

Rooftop Solar PV

Big Benefits. Real Risks.

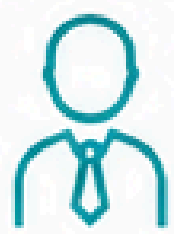


**Do you know where
your gaps are?**

A practical guide for business owners, tenants, developers, EPCs and insurers.



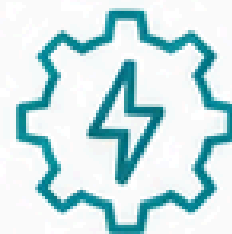
**BUSINESS
OWNERS**



TENANTS



DEVELOPERS



EPCS



INSURERS



Protect People.

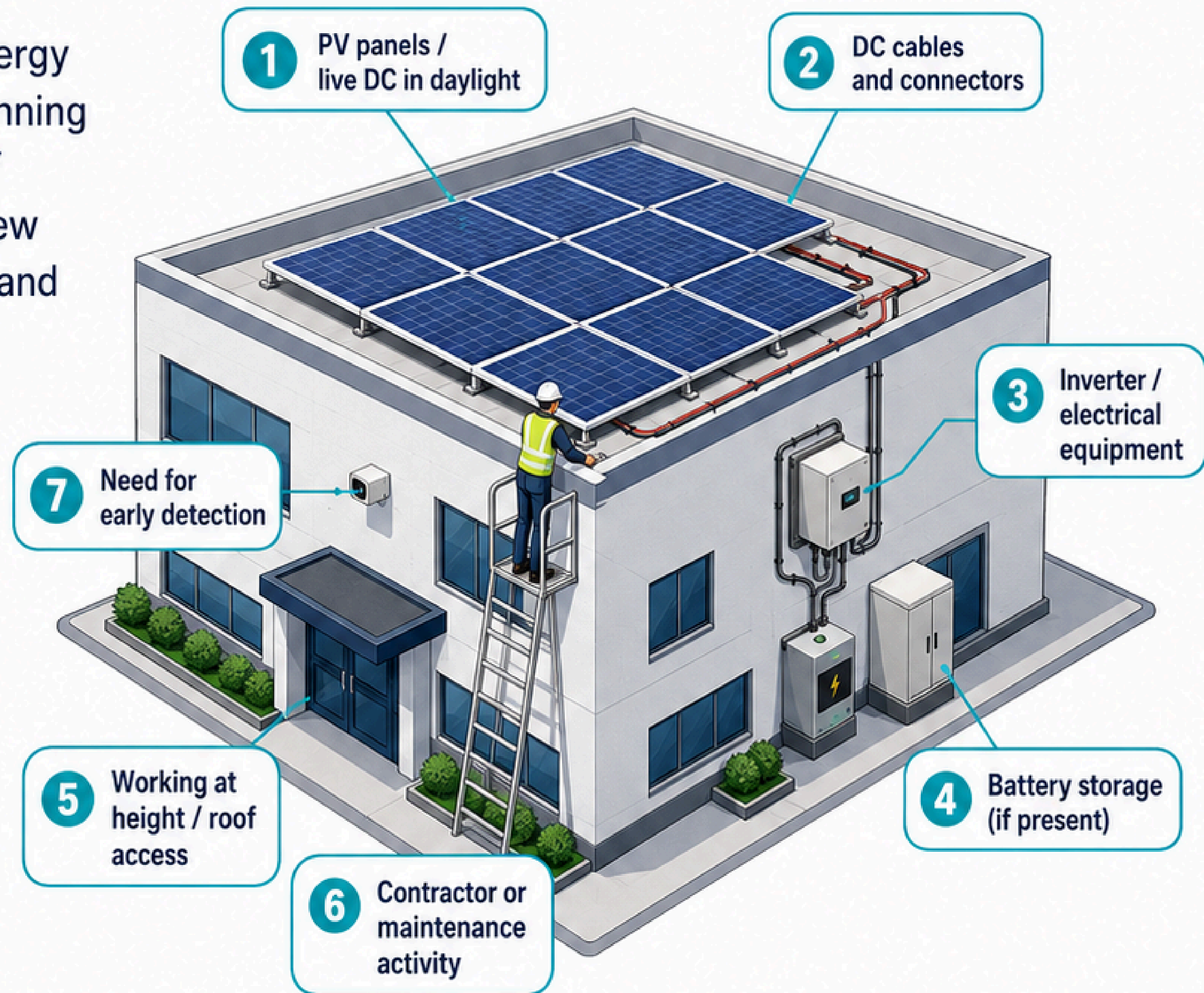
Protect Property.

