



Tea, Coffee and break

Back at 11:00

Andy Frankum



Andy Frankum

Chair of the National Social Housing Fire Strategy Group

Representing 226 member organisations and over 2.8 million homes...

About Us

- National Social Housing Fire Strategy Group (NSHFSG) – established 2011 following Lakanal House fire
- Currently 226 member organisations across England and Wales in eight regions, representing over 2.8 million social housing homes.
- To influence national policy and encourage collaboration to deliver safer outcomes
- A number of our national partner organisations we work with



NFCC Mobility Scooter Guidance Consultation 2025

Residential Buildings



NFCC
National Fire
Chiefs Council



Fire Safety in Housing
Making our Communities Safer

Mobility Scooter Guidance
for Residential Buildings

Background

-
- NFCC and NSHFSG issued national guidance for Mobility Scooters in Residential Buildings in 2018.
 - This was following a significant consultation process with building owners, fire and rescue services and mobility organisations

Consultation

-
- Guidance has now been operating for 7 years, since which technology and practices have advanced.
 - More use of lithium-ion batteries and associated risks
 - Older population is increasing and will continue to increase
 - Opportunity to share good practice and/or any lessons learnt
 - Improved standards to ensure resident safety



Key Proposed Changes

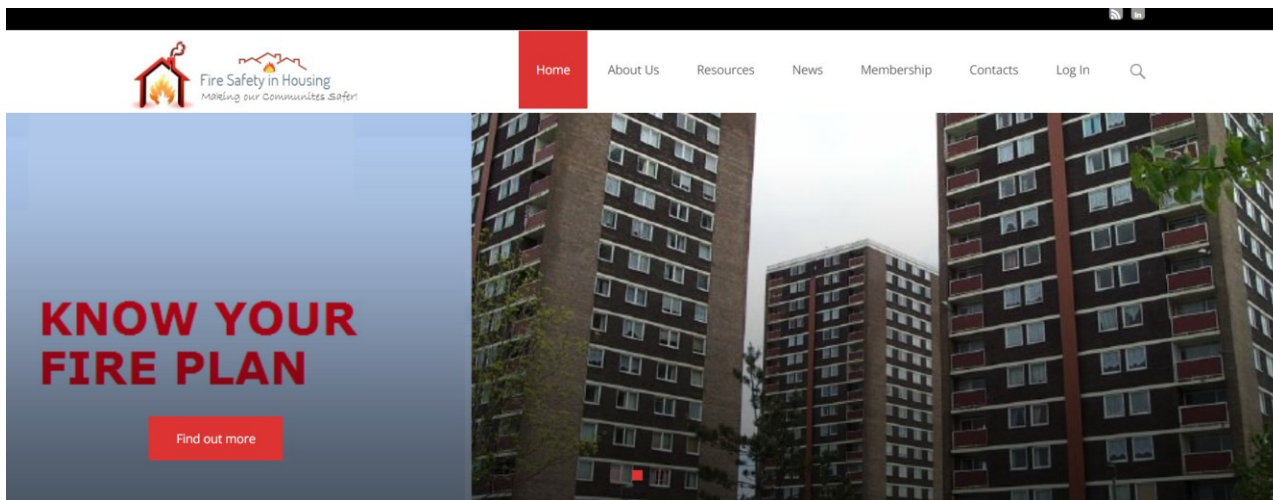
-
- Updated guidance on how quickly an escape route can be affected – less than 3 minutes
 - Clarification that guidance does not constitute Article 50 guidance
 - Images added to guidance
 - Technical updates on heat release rates, toxic smoke and risks associated with thermal runaway.
 - Proposal to consider that you should restrict storage to ground floor storage only with external access – will require practical consideration – feedback please
 - Proposal to consider that you should include fire alarm systems and smoke extraction systems in certain options and in others with recommendations for water suppression systems – feedback please on the options outlined
 - Tenant information has been removed and replaced with case studies. Any case studies or examples of information provided to tenants please would be most useful

Consultation Information

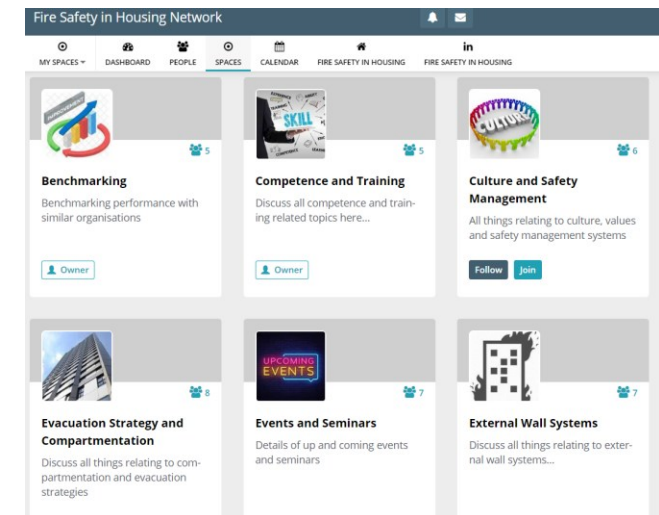
-
- Deadline: Monday 1st December @ 9am
 - Consultation responses to be submitted online here:
<https://www.smartsurvey.co.uk/s/mobilityscooterconsultation/>
 - Any questions or difficulties completing the survey contact the NFCC Protection Reform Unit at pru@nationalfirechiefs.org.uk
 - Consultation Document here:
https://files.smartsurvey.io/3/0/2JF2BAZC/09062018_NFCC_Mobility_Scooter_Guidance_Consultation_Version.pdf

Keep Connected...

- <https://www.firesafetyinhousing.org.uk>
- <https://www.linkedin.com/company/nshfsg/>
- <https://community.firesafetyinhousing.org.uk/>



Representing 259 member organisations and over 3.5 million homes...





EV Risks – what you need to know



Graeme Warnall



EV-EXBOX

HAMMAR Southwest Fire Compliance Conference



Graeme Warnell



Matt Humby | Firechief ...



Alison Tully | Firechief G...

Matt Humby

POWERING THE FUTURE: WHY ACTION ON LITHIUM-ION BATTERIES IS ESSENTIAL IN 10 STEPS



NHMF
**Southwest Regional
Group**

.....
04 Nov 2025 | Fire Compliance Conference



1. Explore the risk LIB
2. Understand Thermal Runaway
3. See examples of battery fires



4. Impacts of LIB Net Zero
5. 10 Step plan to reduce your risk
6. Better management as a mindset change

| About Firechief®



- The fastest growing fire safety brand in the UK, providing BS-EN approved fire equipment
- Stock of over 2000 specialist fire safety products
- We are one of the leading experts in Lithium-ion battery safety products





Matt Humby

**Senior Technical
Consultant**



Net Zero v Lithium-ion batteries



| Lithium-ion batteries are great!



Characteristics of Lithium-ion batteries

- ✓ Capable of storing large amount of energy
- ✓ Small
- ✓ Lightweight

= **VOLATILE UNDER STRESS**

If the energy comes out of the battery in a way that cannot be controlled, it results in fire, and explosion.





| Then and now



Not all Lithium-ion batteries are the same

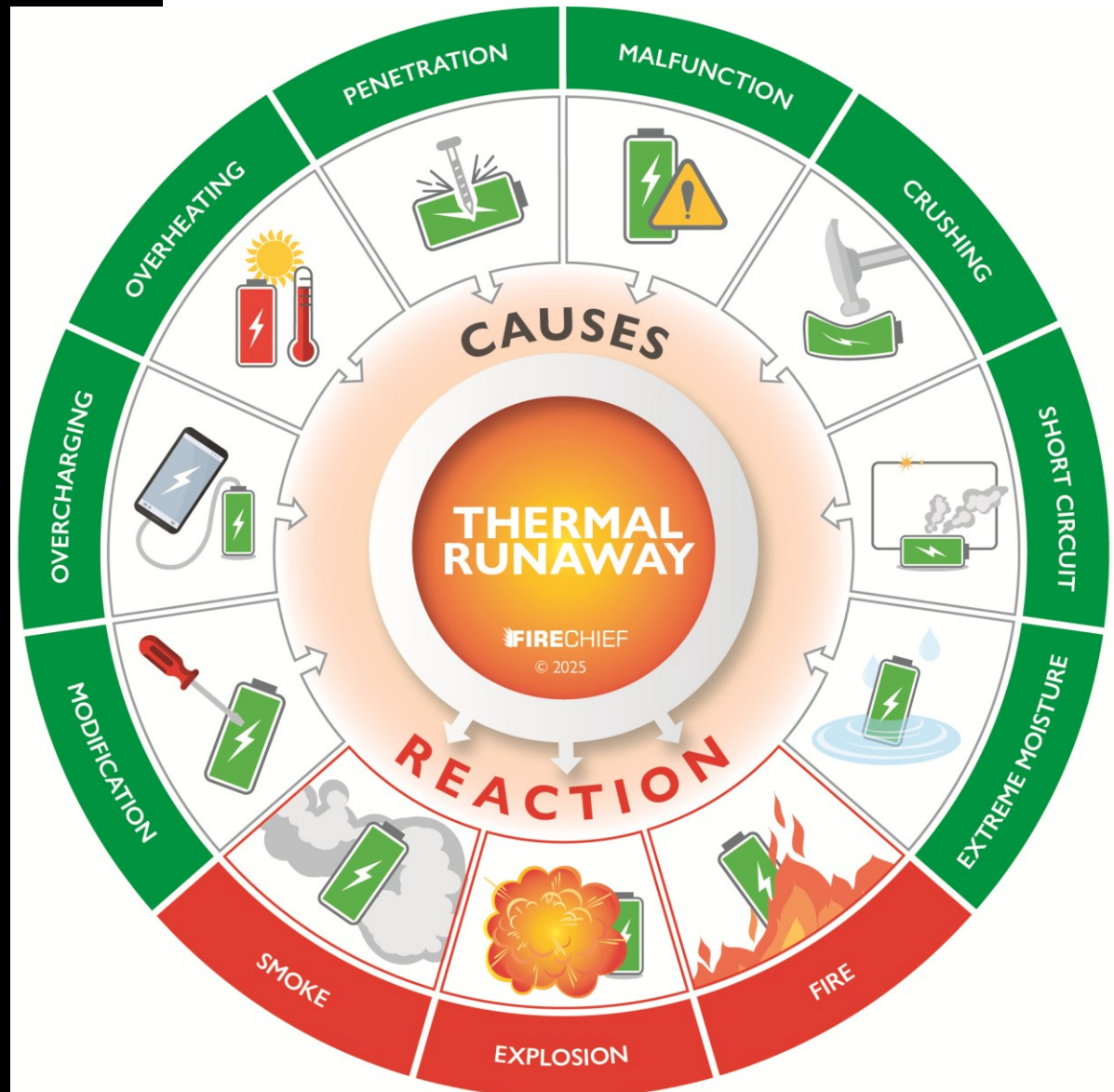
- ✓ There are 6 common types of Lithium-ion battery LFP, NMC, LCO, LMO, LTO, NCA
- ✓ They are named according to their active materials (Chemistry type)
- ✓ Each type has benefits, shortcomings and ideal applications



