



Managing fire risks associated with micro mobility options

Management of micro mobility options, including the use and charging of e-scooters and bikes requires careful consideration. These micro mobility options are powered by lithium-ion batteries which pose a serious safety risk for people and property a-like if not stored, maintained, and recycled or disposed of properly.

Department of Transport (UK) recommendations

In February 2024, the **UK** government published helpful guidance for commercial premises handling e-scooters and e-bikes. Premises managers should refer to the London <u>Fire Brigade's Fire Safety Guidance Note GN103: charging and storage for electric powered personal vehicles.</u>

Self charging and storage recommendations

- ▶ Locate storage and charging facilities so that a fire cannot obstruct means of escape from the building.
- ▶ Ensure ground-level entry is available, so firefighters can get direct access from the fire-engine parking location, providing premises information and signage.
- ► Charging and storage in a basement may need smoke control and sprinkler systems upgrading.
- Install an automatically openable vent linked to the fire detector and also water-based fire suppression if not already in place.
- ▶ Ensure a means of raising the fire alarm is in place along with smoke detectors.
- ▶ Ensure an external means to isolate the electrical power for the storage/charging room is provided and clearly signposted.
- Consider the implications of possible high-temperature fires on the building structure.
- Consider how hot water run-off and contaminated water will be handled as fighting Li-Ion fires often involves considerable amounts of water
- Consider additional issues including the location of gas intake pipes

Managing premises

- Consider policies restricting e-cycle and e-scooter battery charging on the premises, but not restricting access or storage. This may be a particularly appropriate approach where these devices are less likely to be parked overnight, and are more likely to be stored in a lower-risk parking facility during working hours if employees are using them for commuting purposes.
- ▶ General policies restricting the storage of e-cycles, e-scooters and similar items in common areas, stairwells and other fire escape routes should be fully implemented and monitored.
- If secure and safe cycle storage provisions exist, users should be strongly encouraged to leave batteries in place on e-cycles and charge them there, rather than removing the battery and charging at their desks or common areas.
- If there is shared access to the storage and charging area, staff/ visitors may be concerned about theft of batteries and/or chargers, even if the cycle itself can be securely locked. This might lead them to remove batteries and charge them elsewhere. One solution to address this would be to provide secure battery charging lockers in or near the storage (with a mains socket in each locker). Any area such as lockers should be specifically designed for e-cycle/e-scooter battery charging, be clearly labelled and installation should ideally include automatic ventilation to the outside.
- It should be clear that damaged lithium batteries are a particularly high fire risk and should not be brought onto the premises.
- In most cases, e-cycles have more than adequate range for commuting journeys without requiring regular charging at the workplace.

For more risk management advice contact LGIS

1

March 2024