BUILDING OWNERS AND MANAGERS, HOMEOWNERS & OCCUPANTS

Who is this pathway for?

This pathway addresses individual homeowners, tenants, occupants, as well as private and institutional building owners, housing cooperatives, and property and facility managers. It also includes building syndicates, building associations, and co-ownership representatives. These actors are responsible for the day-to-day use, upkeep, and value of residential and tertiary buildings. The pathway is also relevant for professional federations and trade groups representing owner and user interests in housing and building management.

As climate risks escalate, occupants, homeowners, and building owners face increasing exposure to hazards like heatwaves, flooding, and soil movement, particularly in the residential sector. These risks directly affect the safety, comfort, financial stability, and long-term habitability of their homes and buildings. Adapted buildings can mitigate these threats by ensuring better thermal performance, protecting against acute weather events, and supporting healthier living conditions. Moreover, adaptation enhances property value, reduces maintenance and insurance costs, and boosts energy efficiency.

Facility managers, responsible for building operations, must ensure comfort and continuity of service while complying with evolving standards and regulations. Yet, these actors often lack access to climate risk data, clear guidance, and affordable retrofit solutions. Decision-making can be hindered by split incentives between owners and occupants, low awareness, or financial constraints. They need accessible, trustworthy sources of advice, incentives for resilience upgrades, and a voice in policymaking to build lasting, people-centered resilience.

Everyone has the right to live in a safe and climate-resilient building.

Today, most building users and owners are under-informed and under-equipped to deal with climate risks. In the short term, they must be better supported in identifying vulnerabilities and accessing retrofit solutions. By 2030, widespread climate literacy, clear regulatory signals, and support systems must be in place. In the long term, resilient, affordable housing and facilities must become standard, empowering occupants and owners to be active agents of adaptation and stewards of a safer built environment.

BUILDING OWNERS AND MANAGERS, HOMEOWNERS & OCCUPANTS

Short-Term Actions

Actions	Resources & case studies	KPIs
Develop a Thorough Understanding of Building Operations and Needs	ASHRAE *Technical Resources for Facility Managers*	% of critical systems (HVAC, insulation, drainage) with condition assessments completed
Rely on Technical Guidance and Trusted Contractors	*EU technical guidance on adapting buildings to climate change* and its *best practice guide*	Number of supplier or contractor audits focused on resilience performance
Build Trust and Establish Communication Channels with Occupants	*Enhancing the Tenant Experience Through Effective Communication* (Forbes, 2024)	Frequency of meetings, workshops, or bulletins with tenants on building safety and resilience

Medium-Term Actions

Actions	Resources & case studies	KPIs
Conduct a Quick Climate Risk Assessment	*Guide to Climate Risk Assessment* (EU Adaptation Mission Board)	% of identified priority actions with financing or design plans underway
Install Basic Resilience Upgrades	*Guide to action for climate change adaptation* by OID	Number of completed resilience retrofits (e.g., shading, insulation, water retention)
Invest and Update Emergency Plans to Actively Engage Occupants in Resilience	*Emergency Planning Handbook* by the Australian National Emergency Management Agency	% of occupants participating in emergency drills or awareness activities annually

Long-Term Actions

Actions	Resources & case studies	KPIs
Integrate Adaptation into Property Value and Real Estate Transactions	Munich RE brief on *Real Estate and Resilience*	Price premium or faster sale/rental rate for resilient buildings
Scale Community-Based Resilience Programs	UNDP's *Community-Based Resilience-Building Guidance*	Number of shared resources or programs implemented (e.g., backup power, cooling centers)
Advocate for Resilience Standards in Rental and Condominium Regulations	Moody's *Mainstreaming Resilience in Real Estate*	Existence of resilience-related clauses in lease, HOA, or co-ownership agreements

Short-term actions

Develop a Thorough Understanding of Building Operations and Needs

Action 1

Goal: Establish a solid foundation for resilience planning by knowing the building inside out.