**But we are also seeing
an increase in Li-ion fires**



**Why is this happening?
Understanding a Lithium-ion
battery fire is key!**



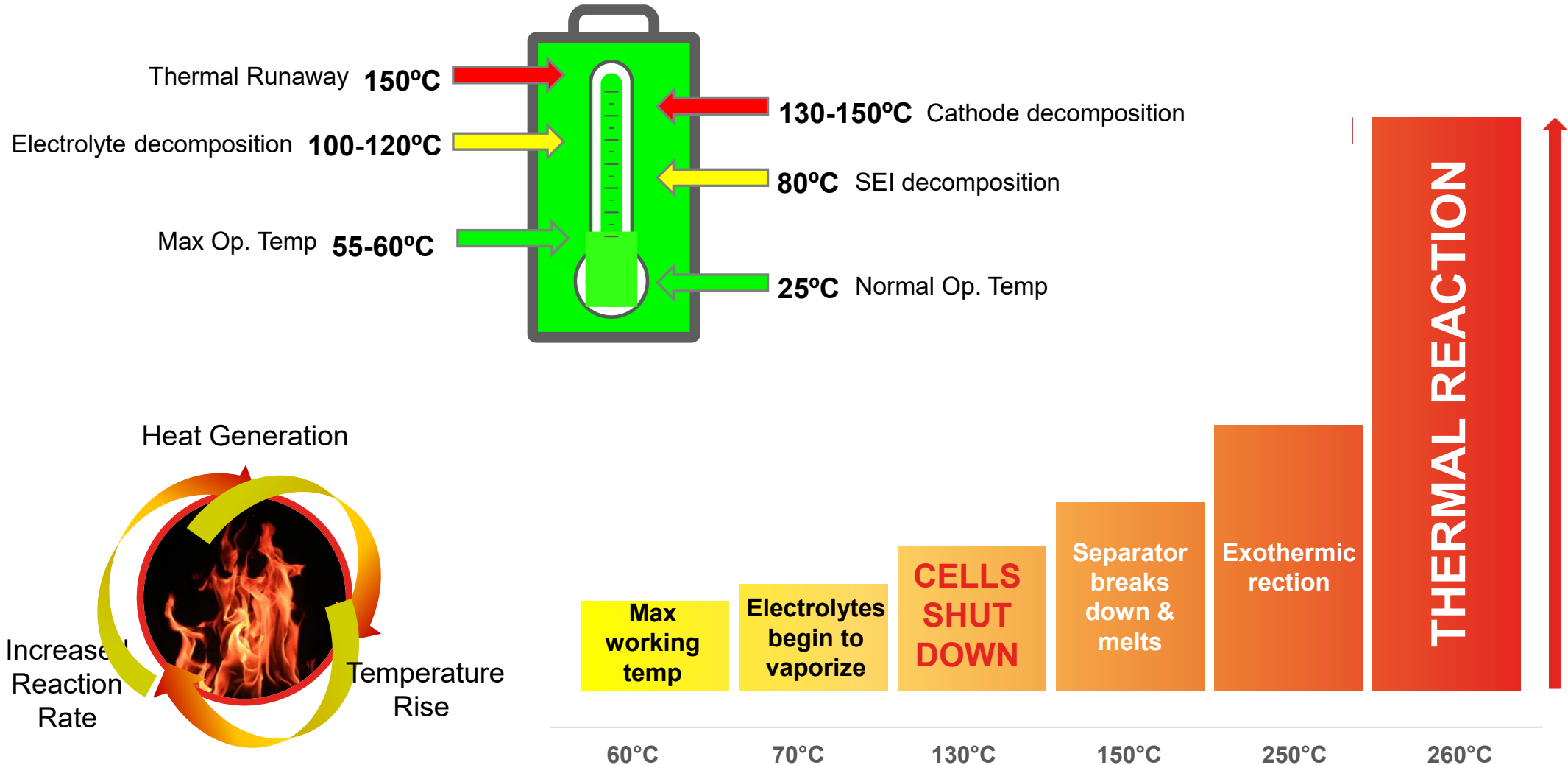
10-04-2023 Wed 08:08:10



FIRECHIEF
Fire & Rescue NSW

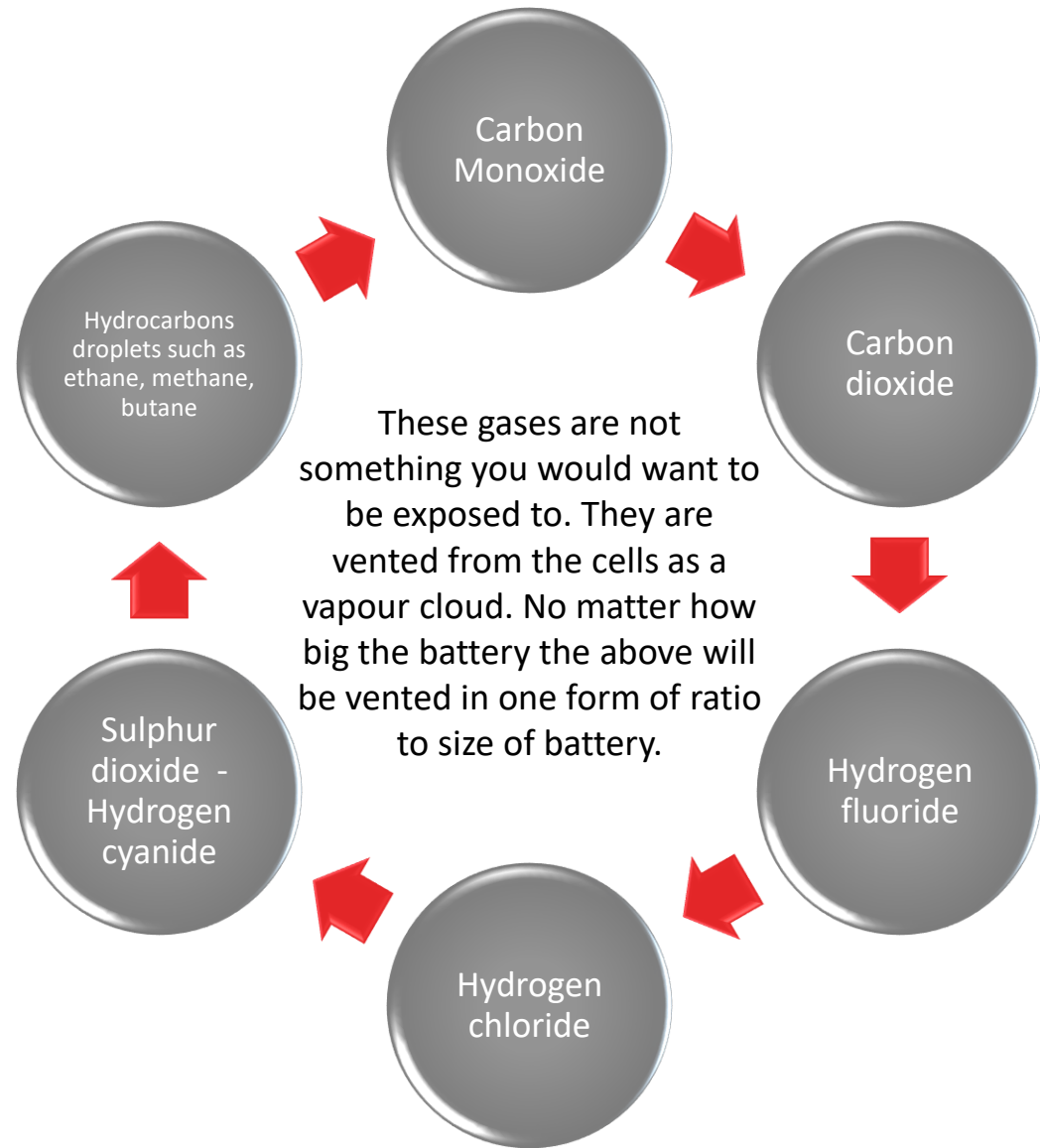
Rm Hallway

Why is thermal runaway a different threat?