Protect Performance.

WHY THIS MATTERS

Rooftop solar helps reduce energy costs and keeps businesses running during load-shedding. But a PV system on your roof creates new risks that must be understood and managed.

- ✓ DC arc and fault risks
- ✓ Working at height
- ✓ Maintenance and contractor exposure
- ✓ Business interruption
- ✓ Liability and insurance gaps



Early detection can improve response time.



LINEAR HEAT DETECTION



AI SMOKE / VIDEO DETECTION



**The question is not IF something can happen.
The question is: ARE YOU PREPARED?**

WHO IS RESPONSIBLE?

Responsibility must be written clearly —
and tested against the real site risk.



Property owner / landlord

- Roof and building
- Insurer disclosure
- Approvals and lease alignment



Tenant / occupier

- Stock and contents
- Business interruption
- Staff safety and evacuation



Developer / EPC / O&M

- Design and installation
- Maintenance and monitoring
- Defect and incident response



Broker / insurer / fire consultant

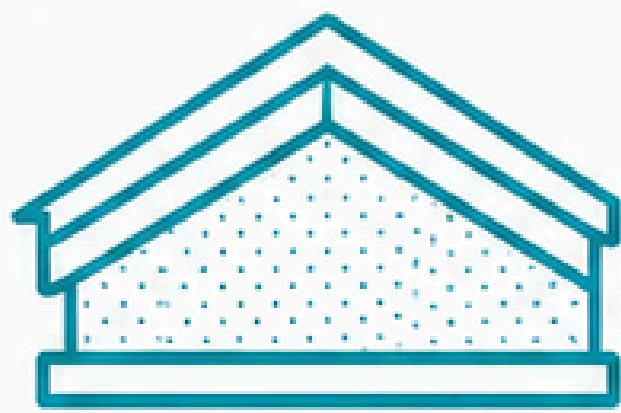
- Review exposure
- Check policy gaps
- Advise on fire-risk controls



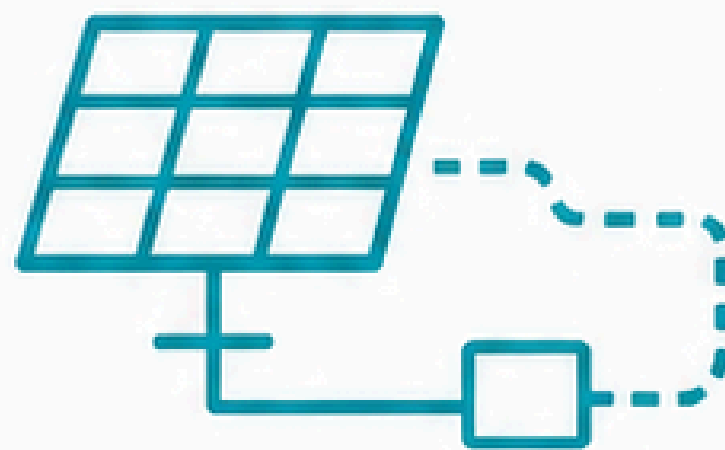
Never assume **one contract** or **one policy** covers everything.

WHAT SHOULD A PROPER PV RISK ASSESSMENT INCLUDE?

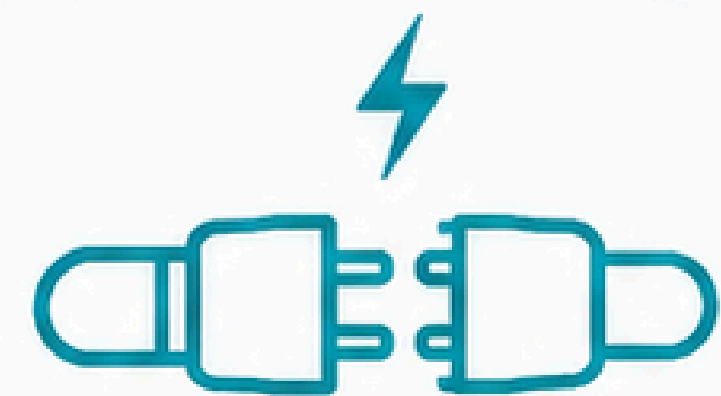
It is more than cleaning, output checks or a basic compliance file.



