

## metroSTOR Webinar Summary

### Back-to-Basics of E-mobility Fire Safety

13.11.24

#### Summary

##### Overview:

The session, led by Nigel, focused on addressing fire risks associated with e-mobility devices such as e-bikes, e-scooters, and mobility scooters in social housing. The key emphasis was on educating residents, preventing incidents, and managing risks through collaboration, sharing best practices, and proactive engagement with stakeholders.

##### Key Presentations:

Neville Tomblin highlighted the growing prevalence of e-mobility devices and the associated fire risks. He shared statistics showing a rising number of incidents linked to improper storage and use, particularly with devices featuring lithium-ion batteries.

- Mobility Scooters: 36 reported fires since 2010
- E-scooters: 19 reported fires in 2022 and 36 in 2023
- E-bikes: 74 reported fires in 2022 (43 conversions)
- E-bikes: 61 reported fires in 2023 (75 conversions)

Neville recounted specific incidents, such as a tragic house fire caused by an improperly converted e-bike, and highlighted the fact that even without a fire, large volumes of toxic and explosive gases are emitted. He discussed the challenges of ensuring safe external storage and noted that residents often resist using external storage facilities due to convenience issues, such as difficulty accessing them. To mitigate risks, he recommended referring to the National Fire Chiefs Council (NFCC) guidance, which provides actionable steps for safe storage and use.

Adam Briggs provided insight into a guidance-driven approach to managing e-mobility risks within his housing organisation, including not allowing Class 3 scooters to be stored within buildings, and requiring users to seek permission before purchasing. He described how his team collaborates with housing officers, residents, and other stakeholders to develop tailored solutions. Adam outlined various storage options, including external storage facilities (with or without charging), internal purpose-built storage spaces, and case-by-case assessments to balance safety and resident needs. He emphasised the importance of proactive engagement with residents to reduce risks, including offering guidance on safe storage and charging. Adam also highlighted the need to learn from past incidents and continually adapt strategies to ensure ongoing safety improvements.

### **Key Issues Discussed:**

The webinar addressed the high fire risks posed by improper storage and non-compliant charging practices for e-mobility devices, particularly when damaged batteries or unapproved chargers are involved. Residents face challenges such as limited mobility, resistance to using external storage, and financial barriers to purchasing compliant devices or accessories. Ensuring compliance within private flats was also highlighted as a significant challenge, as landlords have limited visibility into residents' actions behind closed doors. While some housing providers are transitioning from guidance to enforceable policies within tenancy agreements, there are ongoing debates about mandating insurance for mobility devices to manage liability risks. Several delegates had experienced new homes being built with charging points on the means of escape, highlighting a lack of guidance for specifiers on this subject. It was suggested that the NFCC guidance for mobility scooters should be regarded as applicable to e-bikes and e-scooters, and that electronic noticeboards are a good way of providing information regarding the risks. There was a question raised regarding the use of fire blankets, and it was agreed that the value of these was minimal in such circumstances.

### **Innovative Practices:**

Some housing organisations are implementing creative solutions to address these challenges. For example, free PAT (Portable Appliance Testing) is being offered for chargers to ensure safety and Fire and Rescue Services are normally willing to assist with inspections and offering advice to residents. External storage solutions are being made available, and design teams are being engaged early in housing projects to incorporate safety measures from the outset. The webinar also explored international practices, such as New York City's incentivised registration and charging stations for e-mobility devices, which have shown promising results in reducing fire risks.

### **Recommendations:**

The key takeaway from the session was the importance of prioritising resident education and awareness campaigns to mitigate risks. Clear communication about safe usage and storage practices is essential, along with fostering collaboration among residents, landlords, housing officers, and fire safety authorities. Participants agreed on the need to balance safety enforcement with residents' practical needs and to continue refining policies that ensure compliance without being overly restrictive.

### **Future Steps:**

The session concluded with a commitment to continued engagement through webinars and workshops to share knowledge and explore practical solutions like external charging facilities. Addressing gaps in awareness and compliance at both the design and operational levels remains a priority. Participants also emphasised the need to engage with residents to build a culture of safety and responsibility around e-mobility device usage.