Thermal Runaway – what is it?

Thermal runaway is the chemical process within the battery and ions, which produces heat and chemical gases very quickly, this becomes a self propelling loop the more heat the more gases are produced before any flame appears, the gases are >>>



HF is a byproduct in certain conditions

It exists as a gas above 19.5C and liquid below that temperature point

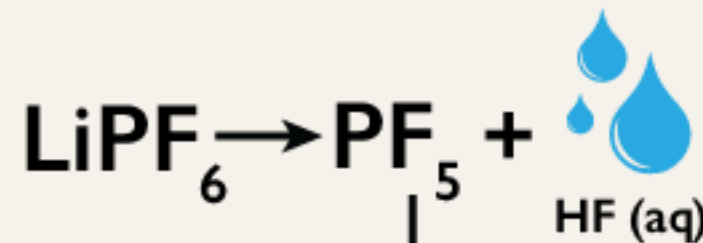
When hydrogen fluoride comes into contact with water (e.g., from firefighting efforts or atmospheric humidity), it **dissolves readily** to form **hydrofluoric acid (HF(aq))**.

This acid is **highly corrosive and toxic**, capable of penetrating skin and causing deep tissue damage



Lithium-ion
battery

Gases



HF (aq)
Hydrofluoric acid



| What can be done?



The Firechief® Halo™ 10 Step Battery Safety Plan:



FIRECHIEF®
making the world a safer place

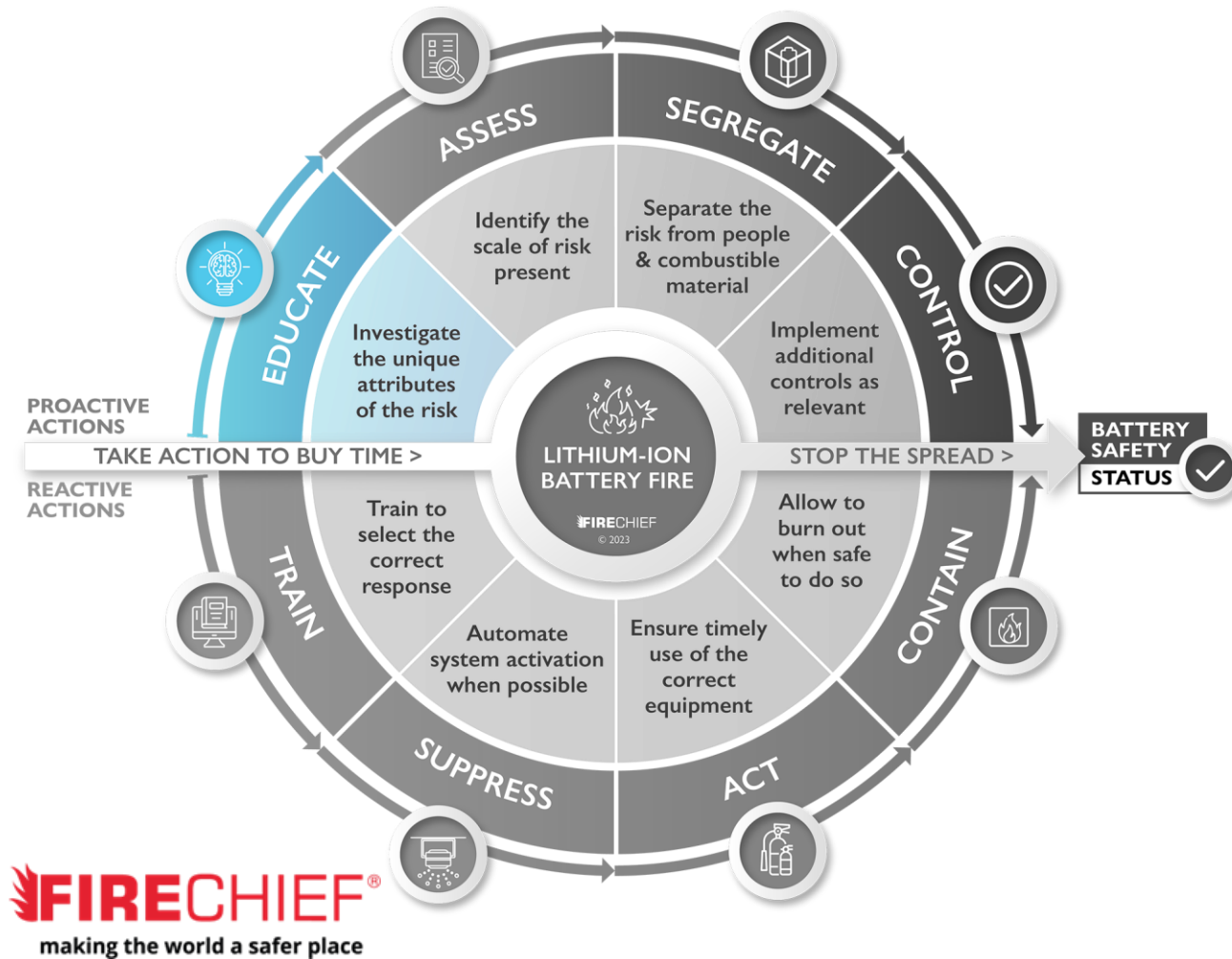
THE SOLUTION

A two-part action plan

PROACTIVE ACTIONS:
Preventative actions to buy time

REACTIVE ACTIONS
To stop the spread in the event of a Lithium-ion battery fire

Be battery-safe & mitigate the risk: An action plan



EDUCATE

Awareness & understanding

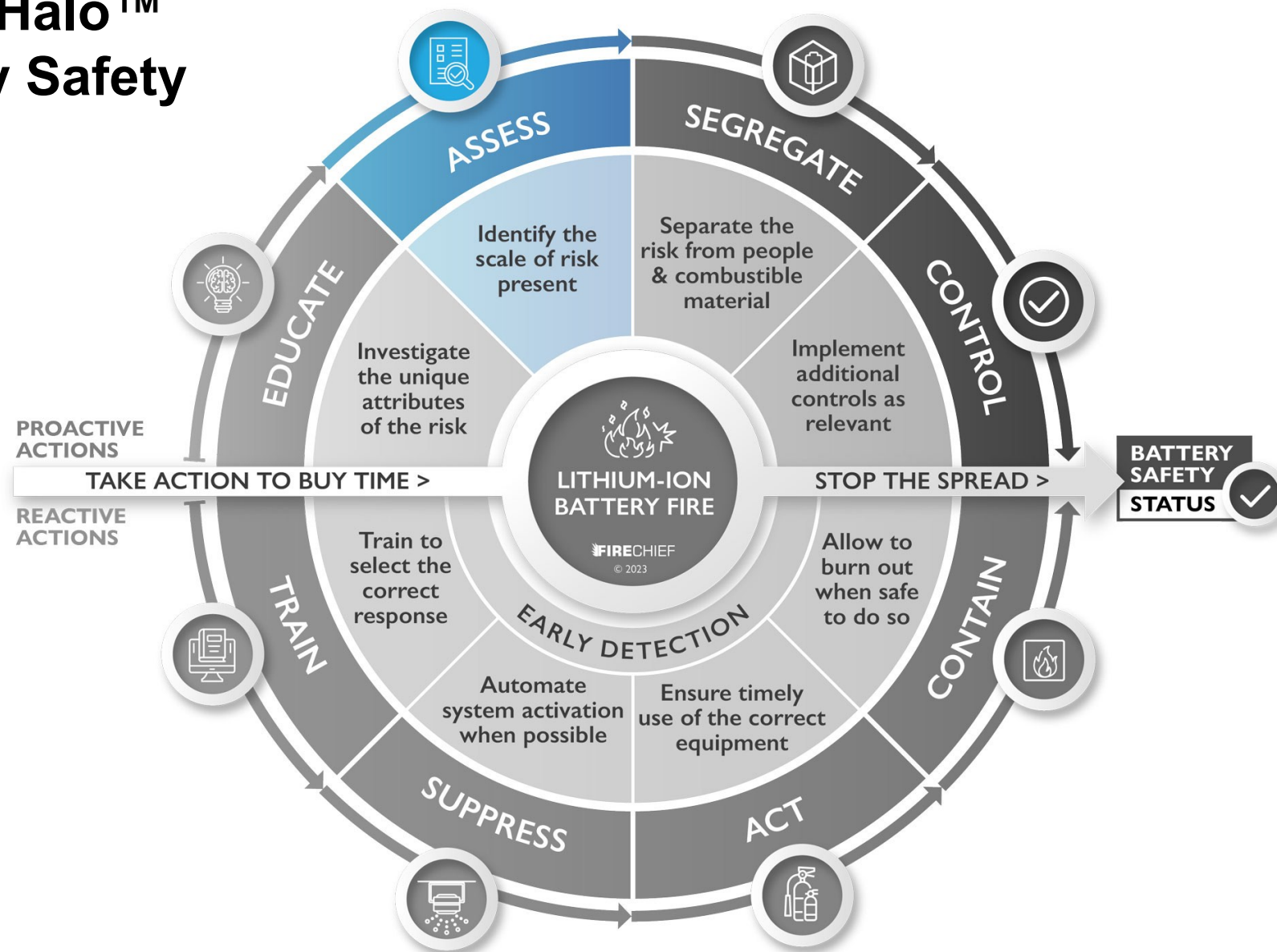
- LiB fires are unlike other fires
- It calls for a unique approach
- Education is key, learn more at
 - [Lithium-ion Battery Safety - Firechief® Global Knowledge Centre - FAQs & Expert Guides](#)
 - [The Battery University](#)