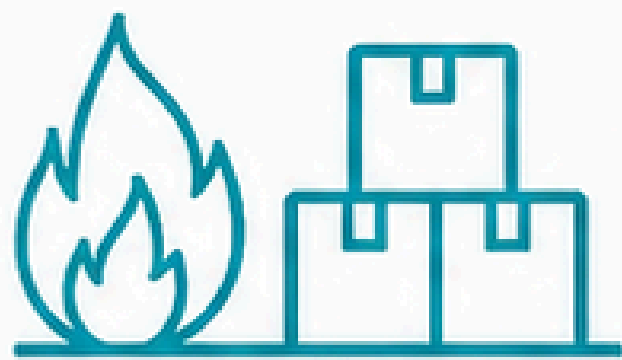
Roof and
insulation



PV layout and
cable routes



DC connectors, isolators
and fault points



Stock fire load and
business interruption



Emergency access,
shutdown and response



Maintenance records,
training and evidence



The assessment should look at **the building, the PV system and the business consequences** together.

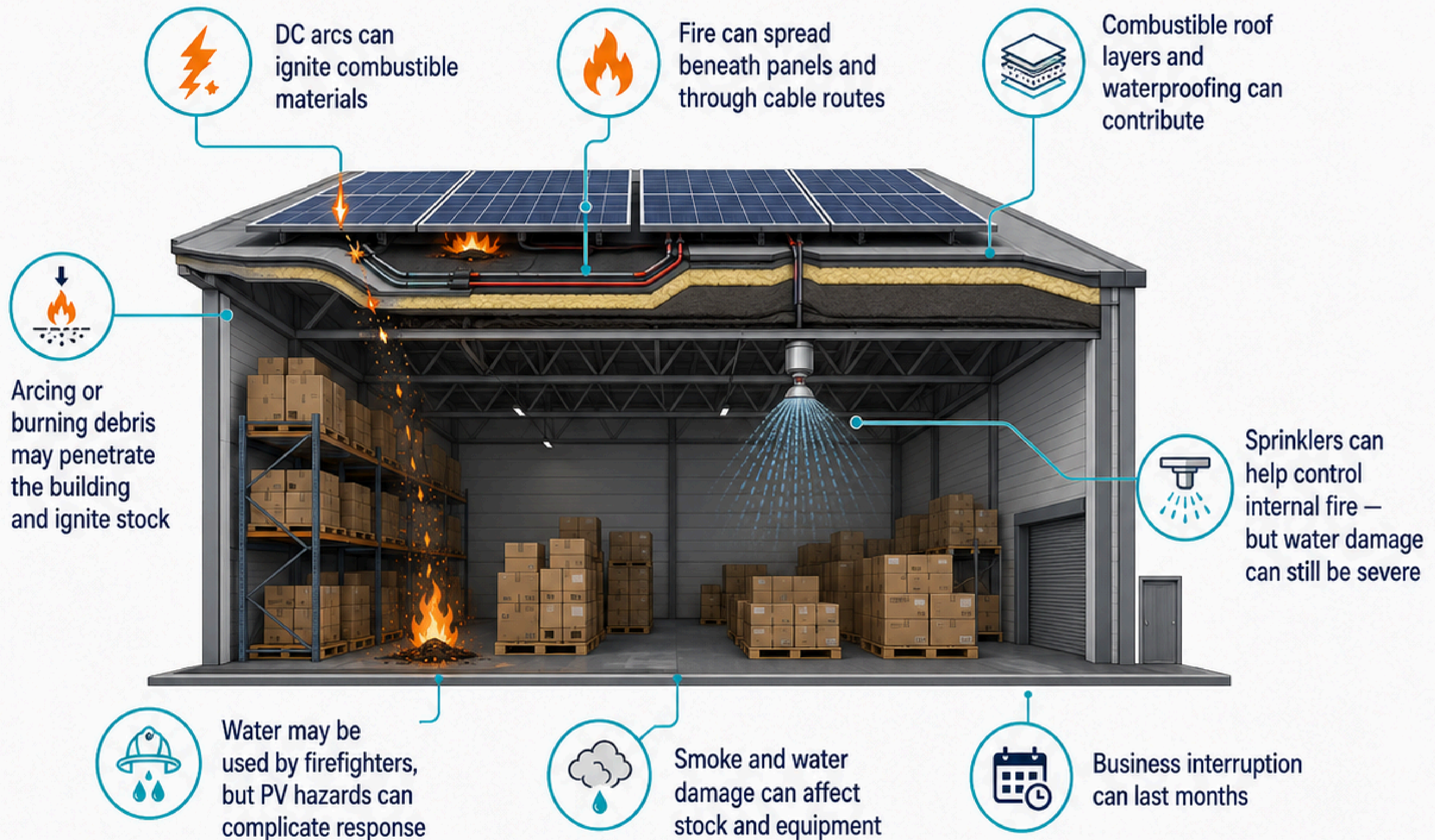
WHERE THE GAPS APPEAR

- ⚠ No PV fire risk assessment
- ⚠ No DC system maps or labelling
- ⚠ No emergency shutdown strategy
- ⚠ No roof access or evacuation plan
- ⚠ No contractor induction or awareness
- ⚠ No maintenance or inspection records
- ⚠ Insurer not informed or inadequate cover
- ⚠ Unclear roles and liability in contracts



GAPS TODAY = EXPOSURE TOMORROW

FIRE DYNAMICS ARE DIFFERENT



IT'S NOT JUST THE PV ASSET AT RISK. IT'S THE WHOLE BUSINESS.

OHS & WORKING AT HEIGHT

Every person on your roof must be protected.



Falls are a leading cause of **serious injury and death**.



Contractors must be **competent, inducted and supervised**.