Description: Before assessing climate risks or planning upgrades, owners and facility managers must ensure they have comprehensive knowledge of their buildings. This means understanding the technical characteristics of the property (e.g., structure, HVAC systems, insulation, drainage), how the building is operated on a daily basis, and what the specific needs and vulnerabilities of occupants are. Skilled and attentive building managers play a key role in this process, as their knowledge forms the baseline for all subsequent adaptation actions.

Resources

- American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) *Technical Resources for Facility Managers*. Provides technical references and best-practice guidelines for building systems operations, which owners/managers need as they document and understand their building operations.
- *Chapter 10 - The New Resilient Built Environment: Perspectives From Investors and Owners of Private Buildings* of *Optimizing Community Infrastructure* offers insight into how building owners see their asset operations and vulnerabilities; useful context for owners/managers to frame their operational baseline.
- CIBSE TM61 to 64 (Chartered Institution of Building Services Engineers) Practical technical manuals for building managers on energy performance, ventilation, and operational risk. TM63 ("Operational performance") helps managers establish a baseline understanding of building systems.
- IFMA (International Facility Management Association) has many playbooks

KPIs

INPUT INDICATORS
Measure the resources required to deliver

- Existence of a complete building dossier (plans, systems inventory, maintenance records, occupancy data)

LEADING INDICATORS
Looks forward at future outcomes and events

- % of critical systems (HVAC, insulation, drainage) with condition assessments completed

LAGGING INDICATORS
Looks back at whether the intended result was achieved

- Number of corrective or preventive actions completed following the assessment

Rely on Technical Guidance and Trusted Contractors

Action 2

Goal: Ensure resilience measures are implemented by credible professionals with the right expertise.

Description: Owners and facility managers should seek out and work with qualified contractors trained in climate adaptation, ensuring that all resilience upgrades and retrofits are carried out with high technical quality. Certification bodies can support this by developing labels or accreditation schemes for climate-resilient construction professionals, helping owners identify trustworthy service providers. By selecting and overseeing certified contractors, building managers increase confidence that resilience investments are durable, effective, and aligned with best practices.

Resources

- The EU's technical guidance on adapting buildings to climate change is accompanied by a best practice guide which includes advice for owners, operators and users when selecting and working with contractors.
- US DOE Building Energy Asset Score Tool helps building owners and managers benchmark their building envelope, HVAC, and energy systems to understand vulnerabilities and identify retrofit priorities.
- Accredited professionals (RICS, LEED, BREAM, Passive House, etc.) can assist owners and managers in resilience audits and adaptation-aligned retrofits. The guidance listed here helps identify qualified contractors and verify quality of work. LEED Resilience Pilot Credits for instance offer credit templates requiring documentation from qualified professionals. Useful for owners verifying that contractors understand adaptation best practices.
- *Enhancing the Tenant Experience Through Effective Communication* (Forbes, 2024), while not strictly about contractors, emphasizes quality of service via credible professionals, translatable to selecting certified/resilient contractors.

KPIs

INPUT INDICATORS
Measure the resources required to deliver

- % of renovation or maintenance contracts awarded to certified climate-resilient professionals

LEADING INDICATORS
Looks forward at future outcomes and events

- Number of supplier or contractor audits focused on resilience performance

LAGGING INDICATORS
Looks back at whether the intended result was achieved

- Reduction in repair frequency or maintenance costs related to climate impacts

Action 3

Build Trust and Establish Communication Channels with Occupants

Goal: Ensure resilience measures are accepted, supported, and effectively implemented by all building users.

Description: Building owners and managers should create transparent and consistent communication channels with tenants and occupants, such as newsletters, resident meetings, or digital platforms. By sharing timely information on resilience efforts, emergency protocols, and building upgrades, managers can foster trust and encourage active participation. Involving residents early and regularly ensures that adaptation measures are understood, supported, and tailored to the needs of those who live or work in the building.