Un Mercedes Benz eléctrico se incendia mientras cargaba su batería

The Firechief® Halo™ 10 Step Battery Safety Plan:

Step 2

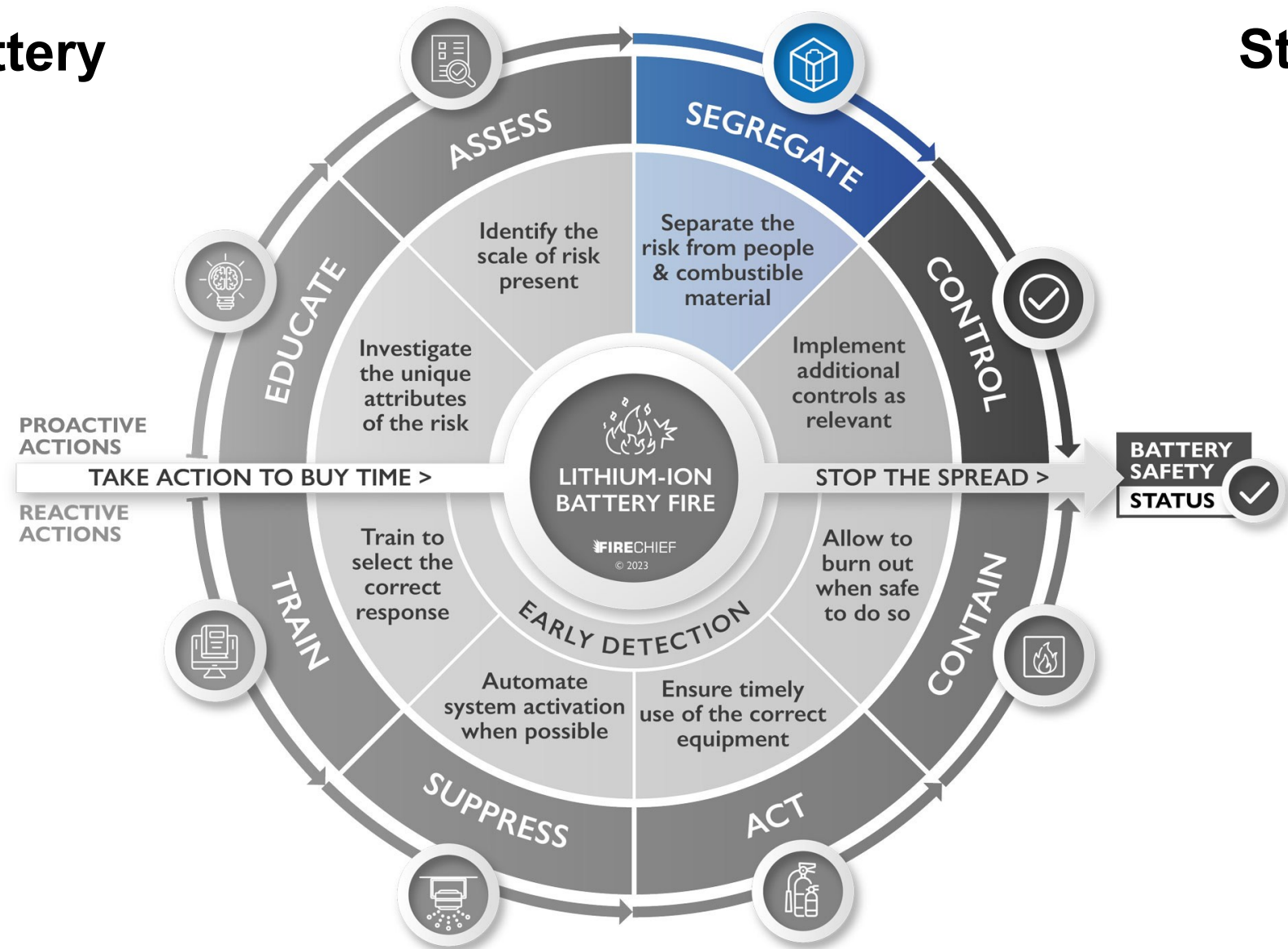


26-12-2022 Mon 13:06:30

Warehouse

The 10 Step Battery Safety Plan:

Step 3

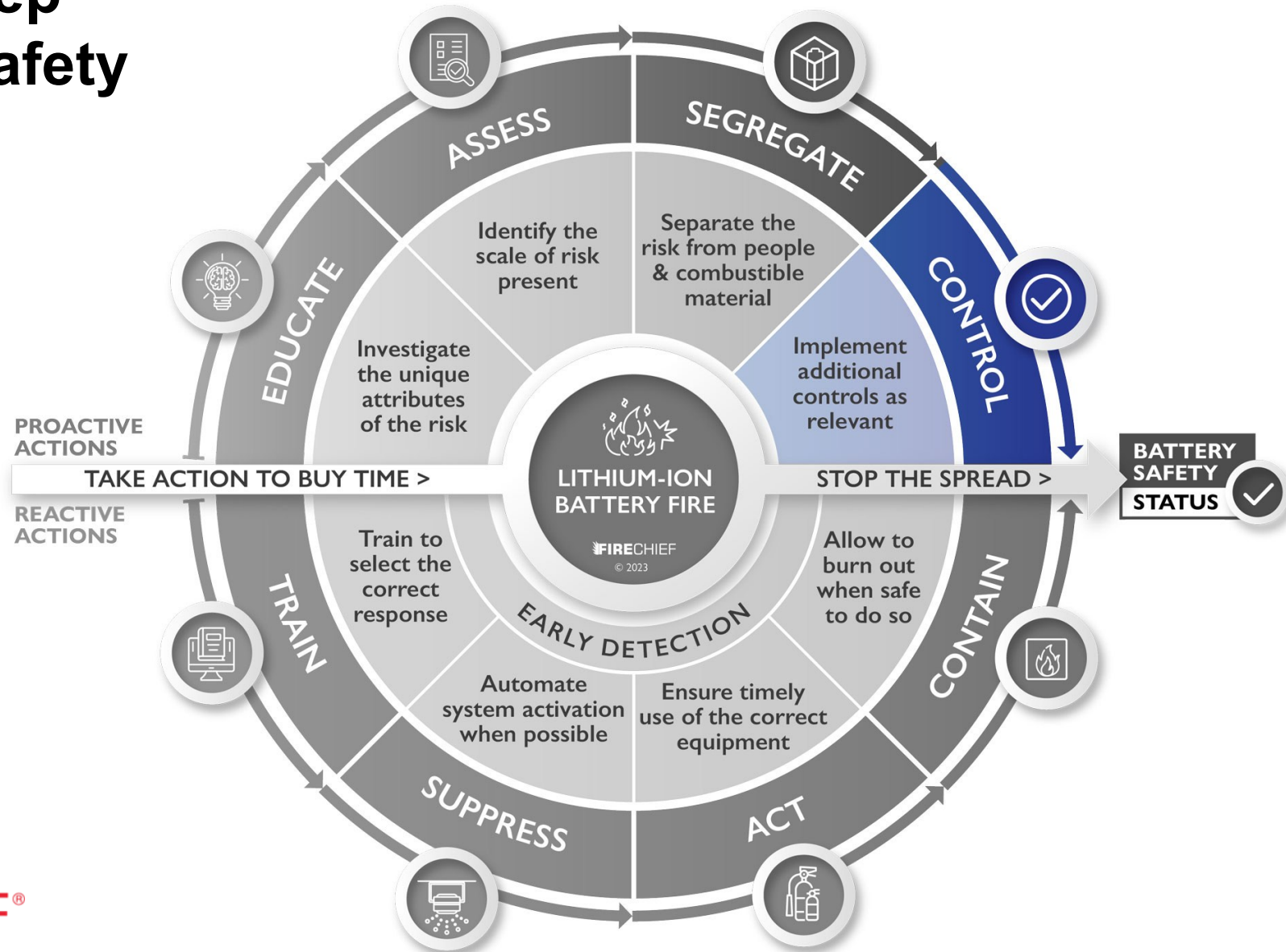


SimpliSafe



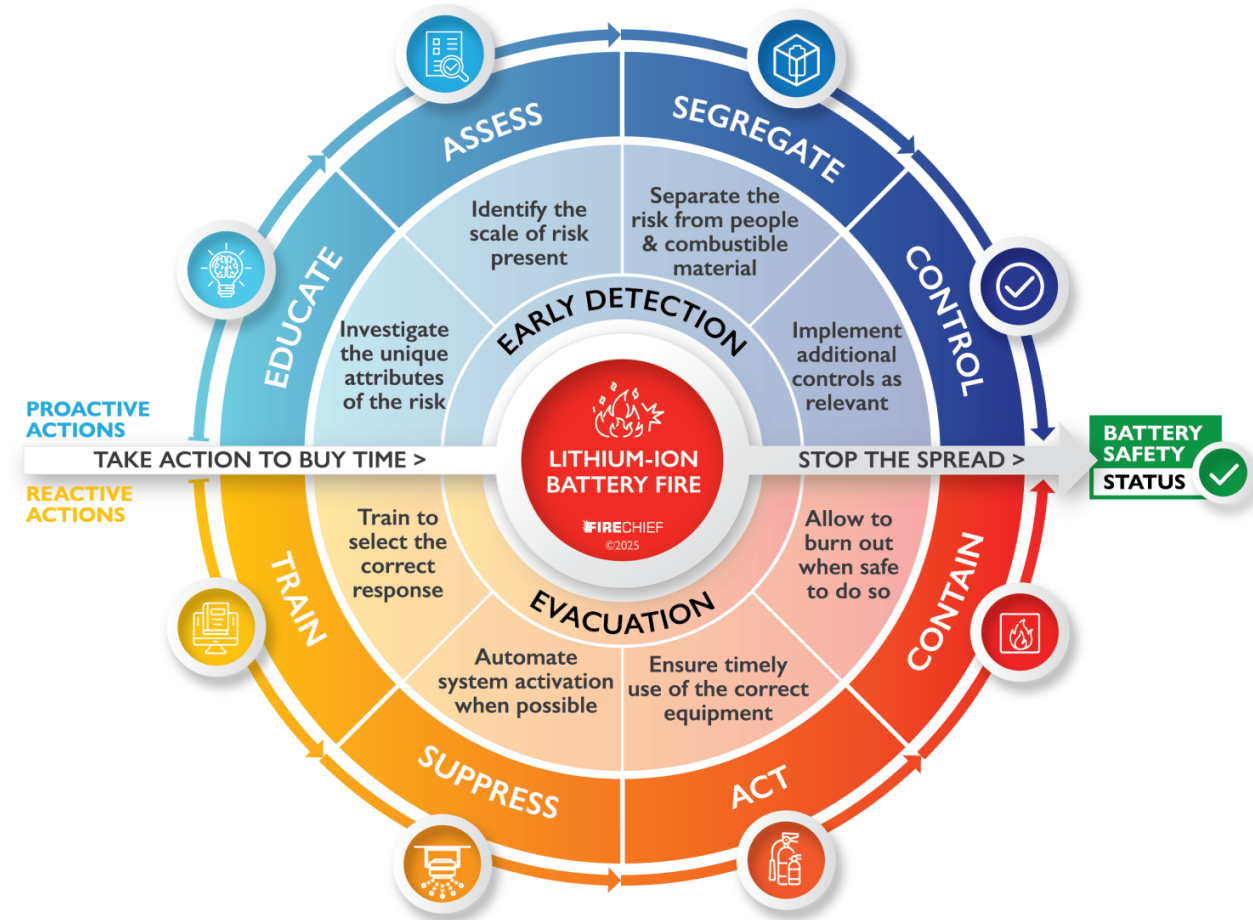
The 10 Step Battery Safety Plan:

Step 4





1



The Firechief® Halo™ 10 Step Battery Safety Plan:

Step 6





FIRECHIEF

LIVERMORE-PLEASANTON FD

fedex.com

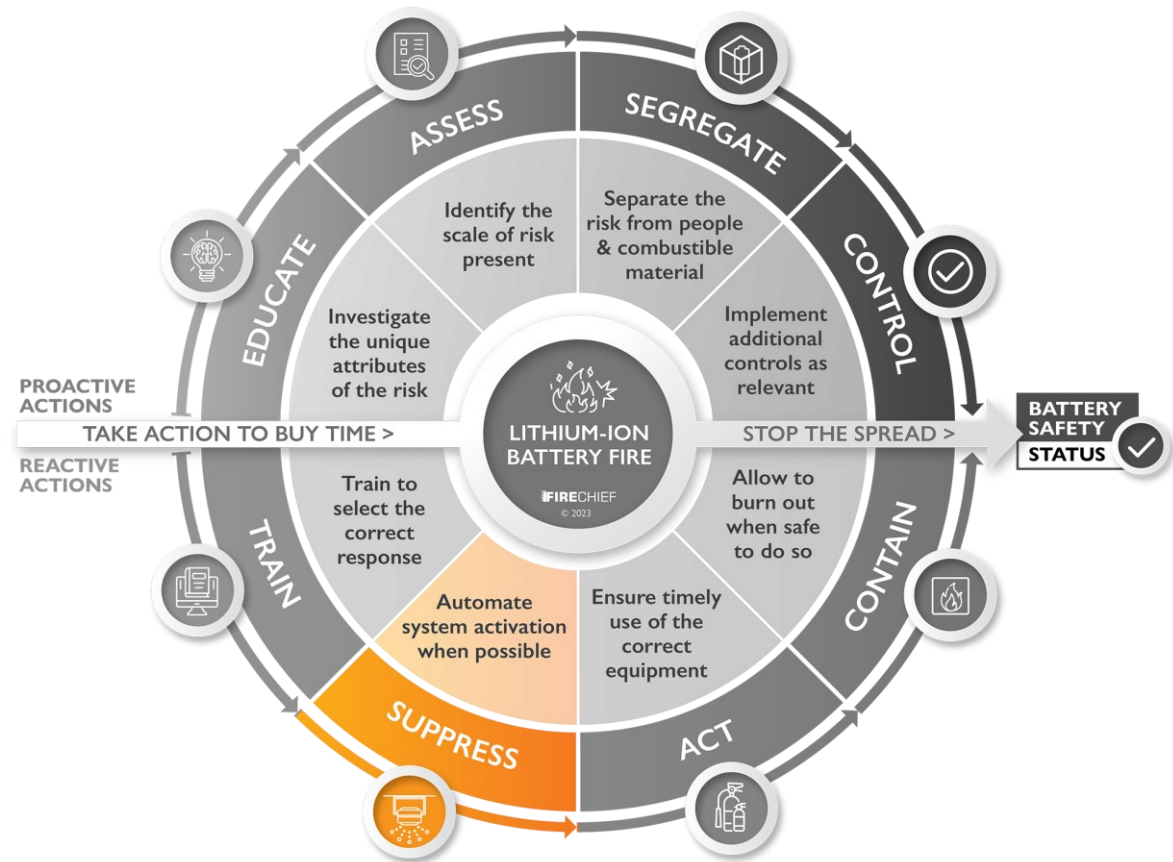
The Firechief® Halo™ 10 Step Battery Safety Plan:

Step 7



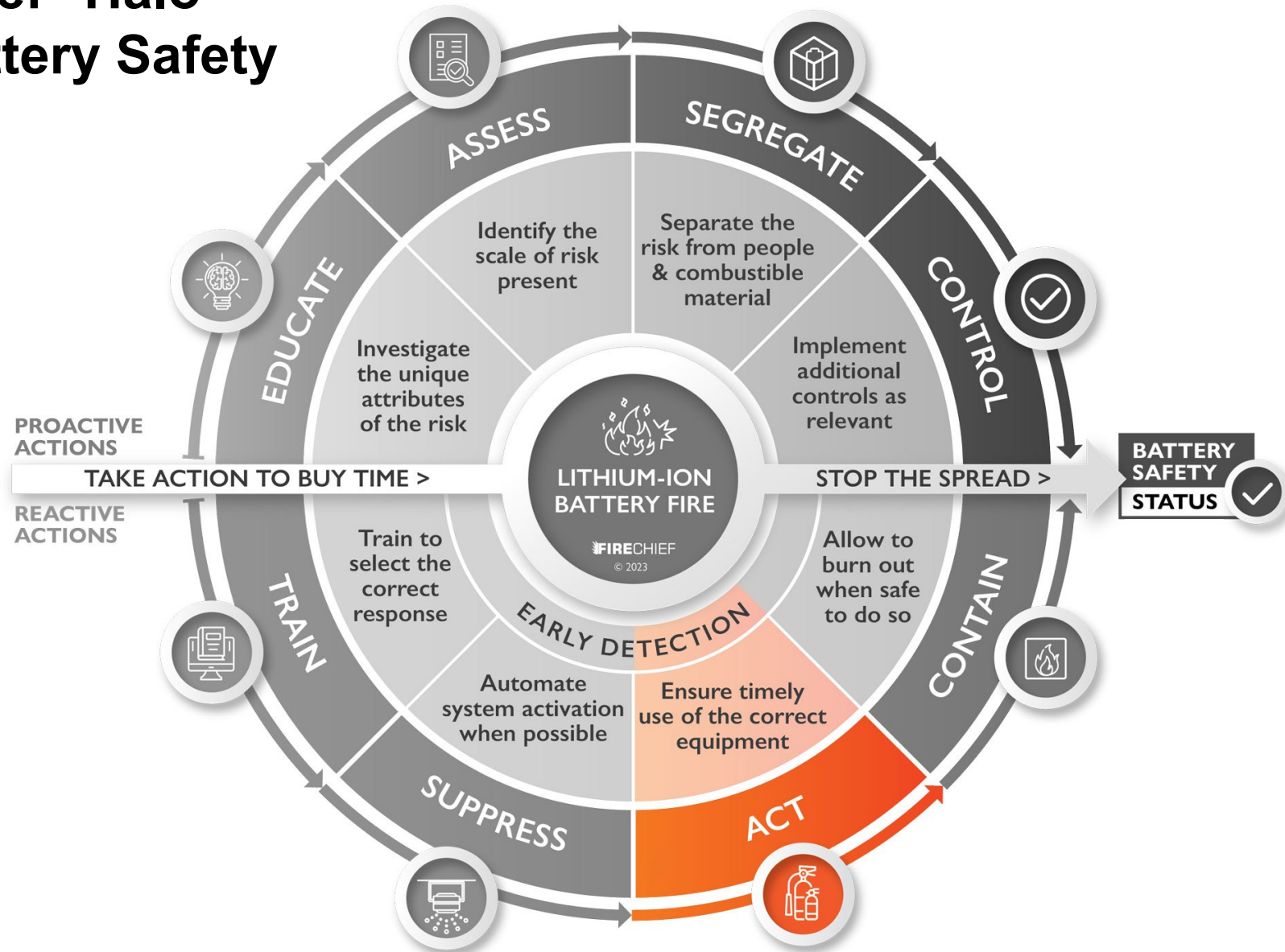


Be battery-safe & mitigate the risk: An action plan



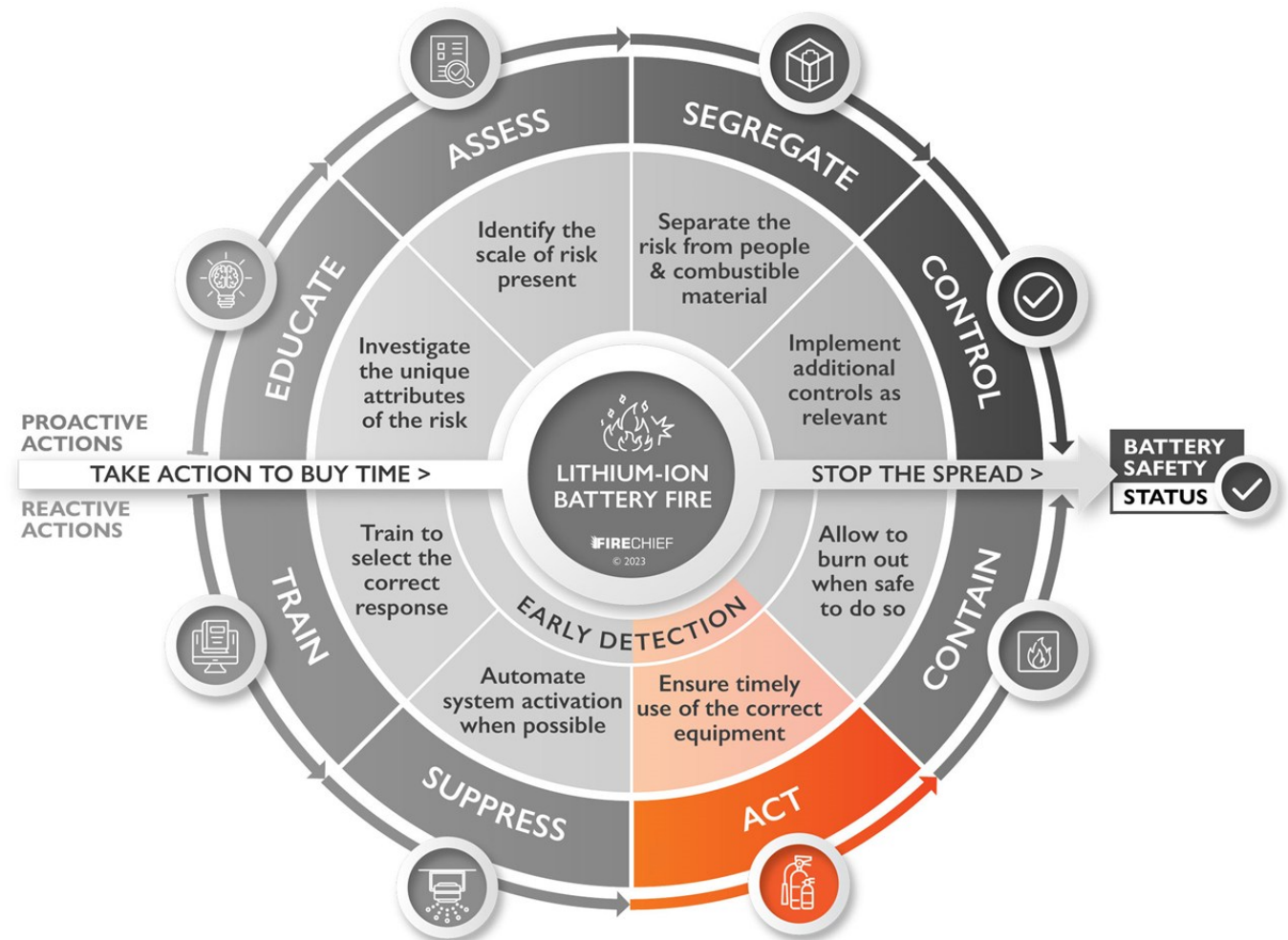
The Firechief® Halo™ 10 Step Battery Safety Plan:

Step 8



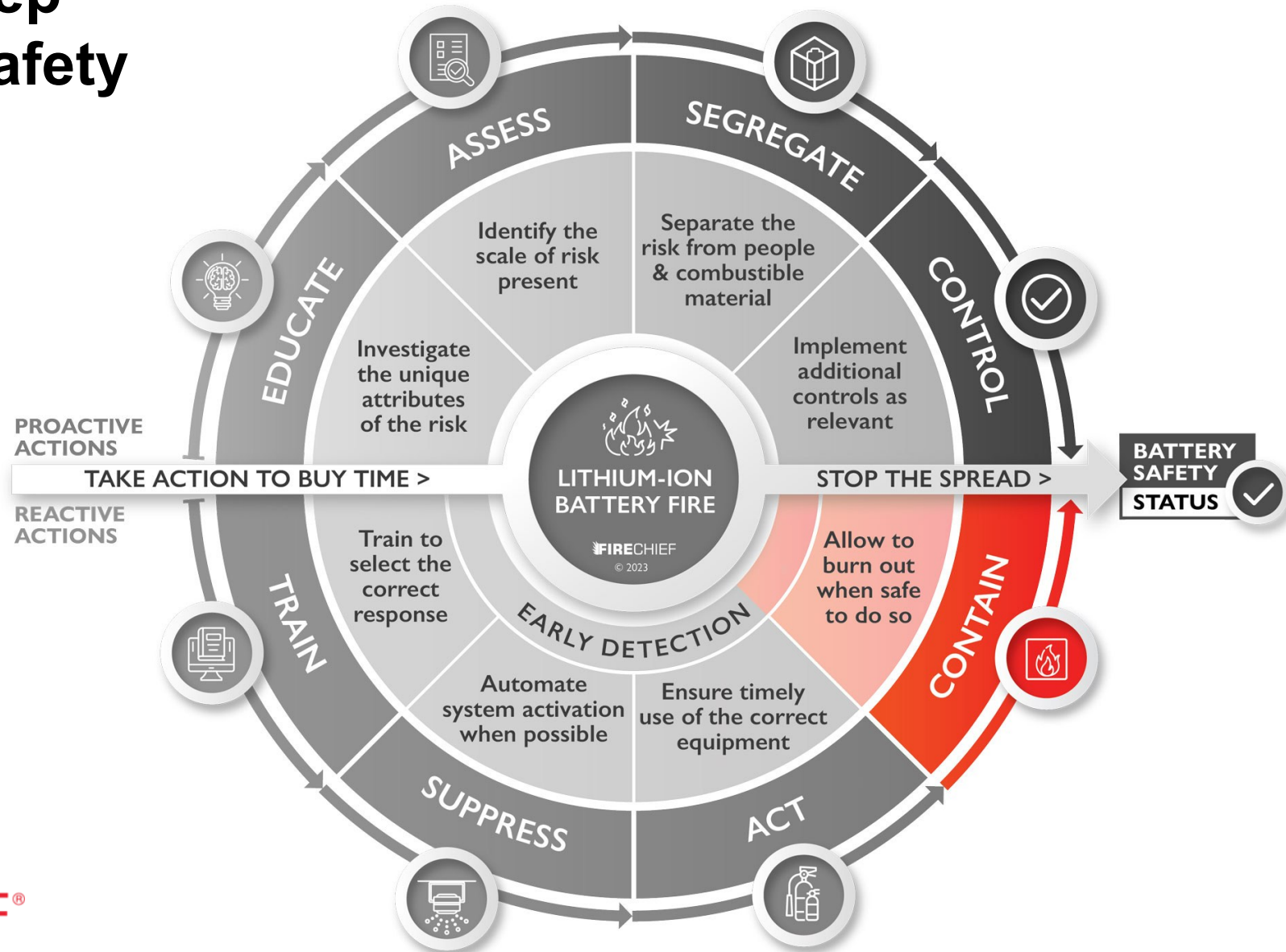


The Firechief® Halo™ 10 Step Battery Safety Plan:



The 10 Step Battery Safety Plan:

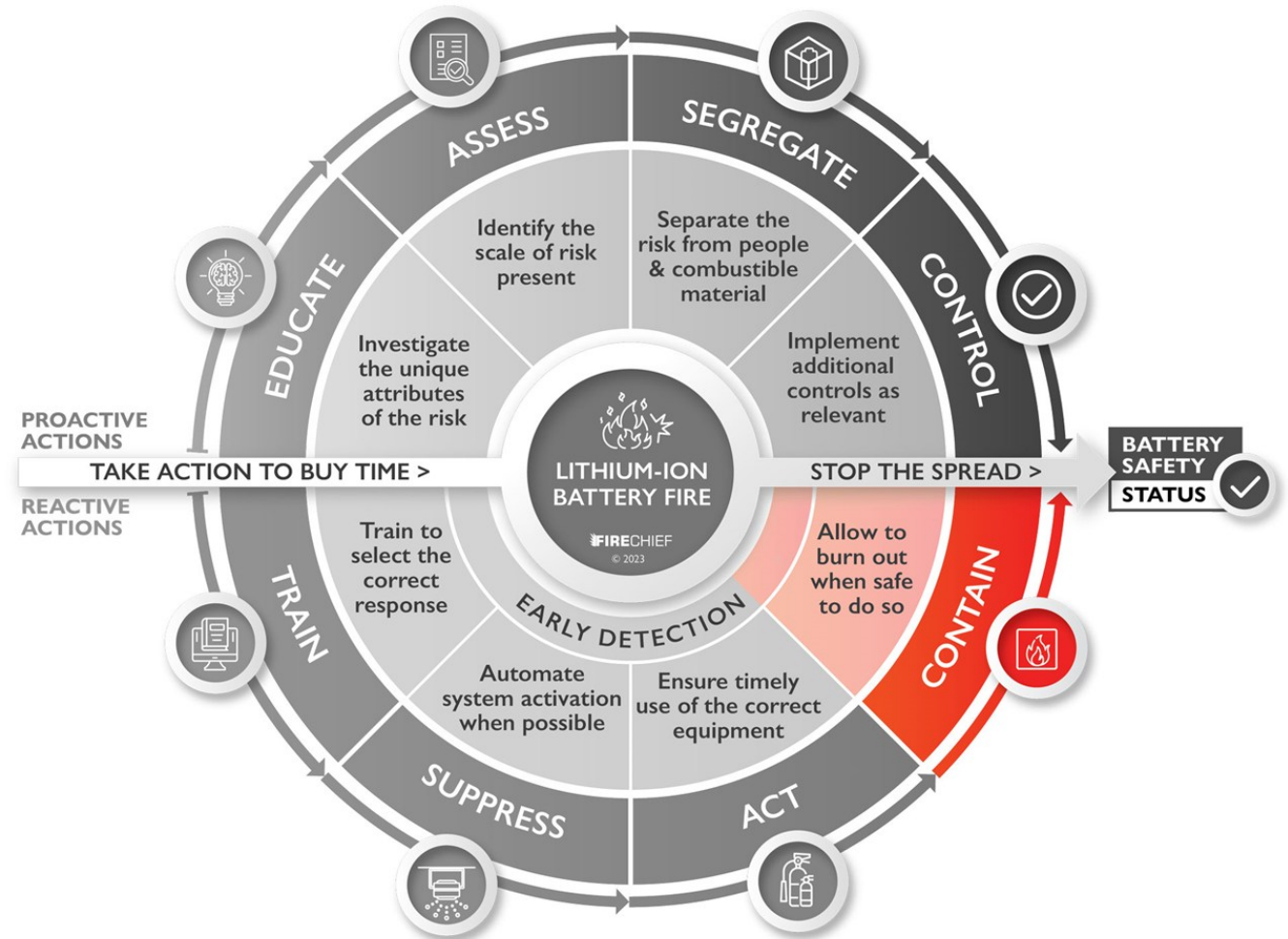
Step 9





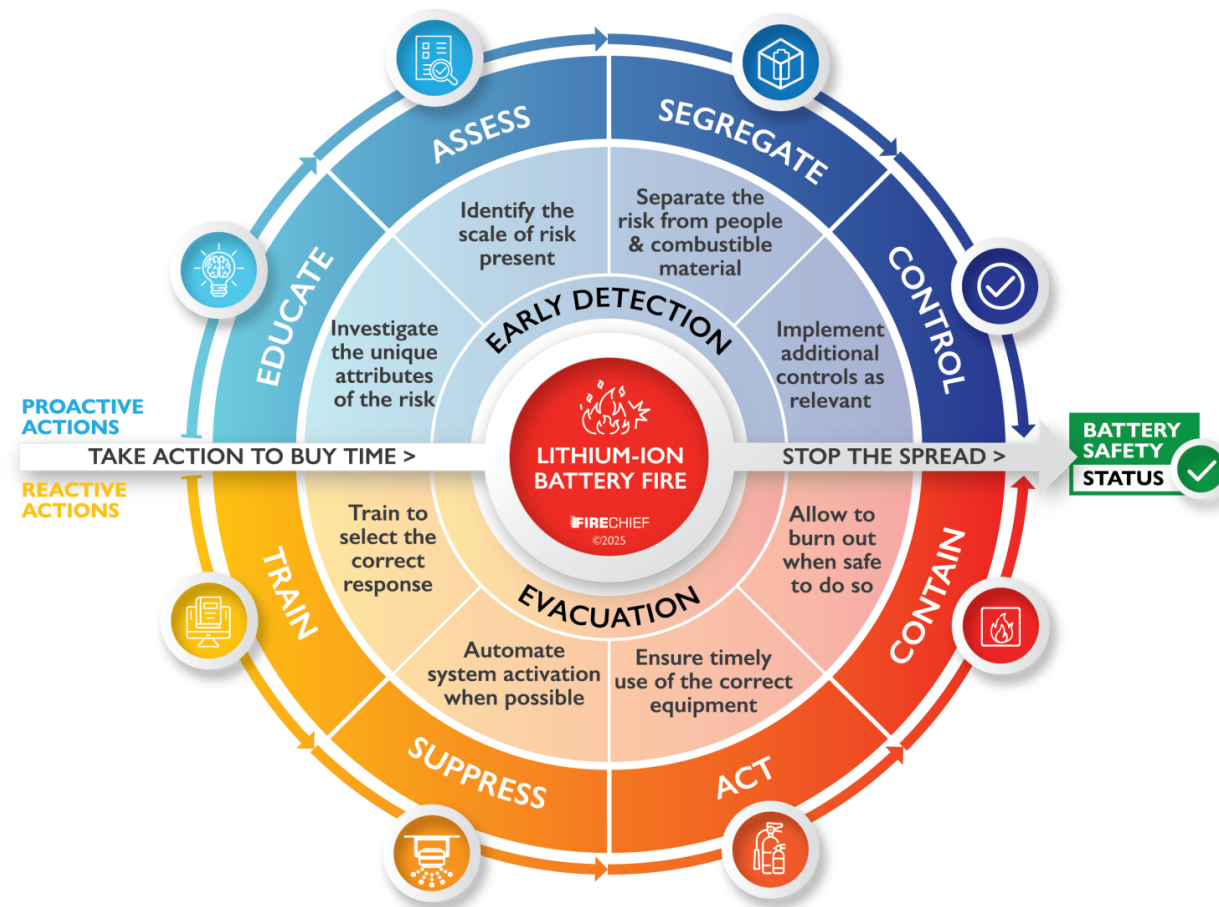
The 10 Step Battery Safety Plan:

Step 9

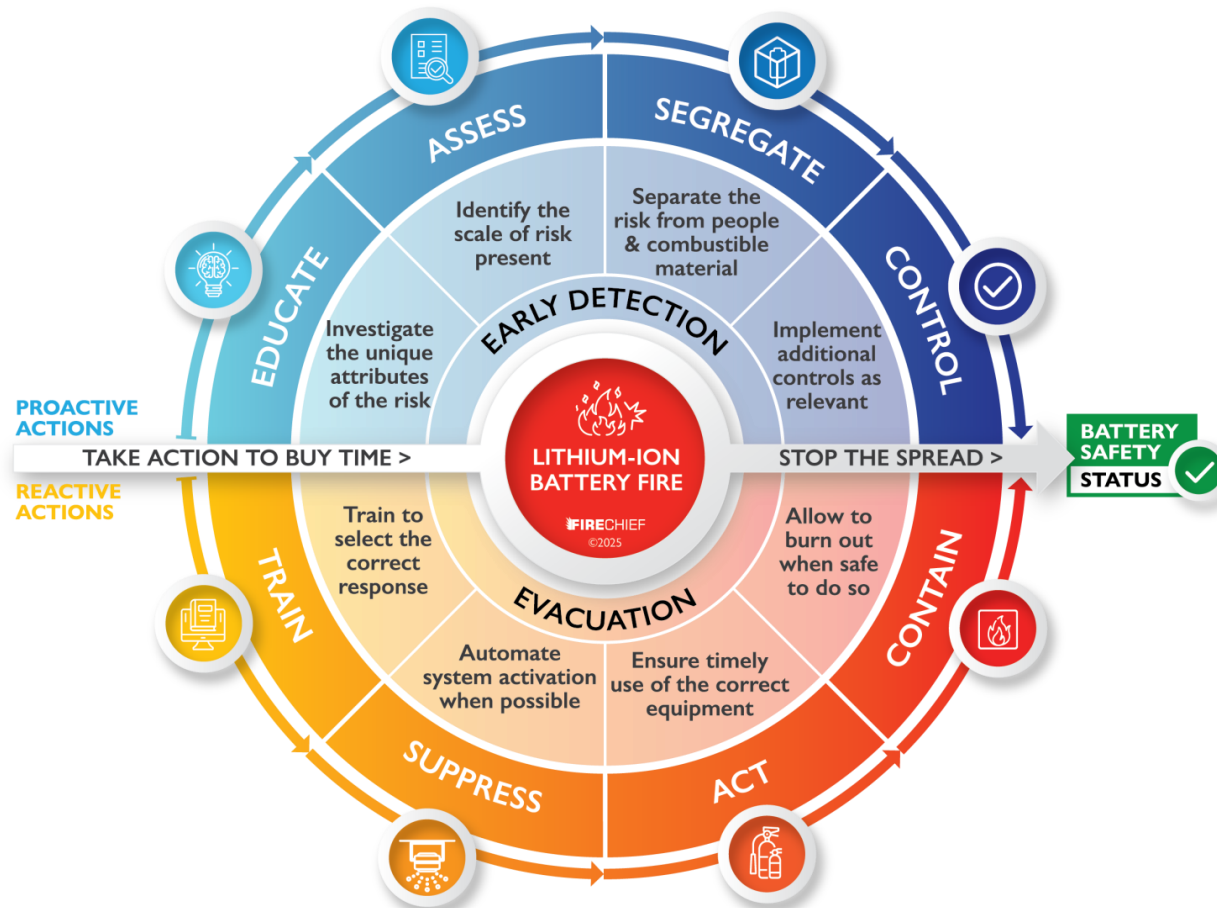




The Firechief® Halo™ 10 Step Battery Safety Plan step 10 :



The Firechief® Halo™ 10 Step Battery Safety Plan:



THE SOLUTION

A two-part action plan

PROACTIVE ACTIONS:

Preventative actions to buy time

REACTIVE ACTIONS

To stop the spread in the event of a Lithium-ion battery fire



THE
PRODUCT REGULATION
& METROLOGY BILL
HAS RECEIVED
ROYAL ASSENT



- Prevent unsafe products from being sold
- Ensure sellers comply with safety laws
- Provide clear product information
- Cooperate with regulators
- The Act gives the **Secretary of State** broad powers to create specific regulations through **secondary legislation**

| Firechief® Lithium-ion Battery Safety Range

LITHIUM-ION
BATTERY SAFETY RANGE



Resources - Interested in learning more?



**Free Article +
Podcast**



**PFAS Webinar +
free whitepaper**



**Burning Issues
Podcast**



**CPD
CERTIFIED**
The CPD Certification
Service

**CPD Accredited
Courses**

| How to get in touch – feedback is always welcome!



MATT HUMBY

Senior Technical
Consultant

matt.humby@firechiefglobal.com

t: +44 (0)1572 770333

m: +44 (0) 7908201270



| Changing behavior to reduce the fire risk



Thank you from the

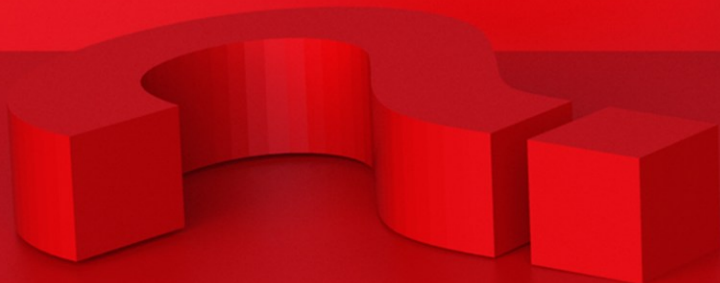


FIRECHIEF[®]
academy.

FIRECHIEF[®]
making the world a safer place



Any questions?





Lithium-ion battery applications



BESS – Battery Energy storage systems - DBESS Domestic Battery Energy Storage



DIN Spec:91489 sets out key requirements

- 1. Thermal Resistance:** Fire blankets are exposed to temperatures cycling between 700°C and 1000°C over a prolonged test period
- 2. Mechanical Stability:** This ensures the blanket's durability during deployment
- 3. Chemical Resistance:** Against Toxic Emissions from EV fires







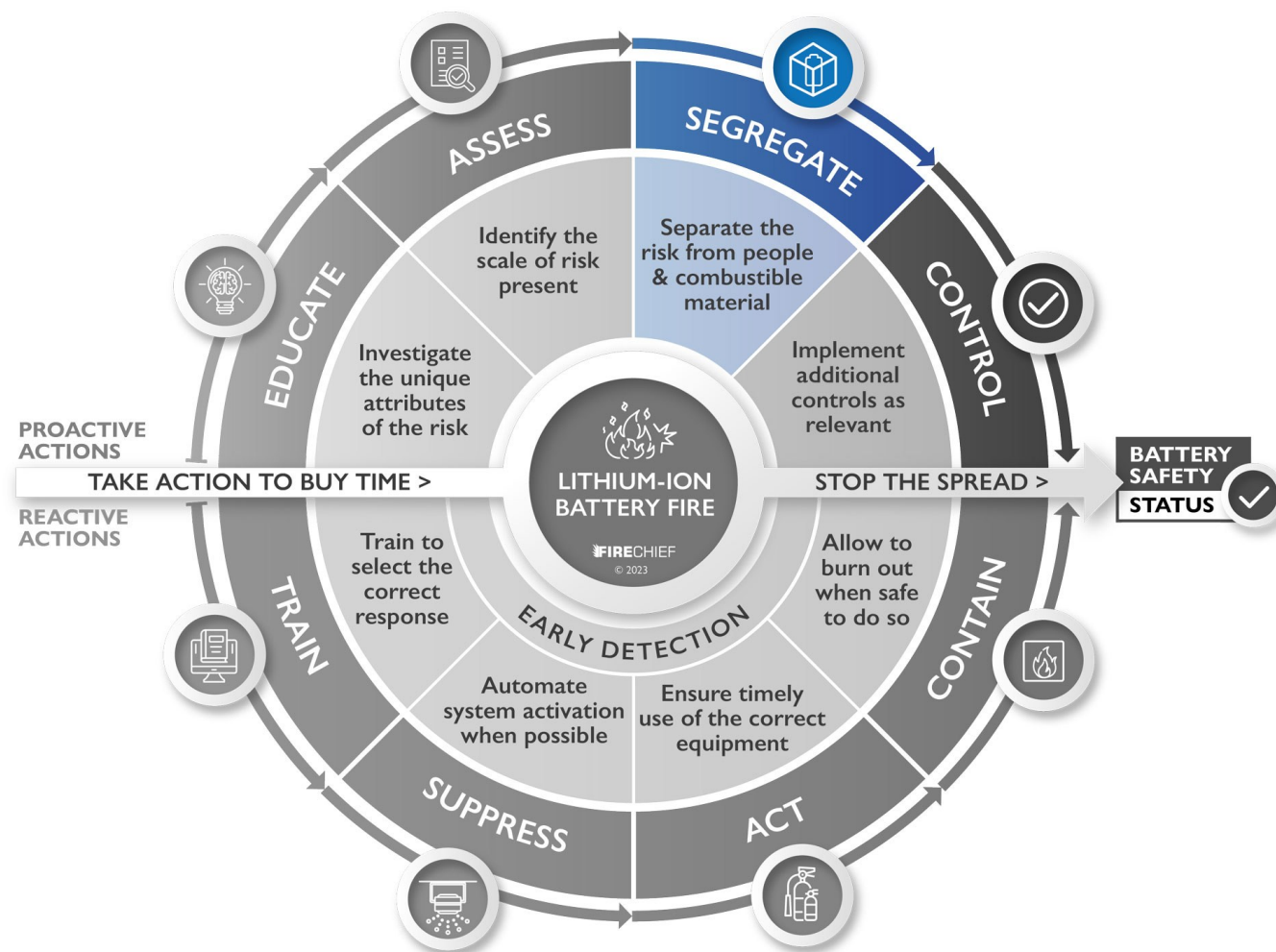
 **FIRECHIEF®**
making the world a safer place





The 10 Step Battery Safety Plan:

Step 3



2019 Nobel Prize in Chemistry

The 2019 Nobel Prize in Chemistry was jointly awarded to John B. Goodenough, M. Stanley Whittingham, and Akira Yoshino for their crucial contributions to the development of lithium-ion batteries.



8 Steps to Managing and Containing Lithium-ion battery fire risks



making the world a safer place

www.firechiefglobal.com









FIRECHIEF

LIVERMORE-PLEASANTON

fedex.com





Lunch, Exhibition and break

Back at 13:25