PV systems add **electrical hazards** to height risks.



Cleaners, HVAC teams and other contractors also need **PV hazard awareness**.



You have a **duty of care** under the OHS Act.



A FALL HURTS PEOPLE. POOR OVERSIGHT HURTS BUSINESS.

LIABILITY & INSURANCE: WHO PAYS?

After a fire or incident, questions will be asked:

- Who owned the system?
- Who designed it?
- Who installed it?
- Who maintains it?
- Who allowed access?
- Who was in control?



COMMON LOSSES:



PV plant



Building damage



Stock loss



Water damage



Business interruption



Injury or death



LIABILITY FOLLOWS CONTROL. DOCUMENTS TELL THE STORY.

WHAT INSURERS LOOK AT

- ✓ Full disclosure of the PV installation
- ✓ Quality of risk assessment
- ✓ Maintenance and inspection records
- ✓ Near-incident reporting and defect history
- ✓ Emergency plans and training
- ✓ Fire protection and access
- ✓ Contractual clarity and insurance limits
- ✓ Total building, stock and BI exposure



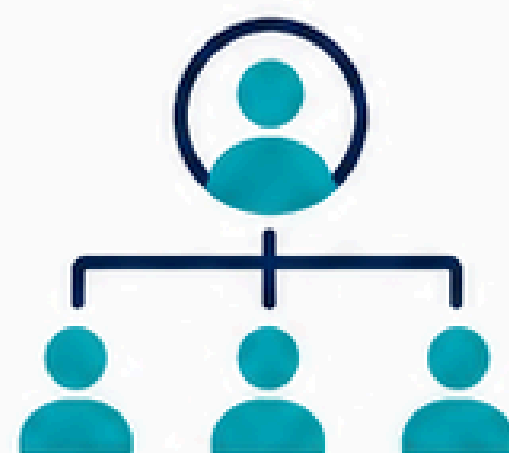
TRANSPARENCY GETS YOU COVER. SURPRISES CHANGE EVERYTHING.

WHAT SHOULD BE IN PLACE?