Resources

- *Using proactive communication to prevent issues and resolve disputes* in tenancies by the Government of Queensland demonstrates communication protocols between managers and owners and occupants. Good model for resilience-upgrade communication.
- *Enhancing the Tenant Experience Through Effective Communication* (*Forbes*, 2024) emphasizes quality of service via credible professionals, and offers valuable insights.
- *Mastering Tenant Communication: Tips for Building and Strata Managers*. Practical communication strategy for engaging occupants; directly supports building trust and participation in adaptation measures.
- *Narratives of a Fractured Trust in the Swedish Model: Tenants' Emotions of Renovation* (*Culture Unbound*, 2019). Dominika V. Polanska and Åse Richard develop the concept of "fractured trust" to conceptualize the emotional reaction of tenants.
- *Communicating seismic building risk with commercial building tenants* (*Bulletin of the New Zealand Society for Earthquake Engineering*, 2025). This research paper by Miranda, C., Eade, C. ., Brown, C., Becker, J., & Doyle, E. illustrates demands put on building owners and developers to address seismic risk are shaping the performance of our building stock.

KPIs

INPUT INDICATORS
Measure the resources required to deliver

- Existence of a tenant communication plan or platform addressing climate resilience topics

LEADING INDICATORS
Looks forward at future outcomes and events

- Frequency of meetings, workshops, or bulletins with tenants on building safety and resilience

LAGGING INDICATORS
Looks back at whether the intended result was achieved

- % of occupants reporting satisfaction with communication and resilience measures

Medium-term actions

Conduct a Quick Climate Risk Assessment

Action 1

Goal: Identify the specific climate hazards that threaten the property (e.g., heat, flood, wind) to inform all other adaptation actions.

Description: This is the entry point for informed decision-making. By using free online tools or checklists, owners and managers can understand exposure to risks such as flash flooding, heatwaves, wildfires, or windstorms, and prioritize actions accordingly. It builds awareness and allows for cost-effective, hazard-specific upgrades

Resources

- *Guide to Climate Risk Assessment* (EU Adaptation Mission Board) provides a step-by-step methodology (including templates) for assessing exposure, vulnerability, and risk of climate hazards, which building owners can adapt for individual properties.
- DNV B-READY (Building Resilience Assessment Tool) translates climate-related risks into building-specific resilience strategies covering more than 140 aspects of building resilience (site design, shell & structure, systems, operations). Owners and managers can use this to rapidly scan how a given building is exposed to climate hazards (flood, wind, heat) and get recommended resilience measures.
- OID's Bat-ADAPT climate risk assessment tool (R4RE) enables owners to assess resilience of a building/asset and produce a resilience score and suggest the more suitable adaptive actions

KPIs

INPUT INDICATORS
Measure the resources required to deliver

- Completion of climate vulnerability assessment (including flood, heat, drought, wind)

LEADING INDICATORS
Looks forward at future outcomes and events

- % of identified priority actions with financing or design plans underway

LAGGING INDICATORS
Looks back at whether the intended result was achieved

- % reduction in asset vulnerability or expected losses under future climate scenarios

Install Basic Resilience Upgrades

Action 2

Goal: Improve the building's physical resilience through affordable retrofits.

Description: Simple solutions such as storm shutters, reflective paint, or rainwater tanks significantly reduce vulnerability. These upgrades can often be installed without major renovations and offer immediate benefits in comfort, energy efficiency, and risk mitigation.

Resources

- *Guide to action for climate change adaptation* by OID is a decision-making tool that helps implement an adaptation strategy by offering a variety of solutions and the essential information needed to implement them.
- A *guide to retrofitting* by the University of the Built Environment
- The *EU's technical guidance on adapting buildings to climate change* is accompanied by a *best practice guide*. Together, they provide actionable and practical solutions and case studies owners can replicate in projects. It is important to note that this document aims to provide a general overview of climate adaptation measures, for a wide variety of building types. Gives the general ins and outs of adaptation.
- *Retrofitting for Flood Resilience* (RIBA Publishing, 2019) offers detailed strategies for building-level resilience upgrades like elevated foundations, flood-resistant features. Owners and managers can use this as a reference when planning basic upgrades.

