A FUTURE GUIDE TO

# EV CHARGING FOR LEASEHOLD BLOCKS

Future Group TM | Sept21 | Form Number 166 | Rev 1a

# It's clear that in the UK we are now at a tipping point for the take-up of electric vehicles.

It's clear that in the UK we are now at a tipping point for the take-up of electric vehicles. By the end of May, there were nearly 260,000 pure-electric cars and more than 535,000 plug-in models on UK roads. Despite the pandemic, last year saw the biggest annual rise in the number of EV registrations – a staggering 66% increase on 2019 according to the Department of Transport. But the biggest obstacle to take-up after cost (which is coming down all the time) particularly for flat owners, is chargepoint availability.

# START PLANNING NOW

## If you get a call from a resident asking you to help them with installation of an EV Charging point, what should you do?

As consultants with several years' experience of working with property managers in this area, we would strongly advise against allowing individuals to add/install single point chargers without a strategy in place that plans for future demand. If you install chargers piecemeal, then you are opening yourself up to all kinds of problems: chargers not communicating, multiple billing platforms, usage fund recovery.  Not to put too fine a point on it – you are stepping into a world of pain.

Instead, we recommend your first step is to engage with the entire block and issue a questionnaire to determine other residents' appetite for transitioning to EV motoring; maybe conduct an online meeting to discuss options.

**"Just make sure not to spend time planning and building a solution that could become oversubscribed as soon as it's installed and commissioned."**

# WILL THE LEASE ALLOW THE SYSTEM TO BE INSTALLED?

**Anyone with responsibility for an existing development that wants to install charging points, needs to consider what is allowed under the lease. This will guide, shape and inform how the project can be successfully achieved.**

**Important points to consider are:**

- Who are the parties to the lease?
- How owns the area where the charging point will be installed?
- How will the supply for the charging point be catered for?
- How are the costs going to be met for both installation, ongoing maintenance and also the electricity supply itself?
- Issues around service charge apportionment

Property managers will need to consider these issues even in the most basic developments and how the EV charging project is taken forward will be entirely dependent on the answers to these questions. Leasehold blocks are often complex, so you may need advice from a law firm specialising in residential blocks.

# CHECK THE EXISTING ELECTRICAL SUPPLY

**Your next step is to have the building's incoming electrical supply investigated and tested to confirm if any spare capacity is available to deliver to the new charging network or whether there is a need for a power upgrade.**

With smart load-balancing charger systems now available, it's possible to achieve sufficient charging options that maximise any spare capacity the block may have. Energy efficiency has improved in many blocks to the point that we often find buildings have enough spare capacity to use during the early days of transition to EVs. However, as demand grows you may need to speak to your power supplier regarding an upgraded incoming supply provision.

"MAXIMISE ANY SPARE CAPACITY"

# HOW WILL CHARGERS CONNECT TO THE BLOCK'S ELECTRICITY METERS?

**Management of cable infrastructure is very important – getting it wrong can be very dangerous. Imagine an array of chargers fed from various points around the building**