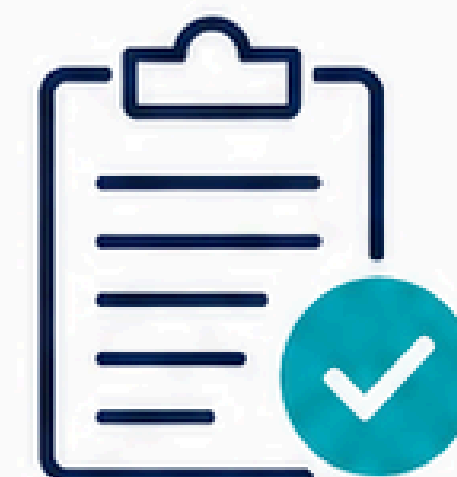
Depending on the site risk profile, the following should be considered.



A site-specific PV risk assessment



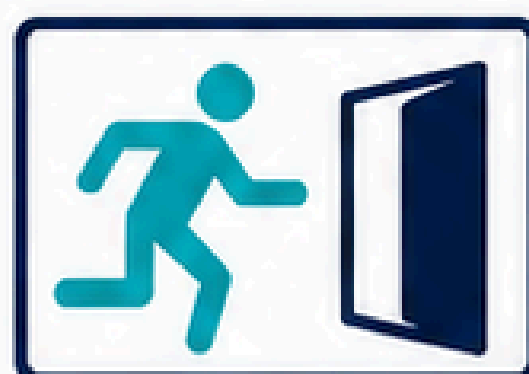
A clear responsibility and insurance matrix



Documented maintenance and inspection records



Near-incident and fault reporting



PV emergency planning and evacuation procedures



Trained staff, fire wardens and decision-makers



DC system maps, labelling and emergency information



A safe shutdown or de-energisation strategy



Suitable prevention and emergency-response solutions where required

PLAN IT. DOCUMENT IT. MAINTAIN IT. PRACTISE IT.

CONTROLS & SOLUTIONS

Layered protection. Smarter response.



ISOLATE & SAFELY DE-ENERGISE

Ability to isolate or de-energise strings and the system.



DETECT EARLY

DC arc fault detection, heat cameras, linear heat detection.



STABILISE & LIMIT DAMAGE

Encapsulation of DC connectors and critical connection points.



RISK ASSESS & MANAGE

Independent PV risk assessment and ongoing management.