KPIs

INPUT INDICATORS
Measure the resources required to deliver

- % of capital budget allocated to adaptation-related retrofits

LEADING INDICATORS
Looks forward at future outcomes and events

- Number of completed resilience retrofits (e.g., shading, insulation, water retention)

LAGGING INDICATORS
Looks back at whether the intended result was achieved

- Improvement in operational metrics (energy efficiency, comfort, avoided downtime)

Action 3

Invest and Update Emergency Plans to Actively Engage Occupants in Resilience

Goal: Strengthen preparedness and safety in the face of climate-related disruptions by regularly updating emergency plans with active occupant engagement.

Description: Effective climate adaptation requires both clear protocols and collective participation. Building owners and facility managers should regularly review and update and invest in emergency plans to address risks such as power outages, floods, and extreme heat by ensuring up-to-date contact lists, evacuation procedures, and resource supplies are in place. Just as crucial is engaging the people who live or work in these buildings. Tenants and occupants should be made active participants in resilience efforts through signage, simple guides, meetings, or drills. This inclusive approach ensures that everyone, especially vulnerable populations like the elderly, children, or those with limited mobility, is informed, prepared, and able to respond appropriately. By embedding resilience into both operations and daily routines, buildings become not only technically equipped but socially ready for climate shocks.

Resources

- Though targeting community leaders and officials, this *Climate Adaptation Planning Guidance for Emergency Managers* from FEMA (US) can serve to inspire facility managers and building owners draw emergency plans
- *Emergency Planning Handbook* by the Australian National Emergency Management Agency provides principles for good practice in emergency planning and draws on and complements current practices. The handbook introduces the strategic context and importance of emergency planning, the emergency planning process, the potential elements of an emergency plan, the actions needed to implement the plan and to monitoring and evaluation. The handbook is for use by: private sector businesses, critical infrastructure owners and operators, community group
- From OID's *Guide to action for climate change adaptation*, chapter on setting up emergency systems.

KPIs

INPUT INDICATORS
Measure the resources required to deliver

- Presence of a designated emergency coordinator or resilience officer within the management team
- Frequency of reviews and updates of the building's emergency plan (e.g., annually or after major events)
- Availability of basic emergency supplies and systems (first aid kits, backup power, cooling or refuge areas)
- Budget allocation for resilience training and occupant engagement

LEADING INDICATORS
Looks forward at future outcomes and events

- % of occupants participating in emergency drills or awareness activities annually
- % of staff and residents trained in basic emergency procedures
- Number of communication channels (signage, digital alerts, printed guides) used to reach occupants
- Regular testing of alert and evacuation systems (yes/no; frequency per year)

LAGGING INDICATORS
Looks back at whether the intended result was achieved

- Time required to mobilize emergency response teams during drills or real events
- % reduction in reported incidents or damages during extreme weather compared to baseline
- Occupant satisfaction and perceived sense of safety (survey-based)
- Documented lessons learned and corrective actions implemented post-event

Long-term actions

Integrate Adaptation into Property Value and Real Estate Transactions

Action 1

Goal: Incentivize resilience by embedding it into how properties are valued, marketed, and transferred.

Description: Owners and managers should advocate for and adopt practices that recognize resilience upgrades in appraisals, property listings, and sales contracts. This includes highlighting floodproofing, passive cooling, or other adaptive features in real estate documentation and ensuring appraisers and brokers factor these into valuations. By making resilience visible in the real estate market, buyers and renters can make informed decisions, while owners are rewarded for proactive adaptation efforts.