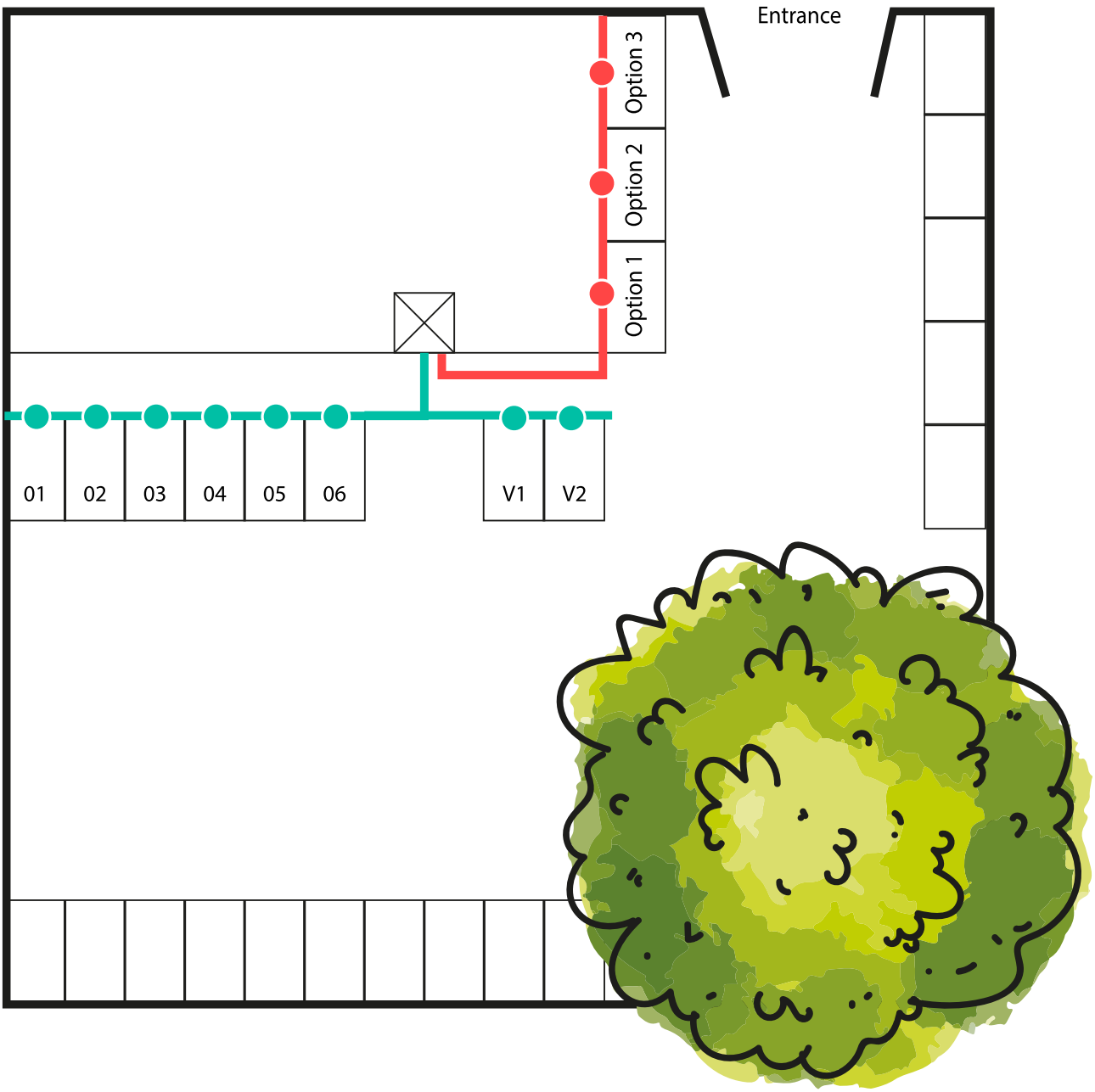
Who would take responsibility for maintaining, testing and confirming compliance and continued safe use? Thankfully, most lease terms prevent individual supplies running through the common area. Instead, chargers must be connected to a single point of supply so there is a single point of isolation/disconnection. This is normally the common/landlord supply

# SO WHERE DO I INSTALL THE CHARGERS

**This is the million-dollar question, and we wish we had all the answers.**

With block parking facilities ranging from 'assigned', 'demised' and 'non-allocated', to 'visitors' and even 'no visitors', every charger installation project is different, and each scheme must be designed to be unique to that development. So, this is where site visits, resident engagement, and pre-planning are imperative. As we said earlier, plan, plan, and plan again.

However, despite the various parking arrangements, it's common for blocks to opt for a 'passive solution' to every or every other bay (shared) which includes the mains distribution and final circuits terminated to parking bays, ready for future connection of a charger.... Basically a 'future-proofed' facility.




# MAKE SURE ITS OCPP - YOU HEARD IT HERE FIRST.

Billing and recovery of electricity usage is the next important area that anyone thinking of installing chargers needs to consider. Make sure you opt for an 'open protocol' or OCPP solution that will allow you to interface any billing and management platform. Many new and exciting companies are developing easy to use, smart billing platforms, some even partnering energy suppliers. If you buy into a closed protocol, non-OCPP you could be surrendering your billing and management flexibility for good.

