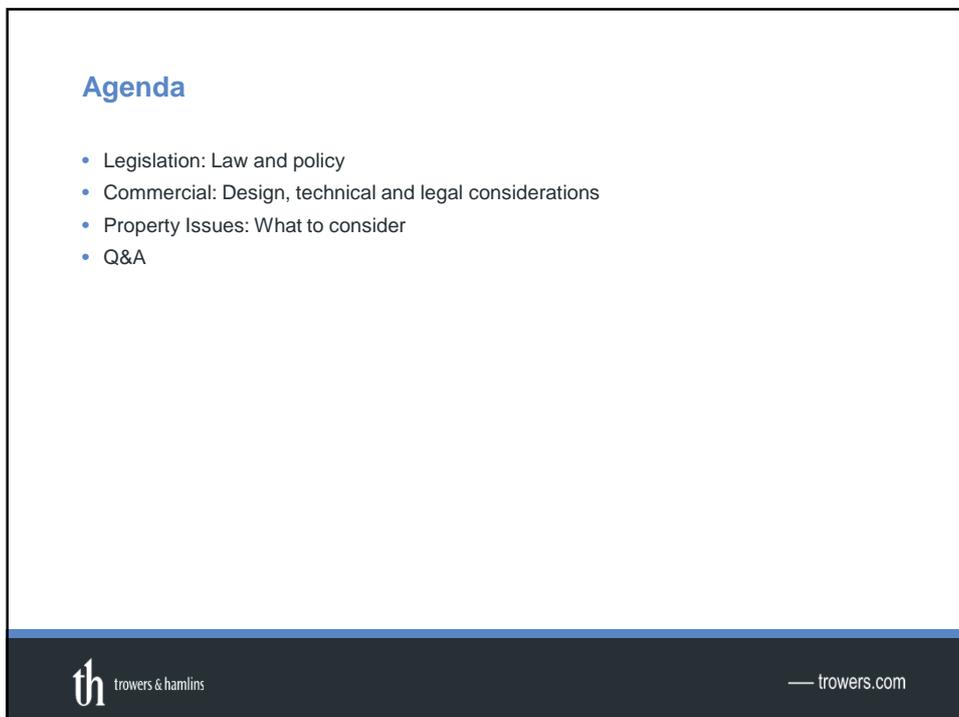




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## Legislation: Law and Policy

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## Net Zero 2050

- The Climate Change Act 2008 (2050 Target Amendment) Order 2019
- England to be 'net zero' by 2050 (100% reduction of greenhouse gases based on 1990 levels)
- 78% reduction in emissions by 2035
- Unprecedented level of change required:
  - Energy: Phase out fossil fuels, with more renewables, storage and/or carbon capture
  - Transport: Ban on new ICE vehicles by 2030
  - Buildings: Focused regulations to bring down emissions (both new-build and retrofit)
  - Farming: Changes to the way land is farmed.

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“ ***Transport is the largest contributor to UK domestic greenhouse gas emissions, responsible for 27% in 2019 (Department for Transport, 2021)*** ”

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### **Electric Vehicles: UK Roll-out**

- Over 500,000 Ultra low emission vehicles in Britain (May 2021)
- Uptake is increasing: 11% of new vehicles registered in 2020 were ultra-low emission (up from 3% in 2019) but overall represents c.1% of all vehicles
- 2021 ZapMap Survey found 90% of respondents use public networks
- Since 2015, the number of public charging devices has increased x8 times (to 22,790 in April 2021)
- Uneven geographical distribution – of the 10 local authorities with the greatest number of devices, 7 of those are in London.

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## EV Policy

- Road to Zero Strategy (9 July 2018)
- National Infrastructure Commission (10 July 2018)
  - Investment in electricity network
  - Converting parking spaces for on-street charging
- Transport Decarbonisation Plan (July 2021)
- Building Regulations changes to require roll-out of infrastructure
- On-Street Residential Chargepoint Scheme (for Local Authorities)
- Energy White Paper: £1.3 billion to accelerate the roll-out

## On-Street Residential Chargepoint Scheme

- **£20 million grant funding** for 2021-22 for Local Authorities to fund on-street chargepoints
- Up to 75% of the capital costs of installing chargepoints and associated dedicated parking bays (as appropriate)
- Up to £13,000 per chargepoint (to reflect higher grid connection costs)
- Administered by Energy Saving Trust on behalf of the Office for Zero Emission Vehicles (OZEV)
- No longer a requirement to complete by March 2023

## EV Legislation

- Automated and Electric Vehicles Act 2018
- Government consultations (closed 7 October 2019)
  - Electric Vehicle Chargepoints in Residential and Non-residential Buildings (New Part S of the Building Regulations awaited)
  - Electric Vehicle Smart Charging (response published July 2021)
  - Smart cables
- CMA EV charging market study (December 2020)

## Building Regulations - Consultation

- Residential:
  - Chargepoints for every dedicated space on new build
  - Existing buildings undergoing "major renovations" with more than 10 spaces required to have EV charging infrastructure to every space
- Commercial:
  - Any new build or existing with more than 10 spaces is required to have EV charging infrastructure for 1 in 5 spaces

Expected to form a new Part S of the Building Regulation to be published Q4 2021 and come into force in 2022.

## Key challenges for Local Authorities

- Funding and resources
- Approach to procurement
- Developing contract models and documents
- Property and access considerations
- Requirements for design and construction (eg chargepoint specifications)
- Power connections and cost of upgrades
- Future-proofing.