Resources

- RICS' *ESG Data List for Real Estate Valuations* sets out indicators for valuers to include ESG factors in valuation reports. Owners and managers can use this to highlight adaptation-features (resilience upgrades) in property documentation and marketing.
- This Munich RE brief on *Real Estate and Resilience* explains how resilience measures (e.g., less hazard exposure) contribute to asset value and lower insurance and financing risk. Useful when owners document value-added adaptation for transactions.
- Forbes *Why Resilience, Not Perfection, Builds Real Estate Value* piece discusses how adaptation and resilience are progressively factored into value rather than being a niche premium in this article

KPIs

INPUT INDICATORS
Measure the resources required to deliver

- Existence of documentation highlighting resilience features in valuation reports or property listings

LEADING INDICATORS
Looks forward at future outcomes and events

- Number of real estate agents or valuers engaged to include resilience in assessments

LAGGING INDICATORS
Looks back at whether the intended result was achieved

- Price premium or faster sale/rental rate for resilient buildings

Scale Community-Based Resilience Programs

Action 2

Goal: Strengthen resilience by linking individual buildings to neighborhood-level initiatives.

Description: Building owners, facility managers, and homeowners should progressively connect their properties to local resilience programs, such as shared backup energy systems, neighborhood emergency plans, and community cooling or refuge centers. By pooling resources and coordinating with neighbors, municipalities, and utilities, communities can spread costs, improve preparedness, and ensure that no household faces climate hazards in isolation. Collective approaches reduce vulnerability, build social cohesion, and create cost savings by sharing infrastructure and knowledge.

Resources

- UNDP's *Community-Based Resilience-Building Guidance* provides a method for designing and implementing community-based resilience programmes. Useful for owners/managers connecting building-level adaptation to neighbourhood initiatives.
- R4C's *Building Urban Resilience With Communities* is a guide that offers guidance on selecting neighbourhoods, coordinating community resilience efforts
- Resilient Cities Catalyst's Resilient Neighborhoods Program demonstrates how building-level owners and managers engage with broader resilience hubs and community-scale coordination
- ANRU (France) "Quartiers Résilients" initiative: A large-scale urban renewal programme linking building- and neighbourhood-level resilience in France. Owners and managers can mirror similar clustering of upgrades and shared services.

KPIs

INPUT INDICATORS
Measure the resources required to deliver

- Membership or participation in local resilience or emergency preparedness networks

LEADING INDICATORS
Looks forward at future outcomes and events

- Number of shared resources or programs implemented (e.g., backup power, cooling centers)

LAGGING INDICATORS
Looks back at whether the intended result was achieved

- Reduced disruption time during local climate events compared to non-participating properties

Action 3

Advocate for Resilience Standards in Rental and Condominium Regulations

Goal: Institutionalize adaptation by embedding resilience criteria into property governance and tenant agreements.

Description: Building owners and managers should actively support policy advocacy and association-level reforms to include resilience measures in rental contracts, co-ownership rules, and homeowner association bylaws. This can cover requirements for energy efficiency, floodproofing, passive cooling, or emergency planning as part of shared responsibilities between landlords, tenants, and co-owners. Adaptation must become part of routine building management rather than an optional or one-off effort.

Resources

- RICS' ESG Data List for Real Estate Valuations can be used to negotiate with regulators and associations.
- Moody's Mainstreaming Resilience in Real Estate explores how resilience is becoming embedded in real estate markets, which supports advocacy efforts for regulation and standard

KPIs

INPUT INDICATORS
Measure the resources required to deliver

- Number of landlord or co-ownership associations joined or engaged in advocating for resilience standards

LEADING INDICATORS
Looks forward at future outcomes and events

- Existence of resilience-related clauses in lease, HOA, or co-ownership agreements

LAGGING INDICATORS
Looks back at whether the intended result was achieved

- % of buildings under management with resilience standards embedded in governance documents