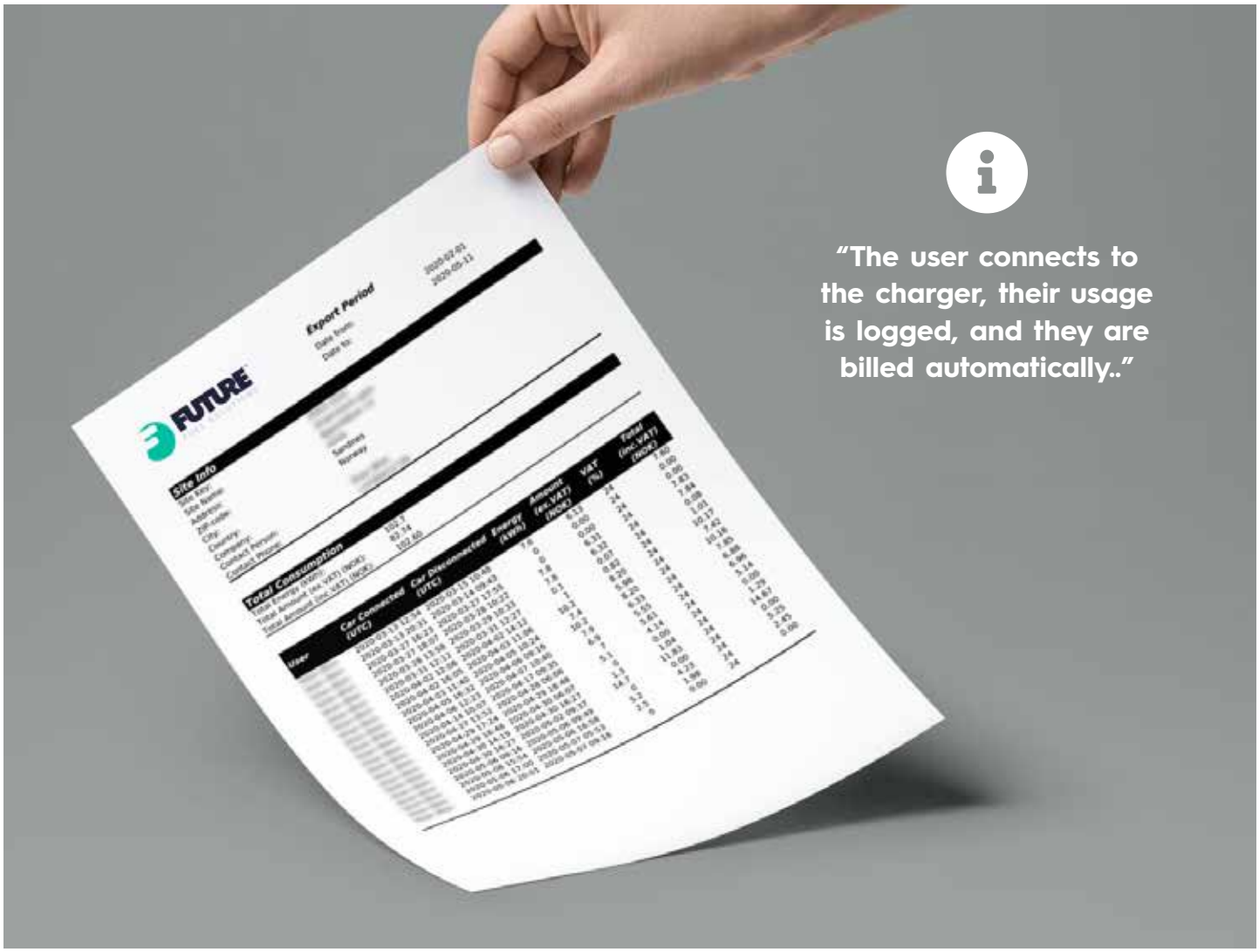
And lastly find an independent supplier who is not "product led' to guide you, don't be swayed by a manufacturer-led solution.