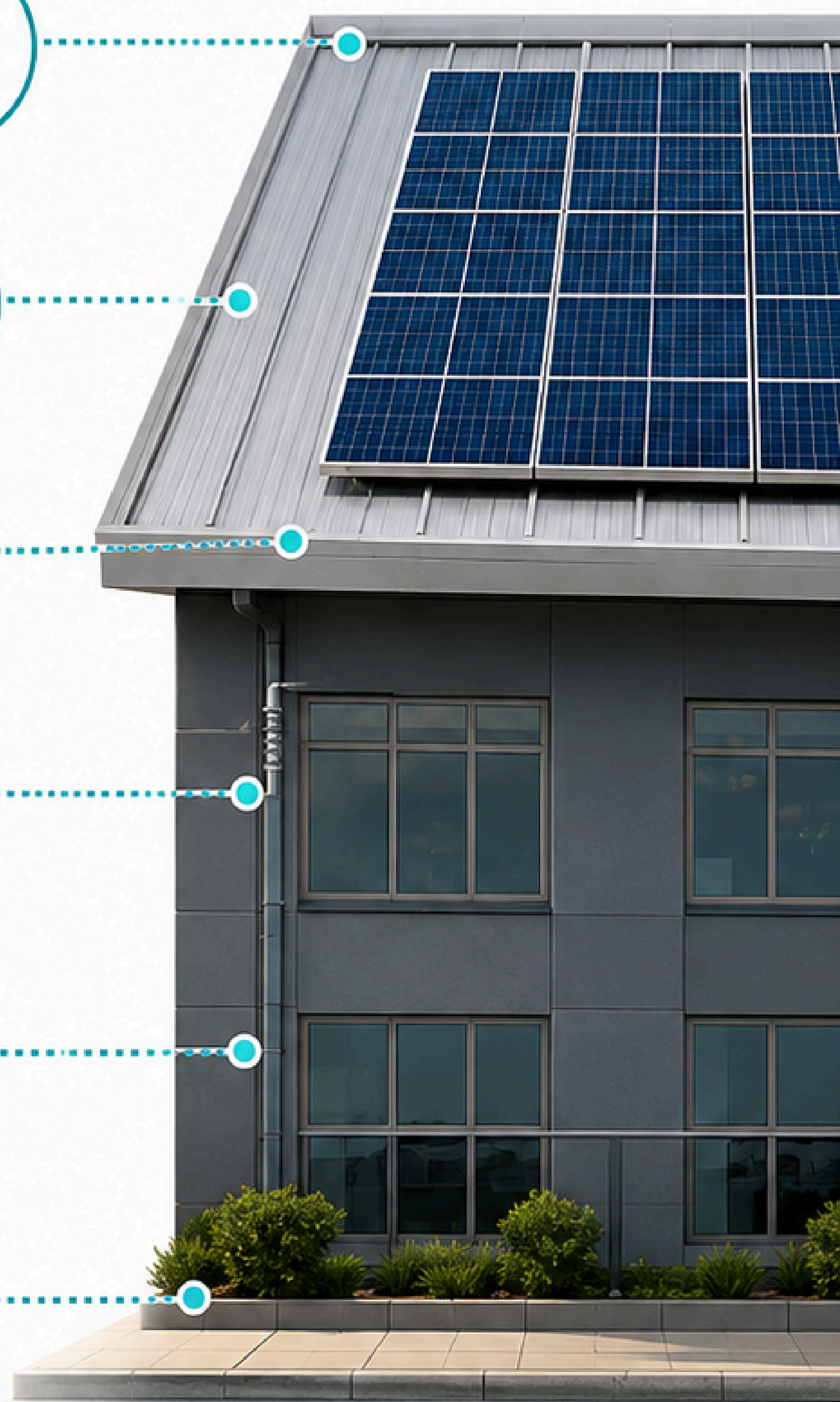
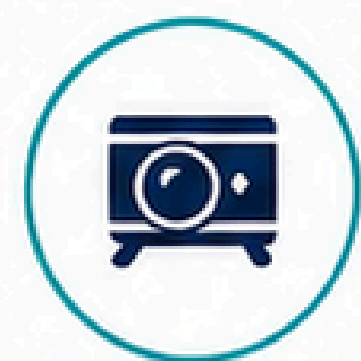
PLAN & PREPARE

Evacuation plan, training, signage and emergency information.



INSPECT & VERIFY

Thermal scanning, inspections and maintenance records.



No single product fixes everything. Layered controls reduce risk.

QUESTIONS EVERY STAKEHOLDER SHOULD ASK

- ✓ Who owns the PV system and who is responsible?
- ✓ Has a PV risk assessment been done and is it current?
- ✓ Are DC routes clearly identified and labelled?
- ✓ How can the system be safely isolated or de-energised?
- ✓ Who has authority to shut down the system?
- ✓ Are maintenance and inspection records complete?
- ✓ Are near incidents reported and reviewed?
- ✓ Do staff and contractors have the right training?
- ✓ Has your insurer been informed about the PV system?



If you can't answer these questions, you have a gap.

THE FIRE CONSULTANT'S ROLE

Essential. But only if they understand PV.



Understand PV and DC fire behaviour



Assess fire spread, compartmentation and fire protection strategy



Review access, egress and firefighting tactics



Integrate PV risks with building fire strategy



Ensure compliance with SANS 10400-T and applicable regulations



Collaborate with all stakeholders



**Get trained. Get involved early.
Don't assume. Understand.**

WORK TOGETHER. CLOSE THE GAPS.

Safe PV. Strong Business. Secure Future.



Everyone has a role. Everyone shares the risk.
Communicate. Coordinate. Stay Covered.

BE PREPARED. STAY PROTECTED. KEEP YOUR BUSINESS RUNNING.



Reduce fire and shock risks



Protect people, property and stock



Meet your legal and insurance obligations



Minimise downtime and financial loss



Build a culture of safety and responsibility



Good planning today prevents
tragedy tomorrow.