## Commercial: Design, technical and legal considerations

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## Types of EVs

- Battery electric vehicles (BEVs)
  - No traditional internal combustion engine
  - Runs entirely from battery power which needs to be charged periodically.
- Plug-in hybrid electric (PHEVs)
  - Runs on batteries which provide the majority of the vehicle's power
  - Back-up internal combustion engine
- Full hybrids
  - Cannot be plugged into mains power
  - Electrical motor and internal combustion engine work in parallel (self-charging)

## Options for chargepoints

- Types of chargers:
  - **Slow:** Usually 3-6kW and typically take 6-12 hours to charge. Usually for home, workplaces and some public points.
  - **Fast Chargers:** 7-22kW and take approximately 3-7 hours depending on the battery size. Often referred to as "standard" and found in supermarkets, car parks and newer developments. New Building Regulations to require at least 7kW.
  - **Rapid chargers:** 43kW+ and capable of charging 80% of cars in 20-40 minutes depending on battery size. Usually found in motorway service stations, or on main routes. Ultra rapid (up to 350kW) now starting to appear.
  - **Wireless charging:** Not yet in the UK.

## EV Charging: Design and technical (1)

- Electricity supply for chargepoints
  - Via landlord supply or separate connection?
  - All spaces enabled/connected?
  - Cable routes/conduits
  - Impact on capacity requirements
  - Load management/Array charging

## EV Charging: Design and technical (2)

- Chargepoint specification
  - What is being installed?
  - Is it platform enabled?
  - Does it have a suitable warranty?
  - Is it tied to an operator?
  - Remote access
  - Monitoring/dashboard features

### EV Charging: Design and technical (3)

- Wifi/Connectivity requirements
- Location issues
  - Right to park vs. allocated spaces
  - Implication on infrastructure and capacity
  - Public charging
- Visibility/signposting
- Regulatory issues (electricity supply)

### EV Charging: Delivery Structures

- Simple supply and installation
  - Construction contract
  - Interface with O&M provider
- Outsourced services
  - Software platform
  - O&M services
  - Customer T&Cs

## EV Charging: Delivery Structures

- Concession opportunities
  - Operator granted exclusivity
  - Installation at zero or discounted cost
  - Operator owns chargepoint
  - Additional security through lease/licence structures
  - Capital contribution and/or revenue share models

## Contractual issues to consider

- No standard approach in the market
- Commercial offers need careful review:
  - Employer obligations
  - Contract duration (is the market clear enough)?
  - Requirement to maintain or upgrade technology?
  - Change in law risk
  - Tariff options (free, per hour, fixed or per kw/h)
  - Controls on customer terms
  - Availability and performance reviews
  - Termination rights and associated payments
  - Dispute resolution

## Property Issues: What to consider

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## EV Charging: Residential property

- Who owns and operates the chargepoint?
  - EV Provider (funded concession models)
  - Landlord owned systems
  - Parking space owner
- What might a provider require?
  - Lease of land for EV charge points to also include parking spaces
  - Access route easement/cable wayleave
- Landlord and tenant issues:
  - S.18 – 20 Landlord and Tenant Act 1985
  - Appointment of O&M provider
  - “Lift and shift”
  - Provisions in occupational leases

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## EV Charging: Commercial property

- Similar issues for ownership/operation of the charge points and provider requirements
- Security of tenure issues (Landlord and Tenant Act 1954)
- Service Charge provisions:
  - RICS Service Charge Code 2019
  - Use of 'caps'
  - RICS Code for Leasing Business Premises 2020
- Potential competition issues?
- Analogy with telecoms apparatus?
- Revenue linked rent opportunities?

## Planning – items to consider

- National Planning Policy Framework 2019
- Relevant local plan
- Early engagement with planning solicitors

## Use of lease

- Lease – issues to consider
  - Exclusive possession
  - Ancillary rights
  - Term of years
  - Rent calculation
  - Alienation
  - Alterations
  - Others?
- Lease – possible disadvantages
  - HM Land Registry compliant plan
  - Negotiate terms/drafting (delay)
  - Title investigation and guarantee
  - Third party rights/consents

## Use of licence

- Licence - advantages
  - Quicker, easier and cheaper
  - Little title due diligence
  - Fewer third party consents
- Licence – disadvantages
  - Personal – does not bind successors
  - Security of tenure risk under Landlord and Tenant Act 1954

## Other options?

- Transfer of freehold – over the top for most circumstances
- Do nothing – not recommended!

## Retrofit vs new development

- Retrofitting more complex from property law perspective:
  - Existing leases and ancillary rights
  - Existing title restrictions
  - Existing rights for utilities
  - Service charges
- New developments:
  - "Clean slate"
  - Set up service charge and lease provisions to dovetail with charging point arrangements from the start
  - Upfront costs

## Round-up

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## Legal points to resolve

- Funding options
- Procurement routes
- Supply and installation contracts
- Appointment of O&M and Metering & Billing provider
- Appointment of EV Chargepoint operator
- Property rights

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## Useful Links

- Transport Decarbonisation Plan – [Decarbonising transport: a better, greener Britain](#)
- Consultation response - [Electric vehicle smart charging consultation](#)
- Consultation - [Electric Vehicle chargepoints in residential and non-residential buildings](#)
- NHBC Foundation Report - [Plugging in to the future: electric vehicle charging and new homes](#)
- On-Street Residential Chargepoint Scheme - [OZEV Guidance](#)