# HOW DOES THE BLOCK RECOVER THE FUNDS FROM RESIDENT USAGE?

**Any smart charging solution will integrate a billing platform that allows access to be granted to users remotely. The charger is installed, and the resident(s) are added to the platform.**

Here's how it works. The user connects to the charger, their usage is logged, and they are billed automatically.  Just like when we park in the High Street using local authority parking bays. We select a bay; we select how long we wish to park (or charge in this case) and the money is taken from our bank/card and paid to the parking facility's owner/authority

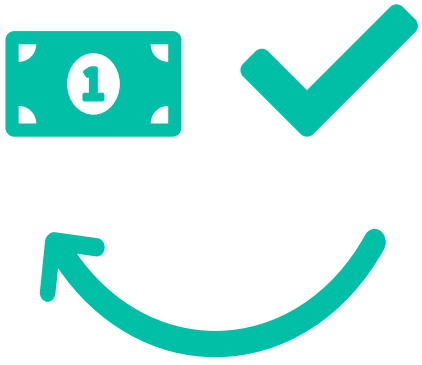
The block management company receives monthly reports of each resident's usage and the funds recovered.  These collected funds are dropped back into the account (normally the service charge account) that pays for the common/landlord electricity supply.



# BILLING & RECOVERY OF USAGE

**Finally, you must confirm that users of the EV chargers are paying for their usage.**

There are several solutions that have been implemented over the years; licensed access cards, Token Pay and the new online smart billing. You must confirm operation and ensure that no one is taking advantage of free electricity to fuel their vehicle at the expense of other residents.



**The Future Fuel guarantee that you only pay for what you use.**

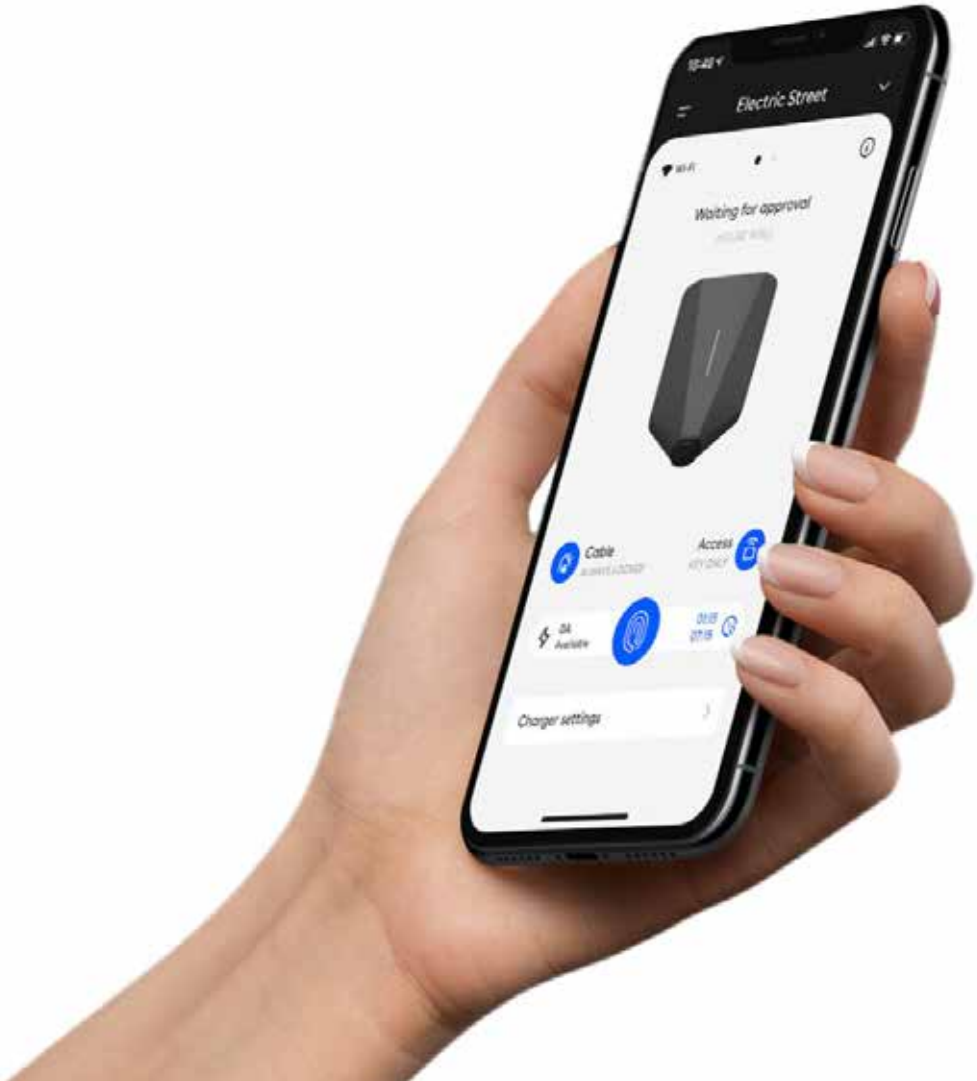
# HOW DOES THE BLOCK PAY FOR THIS?

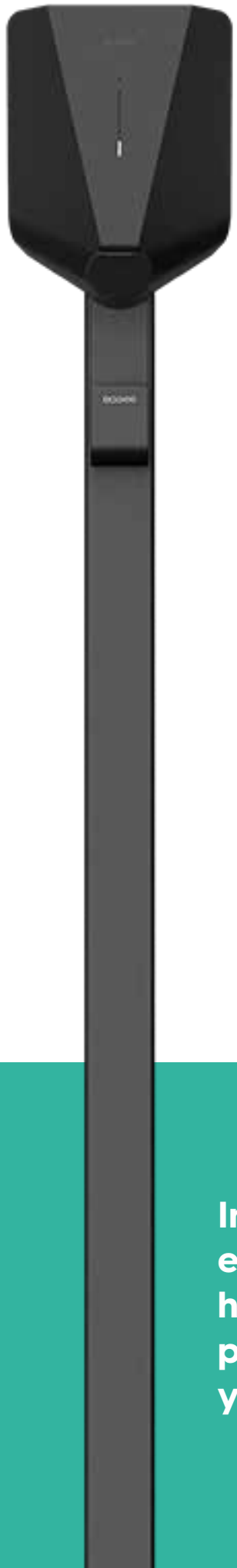
**Most residential blocks we have worked with utilise a similar format to the one outlined above, however we have seen a huge array of different budgeting and payment structures.**

Normally the service charge (or freeholder) pays for the infrastructure and distribution systems and then it's down to the resident to buy the [pre-selected] charger to be installed in their bay. We can apply for a grant to cover part of the cost of the charger for the resident, should they have permission via the OLEZ Home charge scheme, although there are some stipulations we must meet.

If the residents sell the property, then the charger could be disconnected and handed to the owner. However, most will remain, just like selling your fridge as part of the kitchen when you sell your house.

The chargers must be from the agreed manufacture/supplier as they must communicate to prevent building overload while connecting to the block's billing and management platform.





# HELP WITH FUNDING

**If all this on top of the price of a new electric car sounds expensive, then help is at hand.**

From April next year, a newly positioned Electric Vehicle Homecharge Scheme will fund up to £30,000 of leaseholder's installation costs, so now is the time to take stock of the charging infrastructure requirements in your blocks.

Our advice to property managers is to get the ball rolling now; get designs, proposals and scopes in place, so projects are agreed, and you are positioned to file your application to the EVHS for approval on time. Once the fund opens, it is likely to be heavily subscribed. Early applicants are likely to be most successful in securing funds, which won't be in place indefinitely.

Office for Zero Emission Vehicles

**In the next couple of years, EV take-up is expected to grow exponentially, so do your homework, plan and make sure you're well prepared for that call when it comes, because you can rest assured – it will.**

# MY EV CHARGERS HAVE BEEN INSTALLED, WHAT NOW?

**With EV chargers, like any other electrical installation, safety and compliance are vital. These are high powered pieces of kit and must be maintained like any other piece of electrical equipment in a block.**

We recommend that you adopt a regular PPM service agreement where part of the arrangement is to have the equipment tested and certified as "Satisfactory for continued use" from a registered and qualified electrical contractor.

Tel: 020 3826 9999
Email: info@future-group.uk
Web: future-group.uk/ev

Office for Zero Emission Vehicles
Approved EV Charge Point Installer

ARMA PARTNER

Part of the Future Group
FUTURE GROUP